



**Australian Government**  
**Productivity Commission**

# Resources Sector Regulation

# Productivity Commission Study Report

November 2020

© Commonwealth of Australia 2020

ISBN 978-1-74037-713-3 (online)

ISBN 978-1-74037-714-0 (print)



Except for the Commonwealth Coat of Arms and content supplied by third parties, this copyright work is licensed under a Creative Commons Attribution 3.0 Australia licence. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/3.0/au>. In essence, you are free to copy, communicate and adapt the work, as long as you attribute the work to the Productivity Commission (but not in any way that suggests the Commission endorses you or your use) and abide by the other licence terms.

### **Use of the Commonwealth Coat of Arms**

Terms of use for the Coat of Arms are available from the Department of the Prime Minister and Cabinet's website: <https://www.pmc.gov.au/government/commonwealth-coat-arms>

### **Third party copyright**

Wherever a third party holds copyright in this material, the copyright remains with that party. Their permission may be required to use the material, please contact them directly.

### **Attribution**

This work should be attributed as follows, *Source: Productivity Commission, Resources Sector Regulation, Study Report.*

If you have adapted, modified or transformed this work in anyway, please use the following, *Source: based on Productivity Commission data, Resources Sector Regulation, Study Report.*

### **An appropriate reference for this publication is:**

Productivity Commission 2020, *Resources Sector Regulation*, Study Report, Canberra.

### **Publications enquiries**

Media, Publications and Web, phone: (03) 9653 2244 or email: [mpw@pc.gov.au](mailto:mpw@pc.gov.au)

### **The Productivity Commission**

The Productivity Commission is the Australian Government's independent research and advisory body on a range of economic, social and environmental issues affecting the welfare of Australians. Its role, expressed most simply, is to help governments make better policies, in the long term interest of the Australian community.

The Commission's independence is underpinned by an Act of Parliament. Its processes and outputs are open to public scrutiny and are driven by concern for the wellbeing of the community as a whole.

Further information on the Productivity Commission can be obtained from the Commission's website ([www.pc.gov.au](http://www.pc.gov.au)).

---

# Foreword

For resources activities to maximise their contribution to the Australian community, environmental, heritage, safety and social impacts must be appropriately managed and regulated. But if not done well, regulation can impose unnecessary burdens on industry and fail to achieve the outcomes the community expects.

This study was tasked with identifying effective approaches to regulation of the resources sector in Australia and overseas. While Australia's regulatory regimes perform quite well by international standards, there remains ample scope to reduce complexity, inconsistency and duplication.

Forty-eight leading practices that would reduce unnecessary burdens and delays without diluting regulatory objectives are highlighted. Indeed, the Commission considers that community trust in regulators is as important for enabling future investment as regulatory efficiency. Building that trust will require greater transparency and more effective community engagement.

In conducting the review, the Commission has benefited from submissions and consultations from a wide range of participants including from industry, governments, environmental, Indigenous and community organisations. COVID-19 unavoidably delayed consultations after the release of the draft report, and in turn pushed out the final reporting date for the study. We are sincerely grateful to all those who contributed under difficult circumstances.

The team undertaking the study was initially led by Dr Lou Will with Brad Griffiths taking over after release of the draft report. I would like to thank them both along with Catie Bradbear, Jabulani Bulle, Karen Carmichael, Cordelia Foo, Jonathan Gu, Alice Li, Josh Lipp, Sara Ma, Yuliya Moore, Max Oss-Emer, Taylor Rundell and George Steel for their contribution and dedication (especially under lockdown in Melbourne).

Lisa Gropp  
Commissioner

November 2020

---

# Terms of reference

I, the Hon Josh Frydenberg MP, Treasurer, pursuant to Parts 2 and 4 of the Productivity Commission Act 1998 hereby request the Productivity Commission to examine regulation affecting the resources sector and highlight best practice.

## Background

Commonwealth, state and territory governments are responsible for managing resources in their jurisdictions and are all involved in the regulation of the sector. For example, states and territories regulate health and safety, employment, community engagement and environmental management, while the Commonwealth has constitutional powers over many of these aspects of law, and in some instances overrides any legislative inconsistencies. Additionally, States negotiate contractual agreements with individual operators that are subsequently ratified by state parliaments.

Regulation plays a critical role in ensuring that resources projects across Australia meet community and environmental management expectations. However, regulations may pose unnecessary burdens or impediments on resources companies operating, or seeking to operate and invest, in Australia.

## Scope

This study will focus on regulation with a material impact on business investment in the resources sector. The Commission is asked to identify effective regulatory approaches to the resources sector and highlight examples of best-practice regulation across the Australian resources sector and internationally, taking into account the unique regulatory challenges facing individual jurisdictions.

This will provide opportunities for individual jurisdictions to assess their own regulatory environments, and to draw on leading practice.

In undertaking this study, the Commission should:

1. Assess best-practice project approval processes across Australia and internationally and identify any broader impediments to the timing, nature and extent of business investment in the Australian resources sector.
2. Identify regulatory practices that have achieved evidence-based goals without imposing additional costs or regulatory burdens on industry, as well identifying jurisdictions'

---

successful efforts to streamline or augment processes to reduce complexity and duplication and improve transparency for current and future investors.

3. Identify leading environmental management and compliance arrangements that have resulted in the removal of unnecessary costs for business while ensuring robust protections for the environment are maintained.
4. Identify best-practice examples of government involvement in the resources approvals process — taking into account the context of each development – to expedite project approvals without compromising community or environmental standards, based on sound risk-management approaches.
5. Examine regulatory and non-regulatory examples of effective community engagement and benefit-sharing practices, and establish best-practice examples of where mutually-agreeable relationships were successfully developed between the resources sector and the communities in which they operate, including with Indigenous communities.

## **Process**

The Commission is to consult with key interest groups and affected parties, invite public submissions and release a draft report to the public.

The Commission is to consult with COAG Energy Council working groups on existing studies related to land access, community engagement and regulatory benchmarking.

The final report should be provided within 12 months of the receipt of these Terms of Reference.

**The Hon Josh Frydenberg MP**  
**Treasurer**

[Received 6 August 2019]



---

# Contents

Foreword	iii
Terms of reference	iv
Abbreviations	x
<b>Overview</b>	<b>1</b>
Key points	2
1 Australia’s resources sector at a glance	5
2 The regulatory landscape is complex	8
3 Australian jurisdictions have been working to improve their regulatory systems	8
4 Considerable scope for improvement remains	10
5 Effective community engagement and benefit sharing can build trust	27
6 Indigenous community engagement and benefit sharing	29
<b>Leading practices, findings and recommendations</b>	<b>35</b>
<b>1 About the study</b>	<b>63</b>
1.1 What has the Commission been asked to do?	63
1.2 The scope of the study	66
1.3 The Commission’s approach	69
<b>2 Resources activity in Australia</b>	<b>73</b>
2.1 Australia’s resources sector — an overview	74
2.2 Resources investment in Australia	87
<b>3 Regulation: rationales, principles and landscape</b>	<b>91</b>
3.1 Why do governments regulate resources?	92
3.2 What does Australia’s resources regulation look like?	96
3.3 A framework for leading-practice regulation	97

---

<b>4</b>	<b>Resource management</b>	<b>103</b>
4.1	Government provision of pre-competitive geoscience information encourages exploration investment	104
4.2	Where can resources developments take place?	109
4.3	Resource management policies	113
<b>5</b>	<b>Land access</b>	<b>123</b>
5.1	The process for obtaining access to private land	124
5.2	Resources development on Indigenous land	132
<b>6</b>	<b>Approval processes</b>	<b>153</b>
6.1	Application through to assessment	157
6.2	Approval and conditioning	170
6.3	Post-approvals	182
6.4	Review mechanisms	185
6.5	Broader approval processes	188
<b>7</b>	<b>Managing environmental and safety outcomes</b>	<b>195</b>
7.1	Compliance monitoring and enforcement	197
7.2	Environmental offsets	205
7.3	Resources site rehabilitation and decommissioning	215
7.4	Worker safety	231
<b>8</b>	<b>Indigenous heritage</b>	<b>239</b>
8.1	How is Indigenous heritage regulated?	240
8.2	Indigenous heritage regulation is under scrutiny across Australia	243
8.3	Leading-practice Indigenous heritage regimes	246
8.4	What is the role of the Commonwealth?	251
<b>9</b>	<b>Other factors affecting investment</b>	<b>255</b>
9.1	Policy and regulatory uncertainty	256
9.2	Workforce issues	263
9.3	Barriers to foreign investment	268
9.4	Taxation	272
9.5	Other factors raised in submissions	273



---

<b>10</b>	<b>Community engagement and benefit sharing</b>	<b>277</b>
10.1	What problems are community engagement and benefit sharing trying to address?	278
10.2	Identifying leading-practice community engagement	293
10.3	Identifying leading-practice benefit sharing	298
<b>11</b>	<b>Indigenous community engagement and benefit sharing</b>	<b>317</b>
11.1	Understanding Indigenous community engagement and benefit sharing	318
11.2	Engaging and making agreements with Aboriginal and Torres Strait Islander people	326
11.3	Managing benefits from agreements	337
<b>12</b>	<b>Improving regulator governance, conduct and performance</b>	<b>351</b>
12.1	Governments are responsible for the foundations of robust regulatory systems	352
12.2	Regulator performance is also key to outcomes	366
<b>A</b>	<b>Conduct of the study</b>	<b>383</b>
<b>B</b>	<b>Regulatory arrangements across jurisdictions</b>	<b>393</b>
	<b>References</b>	<b>409</b>

---

# Abbreviations

ABS	Australian Bureau of Statistics
ACNC	Australian Charities and Not-for-profits Commission
ADGSM	Australian Domestic Gas Security Mechanism
ADI	Accelerated Discovery Initiative
ALRA NSW	<i>Aboriginal Land Rights Act 1983 (NSW)</i>
ALRA NT	<i>Aboriginal Land Rights (Northern Territory) Act 1976 (Cth)</i>
ANAO	Australian National Audit Office
ANSTO	Australia's Nuclear Science and Technology Organisation
ANZSIC	Australian and New Zealand Standard Industrial Classification
APPEA	Australian Petroleum Production and Exploration Association
ATSIHP Act	<i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cth)</i>
ASX	Australian Securities Exchange
CATSI Act	<i>Corporations (Aboriginal and Torres Strait Islander) Act 2006 (Cth)</i>
COAG	Council of Australian Governments
CCAA	Cement, Concrete and Aggregates Australia
CERD	International Convention on the Elimination of All Forms of Racial Discrimination
CHMP	Cultural heritage management plan
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DAWE	Department of Agriculture, Water and the Environment
DoEE	Department of the Environment and Energy
DIDO	Drive-in, drive-out
DIIS	Department of Industry, Innovation and Science
DISER	Department of Industry, Science, Energy and Resources
EBITDA	Earnings before interest, taxes, depreciation and amortisation
EDO	Environmental Defenders Office
EDR	Economic demonstrated resources
EFTF	Exploring for the Future
EIA	Environmental impact assessment

---

EPA	Environment Protection Authority
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i>
EVS	Economic Vehicle Status
FADA	Future act determination application
FATA	<i>Foreign Acquisitions and Takeovers Act 1975 (Cth)</i>
FBT	Fringe benefits tax
FDI	Foreign direct investment
FIFO	Fly-in, fly-out
FIRB	Foreign Investment Review Board
FPIC	Free, prior and informed consent
FTA	Free trade agreement
FVTOC	Federation of Victorian Traditional Owner Corporations
GA	Geoscience Australia
GDP	Gross domestic product
GGIC	Government Geoscience Information Committee
GHG	Greenhouse gas
GISERA	Gas Industry Social and Environmental Research Alliance
HFE	Horizontal fiscal equalisation
IAS	Indigenous Advancement Strategy
ICCPR	International Covenant on Civil and Political Rights
ICDC	Indigenous Community Development Corporation
ICESCR	International Covenant on Economic, Social and Cultural Rights
ICDC	Indigenous Community Development Corporation
ICMM	International Council of Mining and Metals
ILUA	Indigenous land use agreement
LNG	Liquefied natural gas
LPG	Liquefied petroleum gas
LUAA	Land use activity agreement
MCA	Minerals Council of Australia
METS	Mining equipment, technology and services
MLUF	Multiple Land Use Framework
NNTC	National Native Title Council
NNTT	National Native Title Tribunal
NSW DPIE	New South Wales Department of Planning, Industry and Environment

---

NSW IPC	New South Wales Independent Planning Commission
NSW PAC	New South Wales Planning Assessment Commission
NSW RR	New South Wales Resources Regulator
NOPSEMA	National Offshore Petroleum Safety and Environmental Management Authority
NOPTA	National Offshore Petroleum Titles Administrator
NTA	<i>Native Title Act 1993 (Cth)</i>
NTRB	Native title representative body
NTSP	Native title service provider
OECD	Organisation for Economic Co-operation and Development
OGIA	Office of Groundwater Impact Assessment
ORIC	Office of the Registrar of Indigenous Corporations
PBC	Prescribed body corporate
PBI	Public benevolent institution
PC	Productivity Commission
PKKP	Puutu Kunti Kurrama and Pinikura
RAP	Registered Aboriginal Party
QAO	Queensland Audit Office
Qld DES	Queensland Department of Environment and Science
Qld DNRME	Queensland Department of Natural Resources, Mines and Energy
R&D	Research and development
RNTBC	Registered Native Title Body Corporate
SA DEM	South Australian Department for Energy and Mining
TECC	Tasmania Electronic Commerce Centre
TOSA	<i>Traditional Owner Settlement Act 2010 (Vic)</i>
UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples
WA DMIRS	Western Australian Department of Mines, Industry Regulation and Safety

---

# OVERVIEW

---

## Key points

- Resources activities demand strict, often complex regulation. But if regulation is not done well it can impose *unnecessary* costs, fail to meet objectives and diminish net community benefits.
- There is considerable scope to improve regulatory processes and reduce unnecessary burdens to encourage resources investment *without* diluting requirements to mitigate impacts on the environment, heritage, worker safety, landowners and communities.
- Indeed, confidence in regulatory regimes is critical for community support for resources investment and, in some areas, more rigour is warranted. Creating an environment conducive to sustained investment requires regulation that not only is administered efficiently but also delivers desired outcomes.
- Notwithstanding recent worthwhile initiatives, regulatory processes in the resources sector remain unduly complex, duplicative, lengthy and uncertain, and may be becoming more so.
- Sustained improvement requires greater attention to the pre-conditions for leading-practice regulation — clear regulatory objectives, effective governance, incentive and accountability frameworks for regulators, and adequately resourced institutions. A focus on these foundations would also help industry investment recover from the impacts of COVID-19.
- Leading regulatory practice supports an effective risk- and outcomes-based approach by regulators who: are accountable and transparent; follow clear and predictable processes; build fit-for-purpose technological and staff capabilities; collect, use and disseminate data effectively; and work to inform the community about their activities.
- Improved co-operation and coordination between regulators, both within jurisdictions and between the Commonwealth and States, would reduce delays, duplication and inconsistency.
- Enhanced regulator accountability and transparency — including around monitoring and compliance actions and performance meeting timelines — would reduce costs, improve regulated outcomes and build community trust. Clearer requirements for mine rehabilitation would also deliver community and industry reputational benefits.
- The destruction of Juukan Gorge has focussed attention on the inadequacy of Indigenous heritage protection regimes. Early engagement with traditional owners as part of the project assessment process is critical, centring them in decisions affecting their heritage.
- Capability gaps within regulators are a key cross-cutting issue. Governments should assess whether their regulators are appropriately funded, and the potential for greater cost recovery.
- Communities and landowners understandably want to know how projects affect them and comment on development proposals. Meaningful engagement should begin early in a project and continue throughout. Trusted institutions can play an important role through building community understanding of resources projects.
- Companies should consult and coordinate with local governments and community groups to promote local benefits from their community investments. Mandating requirements such as local content can be counterproductive.
- There are several factors limiting the benefits that traditional owners derive from agreements with resource companies, including resourcing constraints within Indigenous organisations. Clearer guidance on how funds in charitable trusts can be used is needed.

---

# Overview

It is hard to overstate the role of the resources sector in modern life. Raw materials for the concrete, masonry, steel and glass used in infrastructure and dwelling construction; the steel and other metals used in cars, trucks, trains and planes and the fuels that run them; plastics and synthetic fabrics that are ubiquitous in packaging, clothing, communications and other technologies and construction materials; and the components of any technology including medical devices, computers, mobile phones, solar panels and batteries, for example, originally come from quarries, mines and wells.

Australia is a resource rich country, with global frontier expertise in exploration and extraction. The resources sector extracts a diverse range of minerals, and oil and gas. Over 300 mines and 2200 quarries are in operation. Oil and gas wells add to the number of active sites.

Resources are a significant economic contributor — accounting for about 9 per cent of Australia’s GDP in 2019-20, directly employing just over 240 000 people and comprising over 60 per cent of the value of exports. In 2018-19, the resources sector paid about \$25 billion in wages and salaries, and the minerals sector paid about \$40 billion in company taxes and royalties. The oil and gas sector contributed about \$6 billion in taxes, royalties and other fees in 2017-18. Benefits also flow to the community via domestic shareholdings.

Industry and some governments see significant growth potential for the sector, although the future mix of output and investment will reflect multiple (often competing) factors including global and domestic policies and new technologies. For example, net-zero emissions targets will likely see rising demand for the many minerals required for renewable energy technologies and declining demand for coal and other fossil fuels in some countries. However, global population growth and economic development will likely see continued demand for fossil fuels, particularly gas as countries transition to lower-emissions sources of energy. While the COVID-19 pandemic has put downward pressure on energy demand in the short term, medium-term outlooks remain strong.

## **The focus of this study is regulatory processes**

Two principal factors motivate strict regulation of the resources sector in Australia. First, resources (with a few exceptions) are owned by the Crown on behalf of the community. Hence, governments have a role in managing resources development to deliver a community dividend. Second, over their life cycles resources activities have the potential to cause harm to the environment, sites of cultural and heritage significance, workers, landowners and surrounding communities. Given the physical nature of resources activity, some level of harm is unavoidable, but regulations seek to mitigate this to maximise *net* benefits to the community.

---

Although essential, if not done well regulation can impose substantial unnecessary costs. Poorly designed or administered regulation can impose burdens on industry (as well as governments) for negligible community benefit, deterring companies from investing in projects that would have been worthwhile from a national perspective. Ineffective regulation can also fail to adequately protect environmental, cultural and heritage assets, the safety of workers and the health of local communities.

This study evaluates regulation of the resources sector, identifying issues and leading-practice approaches that address them. The primary focus is on how regulation is designed, administered and enforced, and whether there is scope to reduce unnecessary burdens created by regulatory processes and practices without diluting environmental and other regulated outcomes. Indeed, by undermining community support for the sector, weakening regulatory regimes would ultimately be counterproductive.

Well-accepted and widely-applied regulatory principles are used to identify leading practices. Consistent with these principles, leading practices are those that seek to minimise burdens on businesses and regulators subject to achieving clear, evidence-based regulatory objectives. Examples are provided where possible. In some cases, the examples simply align with well-established norms for good regulatory practice. In other cases, the leading practices are more innovative.

The study examines each stage of the project life cycle. It considers potential impediments to investment from the regulation of resources management, land access and project assessment and approvals, along with issues stemming from broader regulatory settings. (Although many of these broader settings lie beyond the scope of this study, the study makes findings and recommendations where the issue has been considered by the Commission previously.) In addition, it evaluates management of environmental and other regulated outcomes, as well as the effectiveness of the Indigenous heritage assessment process.

The impacts of resources activities have always provoked some level of disquiet, particularly among nearby communities. In recent years, the potential for development of unconventional gas reserves, and concerns about environmental and social impacts more generally, have prompted pushback against a range of resources developments from affected landowners, communities and other groups. Resources companies are increasingly conscious of the need to develop and maintain community acceptance of their activities — their ‘social licence to operate’.

Reflecting the importance of these issues, the study has also examined ways in which resources companies engage with communities and share benefits, and identified leading practices.

A significant share of resources activity takes place on land that Aboriginal and Torres Strait Islander communities either own (under land rights legislation) or have native title interests in. This raises distinct sets of issues relating to land access, community engagement and benefit sharing.



---

# 1 Australia's resources sector at a glance

Resources activity occurs in every State and Territory, and in Commonwealth waters (figure 1). Coal mines are located almost entirely in east-coast States, while metal ore mines are mostly situated in Western Australia. Conventional oil and gas fields are located both inland (concentrated in Queensland and South Australia) and offshore (primarily off the north-west coast of Australia).

Australia has large quantities of resources that have not yet been extracted (figure 2). While some deposits have been identified with certainty and assessed as being economically viable, others are more speculative and may be difficult to extract.

The resources market is global. Australia operates alongside major producers such as China, the United States, Russia, Saudi Arabia, Brazil and Canada. While resources are found in many countries, much of what others produce is consumed domestically. For example, China produces more resources than any country in the world — about four times the value of Australian production — but due to high domestic demand, it is also the largest global importer. In contrast, Australia is a small consumer of its own production and exports about 90 per cent (by value) of the top 10 commodities it produces.

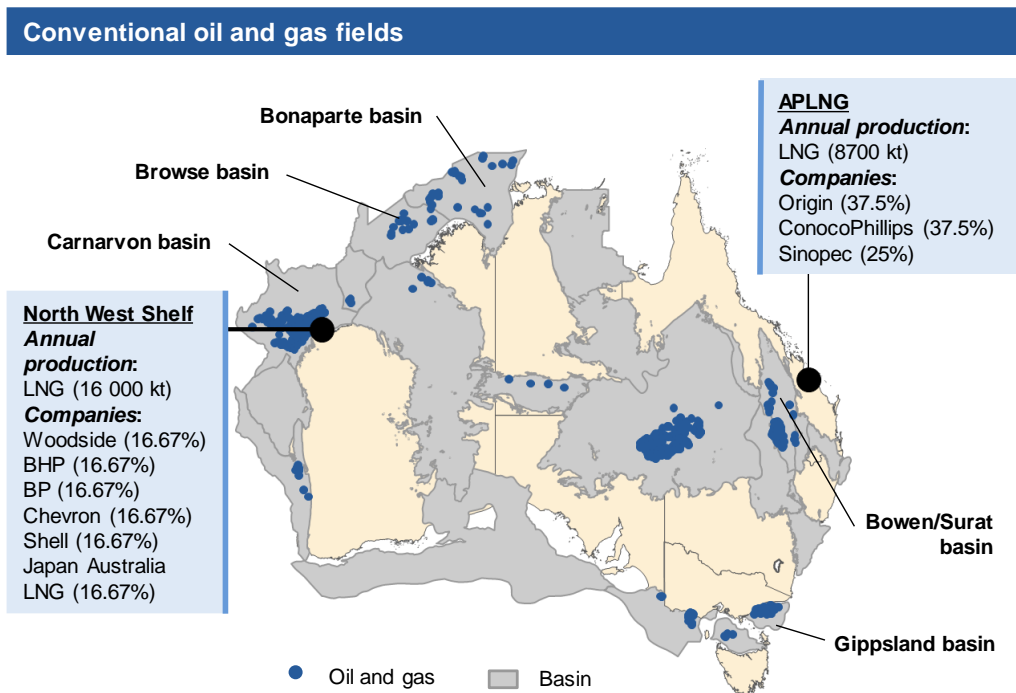
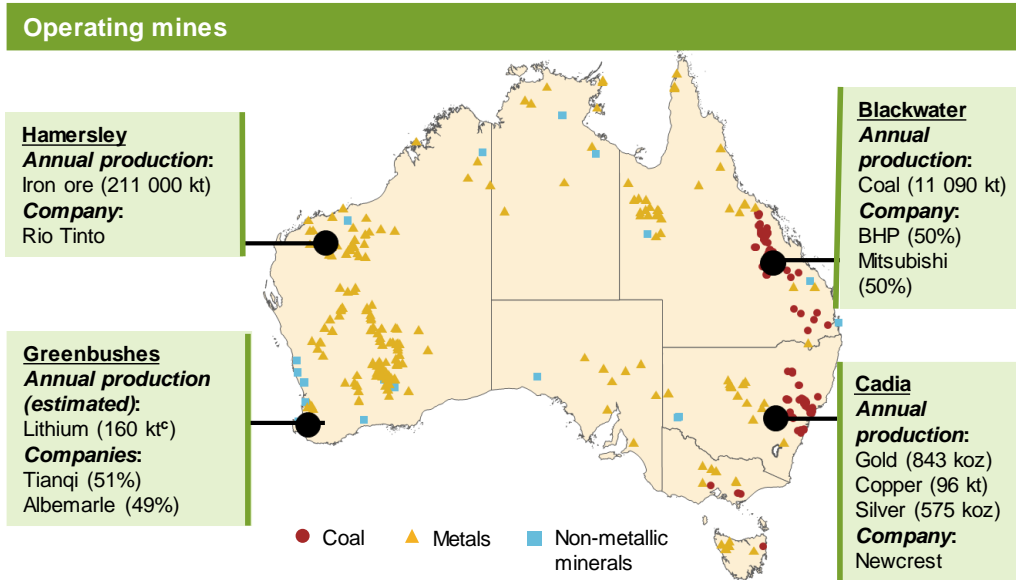
From the mid-2000s, Australia experienced an unprecedented resources investment boom. Rapid industrialisation and urbanisation in emerging economies drove a spike in global prices for commodities used in steel and energy production, leading Australian producers to expand production capacity, particularly in coal, iron ore and liquefied natural gas.

Investment peaked in 2012-13 at \$103 billion, about ten times the level of the early 2000s (figure 3). Since then, it has wound down as new projects have transitioned into production. Exploration expenditure has also decreased — from a peak of \$8.4 billion in 2012-13 to \$4 billion in 2019-20. And as at October 2020, the pipeline of committed major projects — about \$39 billion worth — while still large, was about one seventh of the October 2012 level.

While there has been a recent recovery in investment since mid to late 2019, driven by increasing prices for some resources, some companies deferred investment decisions in the first half of 2020 due to the COVID-19 pandemic. The initial stages of the pandemic had a particularly negative impact on small explorers, who faced dwindling cash reserves. The Commonwealth and State governments implemented support measures to assist explorers over this period.

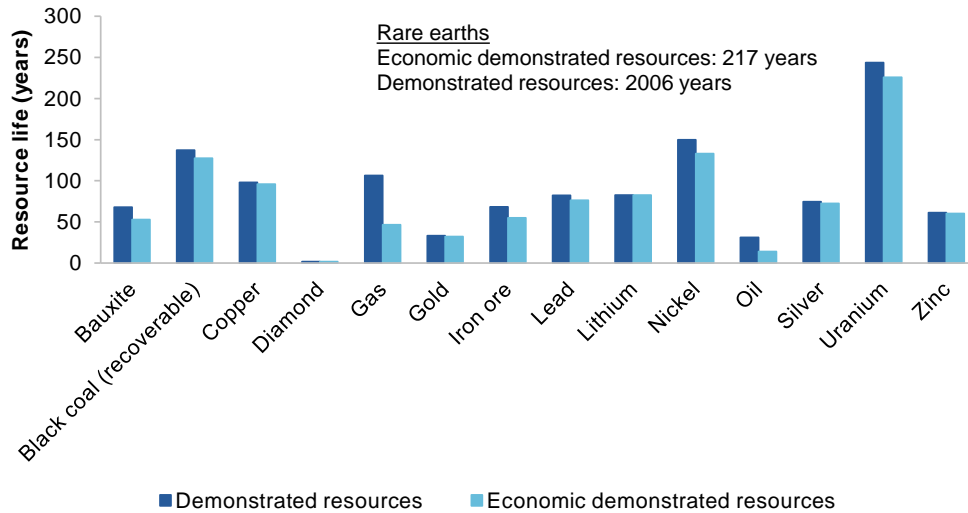
**Figure 1 Resources production occurs Australia wide**

Operating mines and conventional oil and gas fields, selected major projects highlighted



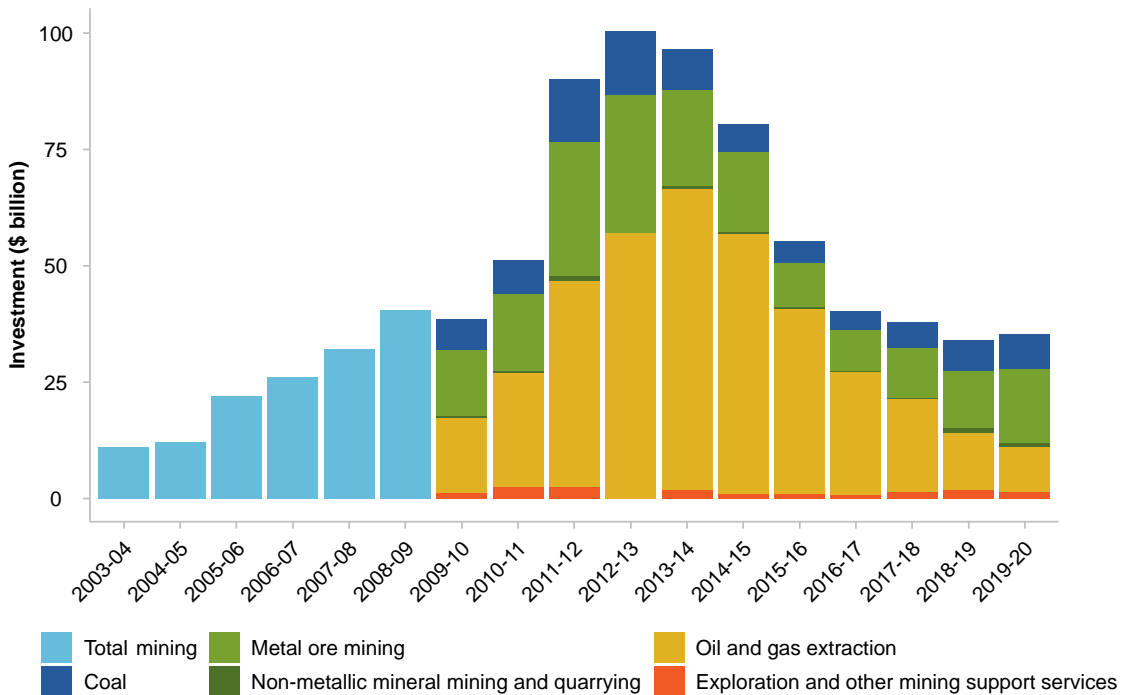
**Figure 2 Known reserves in Australia are large**

Remaining years of resource life given known deposits of selected resources, 2018 (data for oil and gas are from 2014)



**Figure 3 Investment has wound down from boom levels**

Resources sector investment by broad commodity, 2019-20 dollars



---

## **2 The regulatory landscape is complex**

Project proponents and operators must navigate a large array of regulatory requirements across a project's life cycle. Before exploration or extraction can begin, a proponent has to:

- get a licence or permit
- assess the potential impacts of planned activity
- obtain any required environmental and other approvals.

Once operational, activity has to be monitored and when a site ceases operation, it has to be rehabilitated as agreed (unless this has happened progressively over the life of the project).

All levels of government, with multiple agencies in each jurisdiction, play a role in creating, administering and enforcing regulations. It is a complex regulatory landscape and comprehensive depictions challenge regulators themselves. Figure 4 provides a stylised mapping of the system that inevitably masks the regulatory complexity. Opportunities for regulatory outcomes that create unnecessary costs for companies and fail to achieve regulatory objectives are manifold.

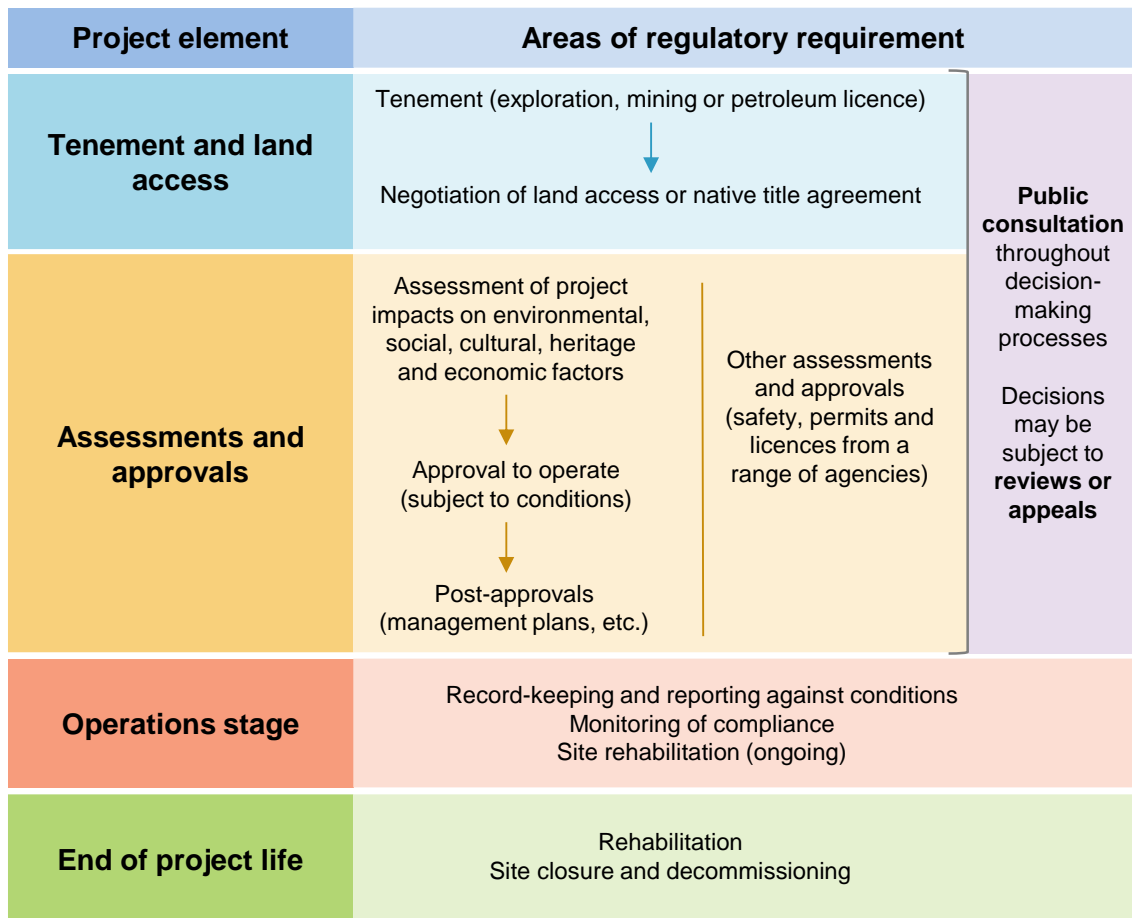
## **3 Australian jurisdictions have been working to improve their regulatory systems**

Australia is generally considered a desirable place to invest. Australian jurisdictions perform favourably in international indices of investment attractiveness due to their political stability, strong legal systems and relatively predictable (if cumbersome) regulatory regimes. And given the many billions of dollars in investment over several decades, the regulatory system does not appear to have acted as a significant brake.

Indeed, the vast majority of applications for new resources projects are approved (eventually). And while the number of potential investors choosing to allocate their capital elsewhere rather than navigate the regulatory maze in Australia is unknown, evidence suggests that the regulatory regimes in other major developed resources-producing countries, including Canada and the United States, are similarly complex and time consuming.

But that is not a wholesale endorsement of the Australian regime. Many reviews over recent years (several by the Commission) have identified significant shortcomings and recommended numerous improvements, and reforms of one type or another have recently been introduced or are being progressed in every jurisdiction (box 1).

Figure 4 Areas of regulatory requirement for resources projects



Several reviews are underway in parallel with this study. At the Commonwealth level, a review of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) was completed in October 2020. In August 2020, the South Australian Productivity Commission completed an inquiry into the effectiveness of regulation in the extractives supply chain. Western Australia has reviewed its *Aboriginal Heritage Act 1972* and New South Wales is reviewing its work health and safety regime for mining.

---

## Box 1      **Resources regulation has been an active reform area**

Jurisdictions have recently introduced or are progressing reforms in many areas of regulatory effort. Selected examples include:

- Amendments to the Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009 (Cth) to improve consultation and transparency requirements for offshore petroleum activities. And the Australian Government's Deregulation Taskforce led to a partnership with Western Australia to develop an online portal that will enable project proponents to apply for WA and Commonwealth environmental approvals via a single application, and track its progress. A database of biodiversity studies will also be established.
- New South Wales has developed a Minerals Strategy with initiatives including a new titles management system to increase efficiency, transparency and accountability. Other reforms include a more flexible approach to environmental offsets and improved compliance and reporting requirements for rehabilitation.
- Victoria has amended its *Mineral Resources (Sustainable Development) Act 1990* to support a transition to risk-based work plans and establish a Mine Land Rehabilitation Authority. And the *Environment Protection Amendment Act 2018* is due to take effect from 1 July 2021 with a focus on risk-based regulatory oversight and strengthened compliance and enforcement powers.
- Queensland has introduced reforms to improve site rehabilitation and financial assurance outcomes, as well as operational policies and guidance to provide greater detail on legislative requirements. A risk-based approach to environmental regulation is being implemented.
- South Australia's updated *Mining Act 1971* includes, among other changes, a commitment to increased transparency — all inputs to government decision making will now be made public. And a regular review and amendment process will test whether regulation remains fit-for-purpose.
- Western Australia has a commitment to monitoring, reporting and improving the performance of the resources regulator and reforms to regulation are being driven through a Streamline WA program. Resources-related environmental approvals are the first key area of reform.
- Tasmania has amended its *Mineral Resources Development Act 1995* with the aim of clarifying the Act's intent, removing duplication and streamlining processes.
- Reforms to the Northern Territory's environmental protection system focus environmental assessment on projects' significant impacts and increase transparency.

Some jurisdictions are also intending to fast track regulatory reforms applicable to the resources sector as part of the COVID-19 economic recovery. For example, Western Australia will amend mining regulations to reduce timeframes for assessing exploration applications.

## **4      Considerable scope for improvement remains**

Notwithstanding initiatives in recent years, there is a widely held view within the sector that regulatory processes are becoming more complex to navigate, more protracted and more uncertain, for little, if any, improvement in regulated outcomes. The industry considers that Australia's global ranking as a place to invest is slipping as a result, and study participants have identified a range of regulatory issues (box 2).

---

## Box 2      **Participants consider there is room for improvement**

[There are] significant opportunities to reduce regulatory duplication and streamline interactions between state and national legislation, to increase investor confidence and support timely project assessment processes. (SA Government, sub. 25, p. 5)

There has been a trend over the past decade or so for approval timeframes to lengthen beyond what is necessary to deliver a thorough assessment of the merits of the project and afford natural justice to all relevant parties with an interest in the project approval decisions. (QLS, sub. 41, p. 3)

Undefined and protracted delays mean that critical market windows that come and go with fluctuating ore prices are lost, and companies cannot proceed with their development. (TMEC, sub. 46, p. 3)

Inconsistent, overly prescriptive and non-risk-based conditions make it difficult for companies to implement project approvals. (CMEWA, sub. DR74, p. 4)

Rather than regulations being 'overly complex' or 'prescriptive' in Australia, attention needs to be placed on the chronic ambiguity and discretion that is provided under resource laws throughout all jurisdictions in Australia. Vague regulation can hinder investment in Australia through affecting the certainty as to how it will be interpreted for each project and what is expected of a proponent. (EDO, sub. 40, p. 29)

The direct financial costs to proponents of preparing assessments can be in the millions of dollars. The greater cost to proponents, and the community, however, comes from the length of time it takes to navigate the environmental approval process (box 3). But getting hard data on assessment and approval timelines is challenging, let alone quantifying the extent to which these pose unnecessary burdens. The NSW Minerals Council noted an average assessment timeframe for seven projects since 2016 of nearly 1000 days, although whether this is representative is unknown. There is some evidence of an increase in the time required to obtain primary approval at the Commonwealth level (figure 5).

There are a number of likely causes of delays. Proponents blame increasingly risk-averse regulators for unclear and ever-growing information demands and their failure to meet statutory timelines, while the regulators counter that they often need to stop the clock and request more information from proponents who provide inadequate documentation. But the two are not unrelated — increased demands for information are likely to result in more documentation gaps. The difficulty in getting performance data itself is indicative of systemic problems within many regulatory regimes.

Overall, the Commission has found that there are many facets of current regulatory arrangements warranting improvement, not only to reduce unnecessary costs but also to bolster regulated outcomes. Going forward, trust in the efficacy of the regulatory system will be essential for ongoing community support for investment in the resources sector. In short, regulation that is both effective and efficiently administered is required to create an environment conducive to sustained investment over time.

---

### Box 3      **The cost of delays can dwarf other regulatory costs**

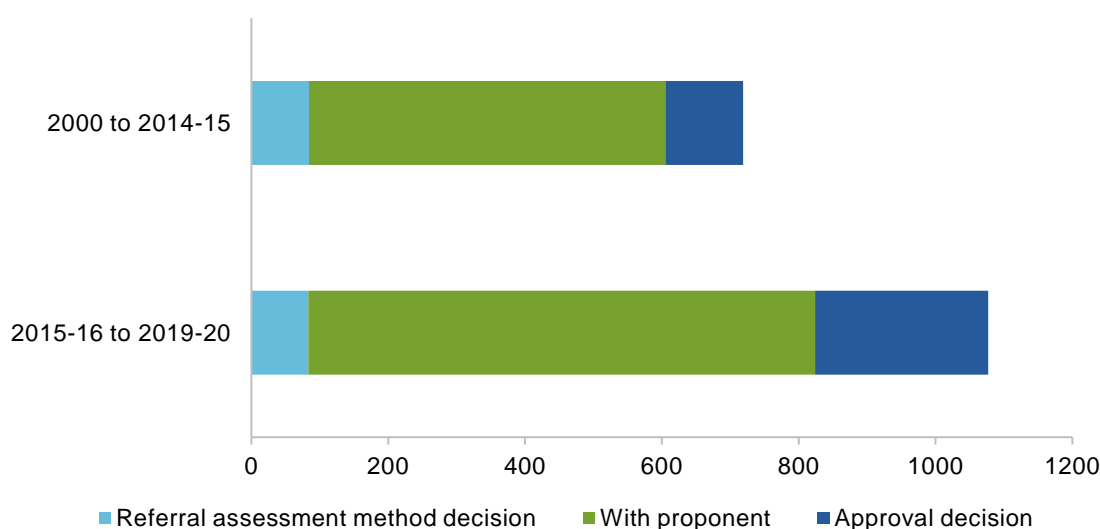
Project delays are costly because the delay of a net revenue stream leads to net revenue forgone. The Commission has previously estimated that a one-year delay for a gas project could cost in the order of 10 per cent of its net present value, acknowledging that such estimates are highly sensitive to assumptions, particularly the cost of capital (discount rate), and projected revenue flows including future commodity prices.

Given the size of most resources projects, delay costs can dwarf the direct costs of regulatory obligations such as assessment documentation and studies, even though these can run into millions of dollars.

---

### Figure 5      **Environmental approvals can take years to secure**

Average time taken for environmental approval decisions for resources projects under the EPBC Act



The Commission has also found that regulatory regimes in all jurisdictions have elements of leading practice (some are noted below, selected practices are summarised in table 1 at the end of the overview, and many more are identified throughout the report), although no one jurisdiction has a leading-practice *system*. This means that there is ample scope for jurisdictions to learn from each other. To this end, Ministers should establish a forum to foster such interaction.

### **Risk- and outcomes-based regulatory approaches would help focus on the things that matter**

Claims of increasing regulator demands for information, leading to increased costs for proponents with little beneficial impact on outcomes, were a strong theme among study participants (box 4). This view was not confined to industry participants. The NSW



---

Department of Planning and Environment has observed that ‘[environmental impact assessment] documents are getting longer and more complex without necessarily improving public understanding or decision making’.

**Box 4            More requirements can raise costs for little apparent benefit**

Industry participants pointed to increases in assessment requirements and approval conditions.

[Environmental impact assessment (EIA)] requirements have proliferated over recent decades as governments (state and federal) are taking an increasingly risk-averse approach to EIA. Increasing ... requirements are resulting in wide-ranging assessments of all impacts, regardless of materiality/level of risk. (MCA, sub. 11, p. 12)

Failure to adequately scope an EIA can lead to a situation where excessive resources are expended on minor impacts, leading to voluminous environmental impacts statements that cover an unnecessarily wide range of impacts in far too much depth. (Woodside, sub. DR82, p. 2)

There is a trend for more conditions to be imposed on all projects due to a one-size-fits approach, rather an impact-based analysis. (BCA, sub. 43, p. 5)

A cycle of increasing regulatory compliance (scope creep) can occur when business has a vested interest in receiving an important approval from the regulator, so there is no incentive to push back on additional information and reporting requests made from these bodies, in the interests of time (as often the associated financial cost associated with any further delay in receipt of approval outweighs the benefit). (Roy Hill, sub. 7, p. 5)

Environmental impact assessments are indeed lengthy — the documents can run to thousands of pages. Of itself, this is not necessarily a problem — expansive assessments may deliver benefits to the community where they are well targeted at the risks imposed by the project. However, the weight of submissions and other evidence suggest that requests for information are generally not risk based, which can result in unduly high costs for companies (particularly protracted delays), barriers to community engagement and unnecessary administrative loads on regulators who have to digest the material.

The lack of a targeted risk-based approach appears to arise mainly from regulators’ approaches to administering regulation rather than the regulations themselves — potentially a reflection of regulators’ increasing risk aversion. It is impossible to gauge the extent of this, but any increase in risk aversion might reflect a lack of support, clear guidance and expectations from governments at a time of heightened community concerns about some resources activities. It might also reflect gaps in regulator capacity and capability (discussed below).

Irrespective of whether risk aversion has increased, more thorough application of a risk-based approach to environmental impact assessment (box 5) would help streamline processes and deliver sounder environmental outcomes. Earlier scoping of key risks, including through community consultation, would give regulators and proponents a clearer and shared understanding of what information is needed to support decision making.

In addition to the issues at the assessment stage, several participants raised concerns about inappropriate approval conditions and a reliance on prescriptive conditions. Failure to tailor conditions to projects leaves proponents facing requirements that sometimes make little

---

sense in their operational context and that can even be impossible for them to comply with. Unclear or under-specified conditions can also limit regulators' ability to enforce them once projects are operational. In addition, altering an approval in some jurisdictions can involve a time-consuming revisiting of the approvals process. The high cost of seeking changes to approval conditions may deter companies from adopting new technologies, and companies are often loath to push back on demands for fear of creating more delays.

A rigid one-size-fits-all approach is also increasingly out of step with a shift towards new 'critical minerals' (such as lithium, boron and rare earth elements), reworking old mine sites and a tendency for newly identified deposits to be deeper and more challenging to extract. In contrast, greater use of outcomes-based approval conditions would foster innovation — as these conditions do not dictate how companies should achieve certain outcomes (box 5).

#### **Box 5      What is risk- and outcomes-based regulation?**

A risk-based approach to regulation bases regulatory decisions and priorities on the likely risks posed by an activity, taking into account both the potential seriousness of a risky outcome and the likelihood of it occurring. Appropriate and proportionate levels of control are then adopted.

Risk-based regulation requires that regulators begin by identifying the risks that they need to manage, not the rules they have to enforce. This requires that they have accurate information and data about the operation of regulated industries, and adequate resources to target their efforts to the areas presenting the greatest risks. In an ideal setting, a risk-based approach can facilitate the efficient and effective use of regulatory resources.

Outcomes-based regulations set out the outcomes or standards that regulated entities must achieve, without specifying what steps must be taken to comply. This contrasts with prescriptive regulation, which sets out in specific detail how regulated entities should behave.

Outcomes-based rules are generally preferable, as they are flexible enough to accommodate different or changing circumstances, including material changes to how an industry operates, and they enable businesses and individuals to choose the most cost-effective ways of complying. However, prescription does have its place in the regulatory framework, and there are instances where it is necessary — for example, where there is a high degree of uncertainty regarding the nature or severity of project impacts.

There are several examples where principles of risk-based or outcome-based regulation have been introduced.

- In New South Wales, draft guidelines on scoping environmental impact statements indicate that matters to be addressed would be categorised as either a 'key issue' (requiring detailed assessment) or 'other issue' (where approaches are understood and specialist studies are not required).
- Measurable outcomes can be identified and pursued through proponent design of risk-management strategies best suited to their project (as now happens in the offshore oil and gas industry under the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) and in Norway), rather than through prescriptive operating conditions.

- 
- A risk-based approach to due diligence when granting tenements to identify likely non-compliant operators would bring community as well as reputational benefits to other operators. Explorers could be required to notify landholders of low-impact low-risk activity in person (as required by the Queensland Land Access Code) rather than via formal negotiation.

## **Greater co-operation, coordination and concurrence would reduce delays, duplication and inconsistency**

Projects typically require approvals from multiple agencies, which can lead to protracted (sometimes sequential) approval timeframes, duplicated effort and inconsistent requirements (box 6).

### **Box 6 Involvement of multiple agencies can create confusion**

Minerals developments are subject to multiple state/territory level approvals requiring interactions and oversight by a range of different agencies, including but not limited to those responsible for planning, environment, water and mining. Managing the myriad approvals and licencing processes can and does lead to additional confusion, costs and delays. (MCA, sub. 11, p. 17)

... the Company has spent an enormous amount of time constantly following up with the different NSW Government departments for progress updates and simple clarifications. (AMEC, sub. 31, p. 15)

Where dual-processes are required, additional and unnecessary work is created, and where multiple parallel approvals are required across jurisdictions and agencies, there is no central coordinating agency or office, and a lack of coordination and prioritisation can lead to project delays. (Woodside, sub. 18, p. 4)

The imposition of approval conditions under the EPBC Act also increases compliance costs across Australia, particularly when those such approval conditions duplicate or impose additional requirements that are similar to State or Territory requirements. (NSW Minerals Council, sub. 28, p. 37)

Regulatory coordination within jurisdictions has improved over the last decade. The Commonwealth and most other jurisdictions have some variation of a lead agency model and all jurisdictions other than the ACT offer major project facilitation. But navigating the regulatory landscape remains challenging for some proponents. And regulation by multiple agencies risks regulators overstepping their remit, resulting in duplication and inconsistency.

It would probably be infeasible and inappropriate to bring *all* approvals required at a given level of government under the auspices of a single regulator, but significant benefits would flow from improved coordination. Arrangements that enable regulatory processes to occur in parallel rather than in sequence also reduce delays.

Leading practices include:

- Western Australia's use of memorandums of understanding and officer working groups, which regularly bring together case management officers from different agencies to resolve issues surrounding approvals

- 
- the South Australian mining regulator’s use of funds from costs recovered from companies to pay the salaries of staff in other regulatory agencies (supporting more efficient approvals processing and better inter-agency communication), and use of multi-agency taskforces that are assembled for complex projects.

## Reducing Commonwealth–State duplication would deliver substantial benefits

Delays and duplication are major issues for projects that trigger the EPBC Act and require environmental approval at both the Commonwealth and State or Territory level.

Bilateral assessment agreements are leading-practice arrangements that reduce duplication by allowing proponents to prepare a single set of assessment documentation for both Commonwealth and State or Territory decision makers. Participants have indicated that they are of demonstrable benefit but that duplication in approval conditions, and in monitoring and reporting requirements, remains problematic.

Participants continue to advocate for bilateral approval agreements. These would allow State and Territory decision makers to approve or reject projects under the EPBC Act, acting as the authorised Commonwealth decision maker. The most recent independent review of the EPBC Act recommended that the Australian Government introduce a set of National Environmental Standards (box 7), which would be used to accredit State and Territory systems to assess and approve projects. While the Australian Government supported this recommendation, the process is in its infancy. The ability of the Commonwealth to develop effective national standards that are supported by State and Territory Governments will be crucial. Notwithstanding the challenges, bilateral approval agreements remain worthy of pursuit.

Delays, duplication and inconsistency would also be reduced by:

- rigorous application of risk- and outcomes-based approaches in State, Territory and Commonwealth jurisdictions (discussed above)
- improved co-operation and coordination between the Commonwealth and State and Territory regulators, including through out-posting of Commonwealth officers to jurisdictions with high application throughput, and training of State and Territory officers in EPBC Act requirements (which would help ensure that information provided in bilateral assessments meets Commonwealth requirements)
- greater commitment from Commonwealth and State and Territory regulators to avoid inconsistencies and overlaps in approval requirements, such as by State and Territory Governments ensuring that their conditions address the likely impacts on matters of national significance
- tighter application of the nuclear and water triggers under the EPBC Act.

---

**Box 7****Proposed National Environment Standards**

The interim report of the second independent review of the EPBC Act recommended the Australian Government create a set of legally enforceable National Environmental Standards to underpin the EPBC Act. The intent of the Standards would be to focus decision makers on environmental outcomes being achieved under the EPBC Act, and clearly define the fundamental processes for sound decision making. The review recommended the Standards be set by the Commonwealth Environment Minister, and that they should be granular and measurable (with targets that specify intended outcomes) without being overly prescriptive. The review recommended Interim Standards be introduced as a first step, to facilitate rapid reform and streamlining, which should evolve as soon as practicable into more specific, definitive and data-based Standards as information improves.

**Enhanced regulator capacity and capability are key to enduring reform**

Adoption of risk- and outcomes-based approaches and greater inter-regulator co-operation requires sufficiently resourced, well-directed and capable regulators. Widespread concerns about regulators' capacity indicate these features are lacking in many agencies (box 8).

Inadequate funding appears common — a product of limited cost recovery combined with budget cuts and efficiency dividends in a number of jurisdictions. Additional funding of \$25 million for the Commonwealth environment regulator announced in the Mid-Year Economic and Fiscal Outlook 2019-20 to address the backlog in environmental approvals, and a further \$21.2 million allocated in the 2020-21 Budget to continue to improve assessment timeliness, is one recognition of this issue.

On the capability front, agencies can lack adequate scientific and technical expertise and industry know-how. Staff turnover means some are in their roles for only a short period of time. Lack of permanent, deep expertise means that staff may be unable to assess project proposals in a risk-based manner — for example, because they do not fully understand the technical details associated with an application, or are not up to date with technological advances that would allow a project proponent to achieve the same regulated outcomes in more efficient ways.

Furthermore, staff turnover also affects continuity, frustrating proponents where case handovers are not smooth and creating inconsistency and processing delays.

---

**Box 8      Capability is seen as a key factor in delays and uncertainty**

Regulator capability and resourcing were a focus for many study participants. For example:

Industry has observed some significant differences in the capability and consequent resourcing of agencies and regulators as they relate to the petroleum industry ... These differences in capabilities is typically expressed as disparities in timeliness of approvals, which has resulted in project approval delays and timing uncertainty for industry. (APPEA, sub. 44, p. 13)

We recognise this [regulator capability and under-resourcing] to be a major challenge – especially the attraction and retention of high-end, industry-relevant technical skills in an environment which appears, from the outside, to prefer to move staff around rather than retain and grow sector specific expertise. It also struggles with a mechanism to compete with industry salaries. (Garnett, sub. 24, p. 5)

Delays in regulators fulfilling their obligations can appear, at times, to be driven by resourcing constraints within agencies. The matter of adequate resourcing is not just about personnel numbers but equally applies to the availability of suitable technical expertise and live industry experience within the regulator. (Woodside Energy sub. 18, p. 4)

Officers of [the NSW] Resources Regulator [are] lacking in experience and understanding of the exploration sector ... the expertise of the regulator is often not relevant to the present project or the issue being dealt with ... (NSW Minerals Council, sub. 28, p. 36)

Decision-making approaches for similar issues often vary between officers, reflecting different capabilities and, potentially, gaps in training and a lack of clear guidance about their regulatory function.

NOPSEMA is an outlier. As an independent statutory national environmental and safety regulator for offshore oil and gas, it has greater capacity to employ staff who are technically competent with the experience, backgrounds and capabilities needed to assess environmental plans. NOPSEMA also entirely cost recovers its services through levies and fees. When workflow increases, revenue increases and the agency can take on additional staff. Cost recovery demands transparency and accountability so that stakeholders can be confident that collected funds are being used effectively — for example, NOPSEMA publishes annual statements on the cost effectiveness of its operations. The offshore oil and gas industry is generally positive about the regulator’s capabilities.

The full NOPSEMA model would not translate easily to the broader, more diverse resources sector (as noted earlier, bringing all approvals required at a given level of government under a single regulator would probably be infeasible, and project approvals processes also apply to non-resources projects), but there is little doubt that wider adoption of a number of its characteristics, including resourcing, would bring benefits.

Governments in each jurisdiction should assess whether their resources-related regulators are appropriately funded, enabling employment of the appropriate number and calibre of staff for implementing a risk-based regulatory system. They should also investigate opportunities for enhancing regulators’ cost recovery processes (like those adopted by the SA mining regulator and NOPSEMA).

---

Other leading-practice approaches that build capability include:

- secondments (such as the officer exchange program between the NT and WA environmental regulators)
- training programs (offered in Tasmania for senior management regarding leadership and in NOPSEMA for all staff regarding regulatory practices)
- strategies to target particular skills gaps, including technical expertise (such as a strategy adopted by the Environment Protection Authority (EPA) Victoria)
- developing cultural understanding through direct engagement with Indigenous organisations and communities (a leading-practice example has not been identified)
- site visits (as have been undertaken by regulators in both Victoria and New South Wales).

Regulators should also consult industry, including peak bodies, on a program of site visits to enhance technical expertise. Such programs could form part of induction training provided to new staff.

Regulators could also make better use of technology to undertake routine tasks, freeing up staff to concentrate on more complex tasks and improving the interface with proponents and the community. The Commonwealth–WA Government partnership to build a portal that will enable proponents to track applications is a promising initiative.

### A supporting culture that develops capability

Effective implementation of leading regulatory practices requires a supportive culture, with strong leadership from senior management.

Leading practices include appointment of a regulatory champion (like the Principal Regulatory Officer at the then Commonwealth Department of Agriculture), recognising and incentivising good staff performance (as per the Queensland mining regulator), creation of working groups to assess and promote cultural change (a NOPSEMA approach) and reporting on performance (for example, the WA mining regulator reports its target timeframes and its performance against them).

### **Improved accountability and transparency would enhance certainty and confidence in the regulatory system**

Inadequate accountability and transparency in some regulatory systems creates uncertainty for proponents and hinder community confidence in the sector.

Regulators do not always provide clear information to proponents about assessment requirements. Proponents claim they deliver what they think is needed, then face requests for more input — extending timelines to approval and adding costs to the process. Lack of clear guidance also impairs the quality of social impact assessments.

---

Not all jurisdictions publish information on target assessment and approval timeframes. In some instances, timeframes stretch out without clear reason, and many agencies do not report on whether target timeframes are achieved. Regulators tend to blame proponents for not supplying adequate information; proponents tend to blame regulator capacity and capability for delays. Greater transparency would shed some light on where the problem lies.

In some cases, approval requirements have been moved from the primary approval process into the so-called ‘post-approvals’ phase (box 9). In part, this is a function of regulators struggling to meet statutory timeframes (where these exist); in part, it reflects the preferences of some proponents to do the minimum required to obtain primary approval as early as possible so they can then seek investment financing. But there is little accountability or transparency in the post-approvals process. For example, there are no statutory timeframes and reporting requirements are unclear, making for greater uncertainty and delay.

#### **Box 9 Post-approval processes add to uncertainty and delays**

It has become increasingly common ... for approvals to be granted subject to conditions requiring later lodgement and acceptance of various types of plans or reports, which are required before operations (or construction) can commence. However, for many of these ‘nested’ approvals, there are two significant risks:

- The matter that has been deferred for future consideration may be fundamental both to the approval and to the proponent’s investment decision, in which case, it is a matter that should have been decided upfront ...
- There is no assessment framework for the plan or report, such as regulatory timeframes, criteria or appeal against refusal. There may be multiple information requests, with no way of closing out the process, preventing the operation (or construction) from starting. (QRC, sub. 27, p. 13)

The process for navigating post approval requirements for mining projects is becoming increasingly uncertain ... This is becoming increasingly difficult and time consuming, with limited accountability or transparency ... Under the NSW assessment process there has been a noticeable increase in post approval requirements necessitating further approval or consultation with various Agencies ... satisfaction of these conditions often takes months ... (NSW Minerals Council, sub. 28, pp. 15, 26, 34)

In addition to the increased time and resources required to resolve post determination issues, the increased reliance on post approval requirements is causing significant uncertainty for operations, particularly where ‘incremental approvals’ are required for projects to continue operating. (Peabody Australia Coal Pty Ltd, sub. 33, p. 5)

The timing of [Offset Management Plan] approvals are becoming one of the biggest risks of delays to the commencement of mining projects. (Anglo American, sub. 42, p. 10)

There are examples of better practice:

- Western Australia provides guidance to proponents on environmental assessment requirements and New South Wales likewise provides guidance on social impact assessment requirements.
- Western Australia is also working to speed up information flows and is publishing average approval times, including the time that applications spend with proponents.
- NOPSEMA has found that publishing applications and seeking public comment has lifted the quality of information provided.



- 
- New South Wales intends to report on performance against timelines for post-approvals.

### Limited transparency makes assessing environmental outcomes difficult

There is limited evidence on the effectiveness and efficiency of resources monitoring and enforcement activity. While regulators in all jurisdictions provide reports summarising their monitoring and compliance activities, the format and content is not always accessible for a lay audience. It can be difficult for the public to get a picture of a regulator's most consequential activities and to assess the overall state of play with compliance.

Audits of regulators' monitoring and enforcement activities provide a detailed view of their processes and capabilities, but these are not done regularly. Those that have been completed have raised concerns — for example, several jurisdictions do not have integrated information systems, making it difficult for regulators to target compliance activities. And the review of the EPBC Act found limited evidence of proactive compliance monitoring.

Environmental offsets can enable economically valuable projects to go ahead without compromising overall environmental quality. But again, there is little available evidence about whether they are achieving their objectives. A community member seeking insight into whether offsets have been delivered would generally not be able to find out one way or the other.

There are some examples of leading practice. Western Australia's provision of summary information from operators' annual environmental reports is one. And comprehensive reports published by the New South Wales Resources Regulator on its activities, including enforceable undertakings, incident investigations and compliance priority programs is another.

### **Harnessing information and data would support better regulation and community engagement**

Resources projects generate rich data and information about geological formations and the quality of resources, heritage sites, threatened species, groundwater assets and more. While much is collected, relatively little is made publicly available. In some cases, there are good arguments to limit access. For example, incentives to explore would be weakened by requirements to release private geoscience data early in the life of projects and the location and nature of Indigenous heritage sites are often highly sensitive. But more generally, the release of collected data would reduce duplicated effort and unnecessary costs for proponents, and promote outcomes monitoring. Digital technologies would support the relatively low-cost collection and management of data and information.

Data and information collected by resources companies also hold significant potential value for the broader community. They can enhance understanding of resources activities, increase confidence in the regulatory system, help with communicating regulatory objectives and provide evidence of whether those objectives are being met. Research and information

---

provision by trusted institutions can also play an important role in informing communities. Where there is tension in communities about resources activities, information provision would help allay fears and develop acceptance.

Examples of leading practice exist:

- The Queensland GasFields Commission, an independent statutory body, aims to manage and improve coexistence among rural landholders, regional communities and the onshore gas industry. Publication of accurate data and information contributes to achieving this end. Also in Queensland, the Office of Groundwater Impact Assessment has built significant expertise in large-scale, groundwater impact modelling. Its research helps allay concerns about the potential impacts of groundwater extraction from resource operations. Independence helps create trust in the work done by these bodies.
- The Gas Industry Social and Environmental Research Alliance — a collaboration between the Commonwealth Scientific and Industrial Research Organisation (CSIRO), Commonwealth, State and NT Governments and industry — undertakes publicly reported independent research.
- The WA EPA has formed a working group, which includes the NT EPA and NOPSEMA, to investigate ways in which digital technologies could streamline the capture, supply and interpretation of data in the environmental impact assessment process.
- The Commonwealth and Western Australian Governments are developing a database of biodiversity studies, which will store and share information provided by proponents.

## **Governments are responsible for the foundations of leading-practice systems**

As already noted, many of the regulatory challenges facing the sector have been raised in previous reviews, by the Commission and others. The key to addressing them is to put in place the appropriate foundations for delivering efficient and robust regulatory processes. These include:

- an institutional and governance architecture that:
  - assigns clear roles and accountabilities
  - sets clear expectations of regulators and decision makers
  - is reviewed regularly to assist in maintaining fit-for-purpose regulation, and enables regulator performance that is consistent with expectations
- provision of, or arrangements for, adequate funding and resourcing of regulators (discussed above)
- evidence-based and consultative policy-making processes that translate to clear and consistent regulatory objectives.

Governments are ultimately responsible for ensuring that these pre-conditions are in place.

---

Getting the foundations of the regulatory system right is particularly relevant in the current climate, as many jurisdictions seek to boost their economic activity as part of the COVID-19 recovery. Setting clear expectations of regulators and improving their accountability and capability can be put in place reasonably quickly and would yield immediate benefits, including by supporting risk-based regulation.

Statements of Expectations (used for the Victorian mining regulator and NOPSEMA (box 10)) clarify a government’s expectations of a regulator, and how performance against these expectations will be measured. Such statements are important to align regulator incentives with policy objectives, and reduce ‘grey’ areas and ambiguity that creates scope for inconsistent decision making and excessive risk aversion. In essence, clear Statements of Expectations empower and authorise regulators to make decisions and make them more accountable.

**Box 10      Examples of Statements of Expectations**

In Victoria, the Minister for Resources issued a Statement of Expectations for Earth Resources Regulation over the period 2018–20. The Statement sets out 14 specific expectations across several areas where there are opportunities for Earth Resources Regulation to improve regulatory practice: streamlining approvals pathways; developing guidance, processes and procedures; staff training; and ICT systems. Expectations have been assigned target completion dates to improve accountability, and the Minister also specified that progress against performance targets must be published in standard annual reporting.

The Commonwealth Minister’s Statement of Expectations for the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA), released in October 2019, sets out how the agency is expected to exercise its legislated functions by regulating petroleum activities in a manner that reflects international leading practice. In addition to a set of guiding principles, the Statement includes specific expectations on NOPSEMA’s regulatory activities in relation to providing effective and efficient regulation; regulatory change; stakeholder engagement, consultation and transparency; reducing regulatory burden; decommissioning; meeting future industry challenges; and operational matters.

A range of institutions are well placed to (and do) conduct reviews. For example, several jurisdictions have established offices akin to the Commonwealth Office of Best Practice Regulation and formed State-specific Productivity Commissions (in New South Wales in 2018, Queensland in 2015 and South Australia in 2018). The Victorian Government has appointed a Better Regulation and Red Tape Commissioner. And jurisdictions have drawn upon Auditor-General reporting to inform change. Further, jurisdictions have undertaken a range of broader initiatives to assess the prevalence of redundant and duplicative regulation, including through the Australian Government’s Deregulation Taskforce, the Streamline WA initiative and numerous Productivity Commission reviews. The Independent Review of the NSW Regulatory Policy Framework highlighted a ‘life cycle’ and ‘whole-of-system’ approach for developing and managing regulation, as is used in Canada and New Zealand, to assist in maintaining fit-for-purpose regulatory frameworks.

---

Political factors will necessarily shape regulatory systems. Decision makers have to balance the trade-offs between resources developments and other land uses. They have to be attuned to community expectations. But investor confidence can be destabilised by sudden policy changes that occur without consultation and analysis (box 11). Policy positions not based on sound evidence, such as blanket bans on gas exploration, undermine investment and community welfare. And the absence or vagueness of policy can translate to inconsistent regulatory objectives and decision making. Recent regulator decisions in relation to scope 3 emissions, for example, have created uncertainty for investors, in particular with respect to the weight that might be given to these emissions in future regulatory decisions. Moreover, targeting scope 3 emissions on a project-by-project basis is likely to be an ineffective mechanism for reducing global emissions.

**Box 11      Unclear objectives, inconsistency and sudden policy changes increase uncertainty for potential investors**

Study participants raised concerns about the regulatory design process, for example:

In the complex legal landscape affecting the resources sector, adequate consultation time is essential to allow stakeholders to identify unintended consequences of proposed changes, which can be many and varied, and may include significant impacts on the legitimate expectations of stakeholders. (QLS, sub. 41, p. 2)

... there is not a consistent approach as to how the contribution of GHG [greenhouse gas] emissions to global climate change should be assessed and how this should be factored into the public interest of a project proceeding. (ACF, sub. 32, p. 19)

The oil and gas sector is inherently marked by high levels of (resource and price) risk and uncertainty in advance of major investment decision making. Stability and gradual change in the regulatory settings are important. For example, a recent 'overnight' announcement of royalty increases in Queensland is destabilising because it is not congruent with the stated aims of government to put downward pressures on gas prices and increase supply (in fact it does the opposite). (Andrew Garnett, sub. 24, p. 3)

The regulatory outcomes sought by the [water] trigger – to improve environmental outcomes and enhance community confidence – were poorly defined, being broad and difficult to measure. As regulatory objectives are not clearly defined from the outset, regulators and independent panels are left to interpret requirements inconsistently and potentially change scope and expectations for the regulated entity. (MCA, sub. 11, p. 11)

Undue political influence on the operation of a regulatory regime, or lack of support for it, can risk undermining confidence in integrity of the system itself. Institutional independence for policy and regulatory functions can reduce perceptions of undue political influence — although independence alone is no guarantee that a regulator will be effective, and other strong governance arrangements remain essential.

Leading practice involves governments:

- clearly communicating their regulatory objectives
- adopting consultative and evidence-based processes when developing or changing policies and regulations
- being transparent about the reasoning behind decisions

- 
- supporting regulatory processes to weigh the environmental, social, amenity and economic impacts of proposed developments against the benefits, rather than for example, pre-emptively banning an activity such as gas exploration.

## **Centring traditional owners in Indigenous heritage protection**

Given the high cultural significance of many sites around Australia to traditional Aboriginal and Torres Strait Islander owners, governments have established regulatory processes to manage and conserve Indigenous heritage, while allowing development to take place. Regulation of Indigenous heritage is primarily a state and territory responsibility, and each jurisdiction takes a different approach. Broadly speaking, these approaches can be placed into one of two categories — agreement making with traditional owners, or ministerial approval for developments that may affect heritage sites. (Traditional owners are those with cultural and spiritual affiliations with land, which may give rise to statutory rights.)

In May 2020, Rio Tinto destroyed several rock shelters in Juukan Gorge, Western Australia, which had significant cultural and heritage value. This has brought to the fore longstanding and widespread concerns about a lack of consultation with Indigenous communities and inadequate monitoring of heritage compliance. There is a perception that the views of traditional owners are seen as an afterthought, rather than influencing decisions about the operation of a site.

Given the nature of Indigenous heritage, understanding of heritage sites cannot be properly achieved without genuine and direct engagement between traditional owners and companies. Centring traditional owners in decisions about the protection of their heritage is therefore a critical element of leading practice regimes, which should:

- promote engagement with Indigenous communities early in the process to allow heritage sites to be identified early and managed effectively
- integrate consultation with regulatory assessment processes
- give traditional owners a strong voice in the heritage approval process.

While all state and territory regimes are under review or are being reformed, there are some examples of leading practice.

- Victoria requires proponents to negotiate a cultural heritage management plan with registered Aboriginal parties before planning approval for a project can be given. Decisions cannot be overturned by the Minister, but can be reviewed by the Victorian Civil and Administrative Tribunal, which considers whether the activity can proceed in a way that minimises harm to Indigenous heritage.
- In Queensland, the ‘cultural heritage duty of care’ requires consultation where there is a high risk of activity damaging Indigenous heritage; compliance can be demonstrated through an agreement covering heritage issues. The process allows for mediation by the Land Court if the project proponent and traditional owners cannot reach agreement.

---

Ultimately, if the parties cannot agree, the Land Court makes a recommendation for an appropriate decision to the Minister who has the final call.

Concerns have also been raised about the role of the Australian Government in heritage protection. The *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (Cth) (ATSIHP Act) provides a last-resort power to intervene when state and territory laws provide inadequate protection to heritage sites. The current Act appears to have been largely ineffective at playing this backstop role.

There are different views about the appropriate role of the Commonwealth in this area. Some participants want the Australian Government to play a much larger role in heritage protection, while there are also arguments for heritage protection to remain the primary responsibility of the State and Territory Governments, embedding engagement and decision making within their assessment processes. Given the concerns about the effectiveness of the ATSIHP Act, its future role, and that of national heritage protection more broadly, a comprehensive review is warranted. This review would need to undertake extensive national consultation on heritage issues (including those beyond the resources sector). It would need to consider the findings of, and responses to, ongoing inquiries, including the Parliamentary Inquiry into Juukan Gorge, and the push for National Environmental Standards and devolution of approvals to state and territory regulators coming out of the EPBC Act review.

## **Other issues merit attention**

### **Surety arrangements for rehabilitation are improving but should go further**

Rehabilitation of sites has become an increasingly important focus for governments. There are few examples of successful rehabilitation — although some have emerged more recently. Governments have sometimes been left with a large clean-up bill, including from the many legacy sites around the country that predate requirements to rehabilitate sites.

Surety arrangements for rehabilitation generally have been inadequate, but are being strengthened. Bonds that cover the full cost of providing rehabilitation offer the highest level of financial assurance for governments, and provide companies with full incentives to complete rehabilitation in a timely way. Surety requirements should be adjusted to reflect and encourage progressive rehabilitation. Jurisdictions are heading in this direction, but a leading-practice jurisdiction has not been identified.

Some State and Territory Governments have moved towards pooled arrangements for rehabilitation surety. These pools are akin to insurance pools, and offer many of the same benefits — notably lowering the potential costs for industry. But they also carry many of the same risks, including reduced incentives to undertake rehabilitation, and the benefits of the pool will be reduced if higher-risk companies or companies with large rehabilitation liabilities dominate the risks covered by the fund. If used, State and Territory Governments need to ensure that levies reflect the risk of the company passing their liabilities to the government, and that the pool is complemented by effective compliance and enforcement arrangements.

---

Larger liabilities should be covered using alternative surety arrangements. Queensland’s rehabilitation pool is a good example of a model that treats larger liabilities differently.

Following the surrender of the mine site, some risks will likely remain. These residual risks are an emerging issue — participants stated that mining companies can be responsible for a mining lease many years after it has ceased to be in force. Residual risk payments, such as those in Queensland, provide protection for governments while allowing companies to surrender their liabilities.

There is also merit in governments facilitating the reopening and rehabilitation of abandoned mines, such as through streamlined approval processes (without compromising the intent of regulation) and indemnities against past damages (where they are clearly not the responsibility of the new operator).

### Addressing ‘lawfare’ at its source

‘Lawfare’ (or attempts by environmental advocates to derail projects via court action) was raised as a concern by some participants. Delays associated with review of environmental approval decisions in the court system are potentially costly but there is good reason to allow certain third parties standing to seek judicial review of environmental approvals.

In reality, there have not been many environmental citizen suits. That said, cases that have made it to court, at least in relation to Commonwealth environmental approvals under the EPBC Act, are often based on technical breaches that have no substantive impact on environmental outcomes. Addressing excessive procedural requirements, improving public confidence in the EPBC Act and improving transparency would reduce the drivers for unnecessary legal challenge, while not frustrating those that address substantive failings in approvals.

## **5 Effective community engagement and benefit sharing can build trust**

Resources projects generally bring net benefits to the economy and community as a whole, as well as the local communities in which they operate. But both positive and negative impacts are typically amplified for local communities, often creating community apprehension and tensions.

Effective community engagement allows communities to have a say in projects that may affect them, and can be a valuable tool in creating support. Early engagement can help to identify issues and any impediments to the projects proceeding. Guidance to companies on how to engage is plentiful. Most frameworks cover similar themes, and there is no one set of guidelines that is better than the others.

Engagement is normally a requirement of licensing and approval processes, and governments generally require an assessment of the economic and social impacts of a

---

project. Companies, rightly, are required to identify the effects of their projects on communities. The issue then is who is best placed to deal with these impacts and who should pay for doing so (box 12).

Some project impacts such as volatile house prices are an inevitable market response to increased demand outstripping supply. They signal a need for adjustment and should not be suppressed, but pursuing strategies such as appropriate planning and targeted investments can manage changes in demand and moderate price spikes.

While communities often benefit from the normal economic activities of resources companies (for example, through new jobs and higher wages), the contributions to communities by many companies go beyond these impacts. Additional ‘benefit-sharing’ activities include financial payments to local governments and community groups, investment in infrastructure, programs to increase local employment and business capability, and approaches to mitigate the negative social effects of resources projects.

In part, companies go above and beyond in benefit sharing to build a ‘social licence to operate’. A lack of community support can lead to delays, additional financial costs and, in extreme cases, failure to obtain an operating licence. Benefit-sharing activities can also improve the liveability of a region, making it easier to attract and retain workers.

**Box 12      Who should do and pay for what?**

Companies should be required to address negative externalities from their operations, such as noise and dust as required by regulation. And they should also generally be expected to provide or pay for infrastructure that is built solely for their operations.

Governments are better placed to address impediments to market adjustment — for example, in the housing market through planning policy, including land release. Alternatively, allowing use of external (fly-in, fly-out) workforces can moderate pressures on housing demand and price increases (but possibly reduce local employment and activity benefits).

Where infrastructure is shared, governments are likely to be better placed to coordinate its provision, partly funded from direct contributions, or from royalty or rate revenue from the project. Governments are also better placed to plan for, provide and manage economic and social infrastructure associated with local population growth. Funding for generally available services should be in line with normal taxing and charging arrangements.

Left to themselves, companies may not target investment to areas of greatest benefit for the community — particularly where multiple companies are making investments simultaneously. Leading practice involves companies consulting with local governments or community groups about how they might leverage and align their investments to promote local benefits (and not shift hidden costs such as upkeep and maintenance). This can occur through formal partnerships, such as that between Rio Tinto and the City of Karratha, or informal consultative arrangements, such as the committee established by Hillgrove Resources in Kanmantoo and Callington.



---

Some participants have argued that local communities located near resources projects should receive benefits from resources companies over and beyond those flowing from increased economic activity and voluntary benefit sharing. These include mandated local jobs, local content and hypothecated royalties.

But approaches that mandate resources companies to use local content — either workers or services — can be costly, reducing both opportunities to source services and employment from other parts of Australia and the profitability of resources companies (which affects the taxes and royalties they pay and the benefits to the Australian community). There are better ways of building local capability — for example, governments and businesses can provide businesses in local communities with the support they need to engage with resources companies, such as through BHP’s Local Buying Program, which is likely to develop more enduring capability than mandating use of local content.

Nor is there a case for hypothecating royalty payments to communities near resources activities. Government revenues should be spent wherever community net benefits are greatest. Programs that hypothecate royalty payments to mining regions may simply substitute for other government spending, and they risk money being spent on projects with lower benefits than might be achieved elsewhere.

It has also been suggested that consideration of community benefit sharing should encompass private landowners being given a right of veto over resources activity on their land or a right to a royalty stream. Landowners have a right to fair and full compensation for access to their land, but not payment for the resources under it. And while a veto right or right to royalties would deliver potentially large gains to some landholders, it would not necessarily spread benefits to all local landholders or communities.

## **6 Indigenous community engagement and benefit sharing**

Resources companies interact with Aboriginal and Torres Strait Islander people as part of environmental impact assessment and heritage processes, but most interaction occurs through agreement making with traditional owners. Many companies also have voluntary programs aimed at benefitting Aboriginal and Torres Strait Islander people even if they are not traditional owners. While agreements often benefit those in the community who are not traditional owners, traditional owners remain the primary beneficiaries of agreements (as they are intended to be).

Financial payments under agreements can run to the millions of dollars, but the confidentiality of agreements has made it difficult for the Commission to gain a broad view of their content, evaluate their effectiveness and identify leading practice. In undertaking its analysis, the Commission has necessarily relied heavily on participants’ views and insights, particularly Aboriginal and Torres Strait Islander representatives, and academics and

---

practitioners who have experience working with traditional owners to negotiate agreements and manage benefits.

The principle of free, prior and informed consent (FPIC) is used to guide engagement with traditional owners regarding the use of their traditional lands. In Australia, traditional owners generally do not have a right of veto. Some resources companies choose not to proceed with development unless traditional owners give their consent, but most apply FPIC by building respectful relationships, and negotiating with traditional owners with the aim of obtaining consent. Where consent cannot be obtained, companies may pursue dispute resolution processes set out in legislation — for example, in the Native Title Act, the National Native Title Tribunal can make determinations about whether a future act can be done (and under what conditions).

Resource limitations in some prescribed bodies corporate (PBCs) inhibit their ability to engage effectively with the resources sector and maximise benefits to Indigenous communities. The Australian Government provides some funding to PBCs, and the effectiveness of capacity-building funding is expected to be reviewed this financial year. But there is also a role for resources companies to provide support, particularly where costs arise from resources companies' need to engage with native title organisations — the Native Title Act allows PBCs to charge resource companies fees associated with negotiating agreements.

Participants have also raised concerns about constraints on how Aboriginal and Torres Strait Islander groups can use funds from native title agreements. These funds are commonly held and managed through charitable trusts — which can limit their use to support economic development. The Commission understands that charities can run profit-making activities and retain registration provided the ultimate use of funds raised is consistent with their charitable purposes and for the public benefit. The range of economic development activities that may be undertaken by Indigenous charities, therefore, may be wider than is currently perceived to be the case, but there is ambiguity surrounding the types of activities that would be acceptable.

Giving the Australian Charities and Not-for-profits Commission the power and capacity to make private rulings on whether activities are considered charitable would provide greater clarity. This change would clarify the scope of permissible economic development activities that charities could undertake, but it would not change the underlying requirement for charities to conduct or support only activities that have a charitable purpose and are for the public benefit. Native title groups may need to look to other vehicles if they wish to undertake non-charitable activities.

Ultimately, traditional owners must be at the centre of decision making about how benefits are used, managed and held. Resources companies can work with and support traditional owners to articulate their goals and realise them.

Two additional legal issues require clarification to ensure that native title benefits flow to their rightful recipients. These are:

- 
- the duties of the applicants who act on behalf of groups claiming native title, and, relatedly, whether claim groups or the groups ultimately determined to hold native title are the rightful owners of funds negotiated through agreements
  - the duties of private agents who represent native title interests. Some private agents have reportedly misused native title funds, either of their own volition or on native title applicants' instructions. A contributing factor is that private agents do not have the same obligations as native title representative bodies to consider the broader native title group's interests, even though they provide similar services.

Proposed amendments to the Native Title Act would not fully resolve these issues. The Australian Government should examine the question of who is the rightful owner of funds from native title agreements, and impose statutory obligations on private agents that are equivalent to those imposed on native title representative bodies and service providers.

**Table 1 Summary of issues and avenues for improvement**

<i>Issue</i>	<i>Recommendations and selected leading practices</i>
<b>Managing resources development in the interests of the community</b>	
Not all companies meet their obligations as tenement holders	Thorough assessments of potential licence holders using a risk-based approach, and considering applicants' past regulatory compliance, insolvency and criminal conduct, and their technical competency, address the risks of repeated non-compliance. (LP 4.2)
Community concerns about mixed land use contribute to calls for greater regulation	For project proposals of intense public concern, accessible information provided by independent institutions can help inform debate. (LP 4.3)
Extraction bans and moratoria can prohibit activity of potential value to the community	Rather than imposing bans and moratoria on certain types of resources activity such as onshore gas, governments should weigh the evidence on the costs of a particular project to the environment, other land users and communities against the benefits on a project-by-project (or regional) basis. (R 4.1)
<b>Managing access to land for resources projects</b>	
Land access can be a contentious issue	Where resources projects proposals affect multiple landholders in a region, it may be appropriate for governments to develop effective strategic land use frameworks to assess the trade-offs between resources development and other land uses on a regional basis. (LP 5.1) Early personal engagement between resources companies and landholders (LP 5.2) and low-cost dispute resolution mechanisms (LP 5.4) can ease tensions.
Landholders often lack capacity to negotiate with resources companies	A standard template for land access agreements can help to set expectations for landholders and resources companies and improve confidence in the regulatory system. (LP 5.3)
Over-use of the NTA expedited procedure can cause unnecessary delays	The National Native Title Tribunal should publish guidance about the circumstances in which the expedited procedure will apply. (R 5.1)
<b>Addressing unnecessary regulatory burdens</b>	
Environmental impact assessments (EIAs) are often unduly broad in scope	Adopting a risk-based approach, including through the use of thorough scoping, leads to the level and focus of investigations being proportionate to the size and likelihood of environmental risks. (LP 6.1)
Delays at the approval stage are unpredictable and lengthy; conditions can be inappropriate	Clear guidance on regulators' expectations about the content and quality of EIAs reduces the need for additional information requests. (LP 6.2) Clarity provided by timelines for regulatory processes supports proponents' planning. Public reporting of regulator performance against timelines is a means of keeping them accountable. (LP 6.3) Limiting use of stop-the-clock provisions to situations where issues emerge that could not have been reasonably anticipated would promote certainty. (LP 6.4) Deemed decisions, whereby the assessment agency's recommendation to the final decision maker becomes the approval instrument if a decision is not made within statutory timeframes, can reduce delays. (LP 6.5) Outcomes-based approval conditions enable companies to choose least-cost ways of achieving defined environmental outcomes. (LP 6.7)
Projects requiring both Commonwealth and State or Territory approval face delays and potentially inconsistent approval conditions	The EPBC Act should be amended to enable negotiation of bilateral approval agreements (R 6.1). When bilateral assessment agreements are renegotiated, State and Territory Governments should consider making additional commitments to address inconsistencies and overlap in approval conditions. (R 6.2)

(continued next page)

**Table 1** (continued)

<i>Issue</i>	<i>Recommendations and selected leading practices</i>
Processes and timelines for securing post-approvals are often unpredictable	Timelines for regulator decisions and public reporting against them would reduce delays and uncertainty in the post-approval stage. (LP 6.9) Clear guidance from regulators on post-approval documentation requirements can make the process more efficient. (LP 6.10)
Coordination between regulators can be insufficient	Effective coordination among agencies within a jurisdiction, such as through a lead agency or major project coordination office, facilitates timely processing and minimises overlaps and inconsistencies. (LP 6.12)
<b>Delivering sound environmental outcomes</b>	
Inappropriate or inadequate approval conditions impede regulator effectiveness	A 'feedback loop' between compliance monitoring and condition-setting processes provides useful information about the efficacy of approval conditions in protecting the environment. (LP 7.1)
Regulators' compliance and enforcement activity lacks transparency	Public communication from regulators about compliance and enforcement activities, and access to information about regulated sites can help to improve public confidence in the sector's regulation. (LP 7.3)
The effectiveness of offset obligations and schemes is unclear	Comprehensive public registers of offset obligations and the projects developed to meet them are a valuable transparency measure. (LP 7.4) Schemes that allow companies to pay their offset obligations into a fund can create opportunities for better environmental outcomes and reduce costs for companies (LP 7.5). The payment should cover the full expected cost of attaining the outcome through the fund. (LP 7.7) Science-based implementation strategies for the use of offsets funds are key to achieving their intended purpose. (LP 7.6)
Surety arrangements for rehabilitation generally have been inadequate	Financial assurance arrangements that cover the full cost of providing rehabilitation provide incentives for companies to undertake rehabilitation and minimise the risk that governments will be left responsible for rehabilitation. (LP 7.9; LP 7.10)
Site rehabilitation has been limited; the historical legacy of abandoned mines is large	Progressive rehabilitation can be encouraged by including requirements in approvals plans, and by financial surety arrangements being reduced commensurate with ongoing rehabilitation work. (LP 7.11) There is merit in governments working with industry to reopen and rehabilitate legacy abandoned mines. (LP 7.14)
Companies can be liable for resources sites for many years after surrender	Residual risk payments allow governments to be compensated for the risks that remain following surrender of a mine site, while allowing companies to surrender their liabilities to the site. (LP 7.13)
<b>Indigenous heritage regulations are in need of reform</b>	
Consultation with traditional owners is often inadequate, and heritage can be seen as an afterthought	Leading-practice heritage regimes embed heritage engagement in the project assessment process, put traditional owners at the centre of decision making on heritage, and provide a process for both traditional owners and proponents to seek dispute resolution or appeal. (LP 8.1)
<b>Investment is also affected by abrupt policy changes, policy inconsistency and uncertainty</b>	
Investment can be undermined by abrupt policy changes, policy inconsistency and uncertainty	Early public consultation on new policy proposals, accompanied by clear articulation of the policy rationale, can avoid policy surprises. Clear policy objectives aid consistent and predictable regulatory decision making. (LP 9.1)
Bargaining arrangements for greenfields agreements can pose risks for projects	The Fair Work Act should be amended to allow an enterprise agreement for greenfields projects to specify a nominal expiry date that matches the life of the project. (R 9.1)

(continued next page)

Table 1 (continued)

<i>Issue</i>	<i>Recommendations and selected leading practices</i>
<b>Community engagement and benefit sharing can help mitigate impacts on local communities</b>	
Some mechanisms for addressing community impacts from resources projects are more effective than others	Supporting local businesses to supply goods and services to resources companies, rather than mandating local procurement and employment requirements, is likely to create more enduring benefits for communities. (LP 10.2) Coordination with local governments and communities can improve the effectiveness of companies' benefit-sharing activities. (LP 10.3)
<b>Specific community engagement and benefit sharing arrangements apply for Aboriginal and Torres Strait Islander communities</b>	
Scope of permissible uses of funds held in charitable trusts is unclear	The Australian Charities and Not-for-profits Commission should have the power and capacity to make private rulings on whether particular activities that a charity wishes to undertake are charitable, and to publish de-identified summaries of private rulings. (R 11.1)
Ownership of funds arising from native title agreements that precede a native title determination is unclear	Whether native title claim groups or common law holders are entitled to funds arising from native title agreements made before a native title determination should be reviewed, and also whether applicants and/or claim groups have any duties towards common law holders in receiving and managing funds. (R 11.2)
Private agents may not act in the best interest of the native title group	The Native Title Act should be amended to impose statutory obligations on private agents representing native title parties equivalent to those imposed on native title representative bodies and service providers. (R 11.3)
<b>Effective governance, conduct, capability and culture are crucial for leading-practice regulation</b>	
Pre-conditions needed for leading-practice systems are sometimes inadequate	Governments should assess whether regulators are appropriately funded, and consider opportunities for enhanced cost recovery. (R 12.1) Statements of Expectations from Ministers to regulators are an effective way for governments to set out clearly their objectives for the regulatory system. (LP 12.1) Regular independent review and evaluation of regulatory frameworks, objectives and performance drive continuous improvement and assist in maintaining fit-for-purpose systems. (LP 12.2)
Capability challenges constrain regulator performance	Staff capability and technical expertise can be improved through secondments, training programs and site visits. (LP 12.3) Regulators in each jurisdiction should consult with industry, including peak bodies, on developing programs of site visits to enhance technical expertise. (R 12.2) Digital technology and data management systems have the potential to significantly improve regulatory processes. (LP 12.6) Ministers should establish a forum to share leading-practice initiatives. (R 12.3)
Information sharing and community engagement by regulators can be improved	The provision of publicly accessible information and data by regulators can promote community confidence in the regulatory system and the sector. (LP 12.7) Engaging with local communities on the regulatory process throughout the life cycle of a resources project and conducting broader consultation on an ongoing basis to understand community expectations can improve the public's understanding of regulatory objectives and processes. (LP 12.8)

---

# Leading practices, findings and recommendations

## FINDING 2.1

Global factors including emissions policies, technological advances, and economic and population growth that drive demand as well as local factors affecting production costs make it challenging to predict the future mix and level of resources investment in Australia. However, given Australia's diverse and significant resources deposits and likely growth in global demand, the potential for investment will likely remain substantial.

## Managing resources development in the interests of the community

### FINDING 4.1

There is no case for a major reform of the Australian pre-competitive geoscience arrangements given the quality of the information is highly regarded. However, the coverage of geoscience databases could be further improved, for instance, by all jurisdictions adopting sunset confidentiality periods for public release of private exploration and production reports prior to the end of the tenure of a project. The public benefits of open access to exploration information must be balanced against the private incentives to explore.

### LEADING PRACTICE 4.1

To promote data access while balancing private incentives to explore, confidentiality periods before public release of private exploration and production reports generally should be shorter than the tenure of a project. New South Wales' new regulations are one example of this practice. Many other jurisdictions have similar arrangements in place.

### FINDING 4.2

No evidence has been presented to this study indicating that differences between jurisdictions' approaches to licensing have created impediments to investment, or that any particular regime for the allocation of tenements is 'leading practice' in all circumstances. However, exemptions from normal licensing requirements aimed at attracting investment have questionable merit.

---

#### LEADING PRACTICE 4.2

Thorough assessments of potential licence holders address the risk of repeated non-compliance. Leading practice involves regulators taking a risk-based approach to due diligence when granting, renewing or transferring tenements and considering:

- whether the applicant has previously failed to comply with licence conditions or health, safety and environment legislation (whether in the same jurisdiction, or in other domestic and international jurisdictions)
- past criminal conduct, technical competency and past insolvency.

While all jurisdictions undertake some due diligence, none fully follows leading practice.

#### FINDING 4.3

Domestic gas reservation schemes that remove the link between domestic and export prices reduce returns to investors and discourage investment in gas exploration and extraction, leading to higher prices in the longer run and imposing net costs on the community.

#### FINDING 4.4

Bans and moratoria are a response to uncertainty about impacts of unconventional gas operations. However, proper application of risk-based regulation would allow projects to proceed where it could be demonstrated that they would not generate undue environmental or other harm. The weight of evidence available, and the experience of jurisdictions where unconventional gas development takes place, suggests that risks can be managed effectively.

#### RECOMMENDATION 4.1

Rather than maintaining bans and moratoria on certain types of resources activity such as onshore gas, governments should weigh the scientific evidence on the costs of a particular project on the environment, other land users and communities against the benefits on a project-by-project (or regional) basis.



---

#### LEADING PRACTICE 4.3

Where resources project proposals are contentious and generate intense public concern, establishing institutions, independent of resources companies and regulators, to provide accessible information to landholders and the broader community can help inform debate. The GasFields Commission, the Office of Groundwater Impact Assessment in Queensland and the Commonwealth's Gas Industry Social and Environmental Research Alliance provide examples in relation to coal seam gas developments.

## Managing resources activities on private lands

#### FINDING 5.1

Landholders frequently express concern about resources projects, and some have called for a right of veto over resources activity on their land. This would be inconsistent with Crown ownership of resources and would affect the distribution of the benefits of resources significantly. Landholders have a right to full and fair compensation for access to their land, but not payment for the resources under it.

#### LEADING PRACTICE 5.1

Where resources project proposals affect multiple landholders in a region, it may be appropriate for governments to develop strategic land use frameworks to assess the trade-offs between resources development and other land uses on a regional, rather than case-by-case basis. However, the aim of these frameworks should be to maximise economic benefits for the community, rather than prohibit activity on certain types of land. These frameworks should thoroughly consider the costs and benefits of allowing resources development, and have approval processes proportionate to the risks of resources development on the relevant land. The Council of Australian Governments' Multiple Land Use Framework provides a leading-practice example.

#### LEADING PRACTICE 5.2

Where planned activity will be low impact, requiring early personal engagement between resources companies and landholders can ease potential tensions and be less costly than a negotiated agreement. The Queensland Land Access Code's notification requirements provide a leading-practice example of this approach.

---

#### FINDING 5.2

Many landholders enter land access negotiations with resources companies with little prior experience or relevant knowledge. This information asymmetry provides a basis for government intervention.

---

#### LEADING PRACTICE 5.3

A standard template for land access agreements can reduce information asymmetry, help to set expectations for landholders and resources companies, and improve confidence in the regulatory system. The Queensland Land Access Code, providing a combination of mandatory conditions as well as guidelines, provides a leading-practice model.

---

#### LEADING PRACTICE 5.4

Low-cost dispute resolution methods that take an investigative approach to resolving problems between parties can reduce tensions between landholders and resources companies. The recently established Queensland Land Access Ombudsman provides an example.

---

Special access requirements apply to resources activity on traditional lands covered by native title or land rights legislation

---

#### FINDING 5.3

The *McGlade* decision of the Federal Court in 2017 created concerns in the resources industry about the validity of native title agreements that had only been signed by the majority of the individual members of the applicant. Amendments proposed in the Native Title Legislation Amendment Bill 2019 (Cth) should address these concerns.

---

#### FINDING 5.4

The level of compensation paid for resources developments on native title land has typically been a matter for proponents and native title groups. However, the Timber Creek decision of the High Court in 2019 went to the value of native title rights and interests and could affect agreement making with native title groups. Any uncertainty will likely be resolved as access negotiations occur over time.

---

---

#### FINDING 5.5

Exploration activities have differing impacts on native title land. Consequently, a case-by-case approach by States and Territories to assessing whether the expedited procedure under the *Native Title Act 1993* (Cth) applies is necessary to give effect to the intention of the Act.

#### RECOMMENDATION 5.1

The National Native Title Tribunal should publish guidance about the circumstances in which the expedited procedure will apply.

#### FINDING 5.6

South Australia has implemented an alternative regime for negotiation of resources projects on native title land, while Victoria and the Northern Territory have different approaches to that set out under the *Native Title Act 1993* (Cth) for negotiating agreements between resources companies and traditional owners. Each of these unique approaches have both advantages and disadvantages; a leading-practice approach has not been identified.

#### LEADING PRACTICE 5.5

Conjunctive agreements that provide a standard set of terms for resources developments in a particular area can reduce impediments to investment on native title land. South Australia's ILUAs for gas and mineral exploration are a leading-practice example.

#### LEADING PRACTICE 5.6

High-quality guidance on native title facilitates investment in the resources sector. The Australian Government's *Working with Indigenous Communities* handbook is a leading-practice example.

---

## Addressing unnecessary regulatory burdens

### FINDING 6.1

Unnecessary delays in project commencements can be costly for proponents and the community, and typically dwarf other regulatory costs.

### FINDING 6.5

Unpredictable and lengthy delays at the approval stage are a key frustration for project proponents. That frustration is compounded where delays are seen as unnecessary or their cause is unclear.

### FINDING 6.2

Environmental impact assessments are often unduly broad in scope and do not necessarily focus on the issues that matter most. This comes with costs — the direct costs of undertaking studies and preparing documentation and the more significant cost of delay to project commencement. Disproportionate and unfocused environmental impact assessments are also of questionable value to decision makers and the community.

### FINDING 6.6

Project approvals are often conditional on the preparation of management plans that also need to be approved by regulators ('post-approvals'). The process and timelines for securing post-approvals are often unpredictable, and over-reliance on management plans is not the most effective approach for achieving environmental outcomes.

### FINDING 6.3

The referral process for the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) and the nuclear and water triggers are creating unnecessary regulatory burden.

- Over half of all projects referred under the EPBC Act do not ultimately require Commonwealth approval.
- Projects ruled out as nuclear actions in the EPBC Act explanatory memorandum are being treated as nuclear actions requiring Commonwealth environmental approval.
- The evidence that the water trigger has filled a significant regulatory gap is not compelling. The recommendation of the interim report of the second review of the EPBC Act to limit application of the water trigger should help reduce duplication.

---

#### FINDING 6.8

Resources projects typically require a range of assessments and approvals by multiple regulators within a jurisdiction. While regulatory coordination has improved over the past decade, proponents still report difficulties navigating the regulatory landscape. Lack of coordination can cause costly delays and liaising with multiple agencies can also give rise to significant compliance costs.

---

#### LEADING PRACTICE 6.1

Leading-practice environmental impact assessment (EIA) involves application of a risk-based approach, where the level and focus of investigations is aligned with the size and likelihood of environmental risks that projects create. Early identification of risks through thorough scoping, including community consultation, is critical for developing EIA terms of reference that focus on the projects biggest and most likely impacts and therefore which matters need to be investigated more or less thoroughly. The ongoing EIA improvement project in New South Wales shows movement in this direction.

---

#### LEADING PRACTICE 6.2

Clear guidance on regulators' expectations about the content and quality of environmental impact assessments reduces the need for additional information requests and the scope for misunderstanding by proponents. Western Australia and Queensland are examples of leading practice in this area.

---

#### LEADING PRACTICE 6.3

Timelines, statutory or otherwise, provide proponents with information about how long regulatory processes ought to take, which supports project planning. They also focus regulators' attention, and public reporting of regulator performance in meeting those timelines is a means of keeping them accountable. For example, both Western Australia and South Australia report on the share of mining proposals and other approvals finalised within target timelines.

---

#### LEADING PRACTICE 6.4

Leading-practice use of stop the clock provisions means placing limits on when they can be used — when matters emerge that were not contained in the terms of reference or could not have been reasonably anticipated — and transparency about why the clock is stopped. No examples of leading practice have been identified.

---

#### LEADING PRACTICE 6.5

The use of deemed decisions, whereby the assessment agency's recommendation to the final decision maker becomes the approval instrument if a decision is not made within statutory timeframes, is a leading-practice approach to reducing delays. At the same time, deemed decisions should be subject to limited merits review. No jurisdiction ticks both boxes — the *Environment Protection Act 2019* (NT) introduced deemed decisions but does not allow them to be subjected to merits review.

---

#### LEADING PRACTICE 6.7

Outcomes-based approval conditions enable companies to choose least-cost ways of achieving defined environmental outcomes. The National Offshore Petroleum Safety and Environmental Management Authority has a leading-practice approach to outcomes-based condition setting.

---

#### LEADING PRACTICE 6.8

The use of standard conditions for standard risks can deliver efficiencies to approval processes. Queensland's *Model Mining Conditions* are leading practice.

---

#### LEADING PRACTICE 6.10

Clear guidance from regulators on the type and quality of information that post-approval documentation needs to include can help make the process more efficient. An example of such guidance is the *Instructions on how to prepare Environmental Protection Act 1986 Part IV Environmental Management Plans* produced by the Western Australian Environmental Protection Authority.

---

#### LEADING PRACTICE 6.9

Regulator decisions in the post-approval stage should be subject to timelines — statutory or otherwise — and regulator performance against those timelines should be publicly reported. The New South Wales Department of Planning, Industry and Environment intends to report on performance against timelines for post-approvals.

---

FINDING 6.9

Strategic assessments are costly but may reduce regulatory burden in the long run where they reduce the cost or number of future project approvals.

Greater Commonwealth-State co-operation, and intra-state coordination, would deliver substantial benefits

FINDING 6.4

Bilateral assessment agreements significantly reduce regulatory burden for projects that require Commonwealth and State or Territory environmental assessment.

RECOMMENDATION 6.1

The *Environment Protection and Biodiversity Conservation Act 1999* (Cth) should be amended in line with the *Environment Protection and Biodiversity Conservation Amendment (Streamlining Environmental Approvals) Bill 2020* (Cth), to enable negotiation of bilateral approval agreements.

RECOMMENDATION 6.2

When bilateral assessment agreements are renegotiated, State and Territory governments should consider making additional commitments to address inconsistencies and overlap in project approval conditions. These commitments could be modelled on those described in the *EPBC Act 1999 Assessment Bilateral Agreement Draft Conditions Policy*.

LEADING PRACTICE 6.6

Co-operation between the Commonwealth and the States and Territories in environmental assessment and approval processes can be supported by:

- the Commonwealth out-posting staff with State and Territory regulators, prioritising jurisdictions where more projects require approval by both levels of government
- State and Territory regulators taking up opportunities to have their staff trained in the application of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth).

New South Wales is an example of leading practice with respect to both initiatives.

---

#### LEADING PRACTICE 6.12

Effective coordination among agencies within a jurisdiction reduces uncertainty, facilitates timely processing and minimises overlaps and inconsistencies. This can occur through:

- a lead agency or major project coordination office that provides guidance to proponents and coordinates processes across agencies (without overriding the decision-making capacity of other regulators). The coordination models in Western Australia and South Australia, and the case management system in Northern Territory have been highlighted as leading practice by study participants
- co-operative arrangements between agencies. These include the use of memorandums of understanding, inter-agency working groups or taskforces such as those in Western Australia. South Australia's approach of using costs recovered from resources companies to pay staff in multiple regulatory agencies also supports faster approvals and better inter-agency communication.

#### Avenues for review of decisions bring accountability to the approvals process

#### FINDING 6.7

Court cases brought by third-party opponents to resources projects may cause delay, but this does not imply that third parties should be excluded from seeking judicial review. Process-driven legislation creates opportunities for regulators to make invalid administrative decisions that open the door for judicial review even where a project meets appropriate regulatory standards.

#### LEADING PRACTICE 6.11

Where approval decisions are made by unelected officials it is a leading-practice accountability measure that they can be subjected to merits review that allows for conditions and approval decisions to change to reflect substantive new information. The *Environment Protection Act 2019* (NT) puts this principle into practice.



---

## Delivering sound environmental and safety outcomes

### FINDING 7.1

The average environmental footprint of resources activities has reduced over time, but publicly available information about environmental outcomes and how regulations have influenced them, is limited.

### LEADING PRACTICE 7.1

Regulators' experiences of monitoring compliance with approval conditions provide useful information about the efficacy of approval conditions in protecting the environment. Leading practice involves regulators employing a 'feedback loop' between the compliance monitoring and condition-setting processes, where any findings of redundant or ineffective approval conditions are communicated to the bodies responsible for setting those conditions. An example has not been identified.

### LEADING PRACTICE 7.2

Effective regulators continually look for ways to improve their methods, and for actions they could take beyond their routine monitoring and enforcement activities that could address specific problems. The New South Wales Environment Protection Authority's involvement with a study examining emissions from coal trains, and the New South Wales Resources Regulator's targeted programs described in its *Compliance Priorities* documents, provide examples of these practices.

### FINDING 7.2

In most jurisdictions public reporting about the effectiveness of compliance monitoring and enforcement activity is limited, putting public confidence in the regulation of projects at risk.

---

#### LEADING PRACTICE 7.3

Public communication from regulators on their compliance and enforcement activities, dialogue with community groups on local issues and access to information about regulated sites can help to improve community confidence in the sector's regulation. Leading practice examples include:

- the NSW Resources Regulator's updates on rehabilitation progress and summaries of the outcomes of its compliance priority programs, and the National Offshore Petroleum Safety and Environmental Management Authority's *The Regulator* magazine
- the NSW Resources Regulator's publishing of its enforceable undertakings and documenting of prosecutions
- the NSW Environment Protection Authority's consultations with regional air quality committees.
- the Western Australian Department of Mines, Industry Regulation and Safety's posting of information from operators' annual environmental reports.

---

#### LEADING PRACTICE 7.4

Public registers of activities with offset obligations and the projects developed to fulfil them provide valuable transparency about the application of offsets policies. Information on offset projects should include their biodiversity values, location, date of approval, completion status, and follow-up evaluations of benefits. Where companies fulfil their offset obligations by paying into a fund, the register should include the size of the payment. Western Australia's offsets register includes some, but not all, of these elements.

---

#### LEADING PRACTICE 7.5

Schemes that allow companies to meet their offset obligations by paying into a fund can create opportunities for better environmental outcomes and reduce costs for companies. New South Wales, Queensland, South Australia and Western Australia all offer examples of this.

While the principles behind the use of such funds, including on what basis prospective offset projects should be evaluated, should be set subject to ministerial oversight, the fund's administration and selection of offset projects is best left to a separate body, like the NSW Biodiversity Conservation Trust.

---

#### LEADING PRACTICE 7.6

Science-based implementation strategies for the use of offsets funds are key to achieving their intended purpose. These should complement other government activities or strategies aimed at improving the same types of outcomes, and be publicly available. An example has not been identified.

#### LEADING PRACTICE 7.7

When a resources company elects to fulfil its offset obligations by paying into a fund, the fund payment should cover the full expected cost of attaining the required environmental outcome through the fund, including an amount that contributes proportionately to the fund's establishment and administration costs. The NSW Biodiversity Conservation Trust's fund incorporates this principle.

### Rehabilitation requirements should be strengthened

#### FINDING 7.3

There are few examples of large resource extraction sites being rehabilitated or decommissioned in Australia — in part because rehabilitation and decommissioning only became a policy focus for governments in recent decades. As a result, there are many legacy abandoned mines. Some examples of positive end uses and good rehabilitation outcomes have emerged over recent years.

#### LEADING PRACTICE 7.8

Resources sites that are placed into care and maintenance can create particular risks for the environment, and the operator may be at greater risk of default. These risks can be managed by a requirement to notify the regulator when a site is placed into care and maintenance, which can lead to further conditions. The preparation of care and maintenance plans that identify and address how environmental risks will be managed (such as those required in Western Australia) and the option to modify a site's financial assurance requirements (as available to the regulator in Queensland) are leading practice examples.

---

#### LEADING PRACTICE 7.9

Having financial assurance arrangements in place to cover rehabilitation or decommissioning, based on the risk the project poses to the taxpayer, provides incentives for companies to undertake those processes and minimises the risk that responsibility will be shifted to governments. These arrangements are present for most (but not all) types of site.

#### LEADING PRACTICE 7.10

Rehabilitation bonds that cover the full cost of providing rehabilitation offer the highest level of financial assurance for governments, and provide companies with full incentives to complete rehabilitation in a timely way. Jurisdictions are heading in this direction, but a leading-practice example has not been identified.

#### FINDING 7.4

Rehabilitation pools can weaken incentives for companies to rehabilitate their sites and there are risks that the pool will be insufficient to cover the cost of rehabilitation if a company with a large liability does not fulfil its rehabilitation requirements. Pools must be paired with effective compliance and enforcement arrangements.

State and Territory Governments that use pooled arrangements for rehabilitation surety should ensure that levies reflect the risk of the company passing their liabilities to the government. The pool's exposure to larger liabilities or higher-risk companies should be limited. Queensland's rehabilitation pool is a good example of this model.

#### LEADING PRACTICE 7.11

Progressive rehabilitation can lead to a better understanding of rehabilitation requirements, ensure that funds are made available, reduce the total costs of rehabilitation, improve health and safety outcomes and provide community confidence in the operator's commitment to rehabilitate.

Progressive rehabilitation can be encouraged by including requirements in approval plans, and by financial surety requirements being reduced commensurate with ongoing rehabilitation work. Victoria's rehabilitation policy for Latrobe Valley mines represents a good example of the latter mechanism.

---

#### LEADING PRACTICE 7.12

Smaller companies that acquire a resource extraction site that is nearing the end of its life may struggle to meet their rehabilitation obligations. Leading practice suggests that governments account for this risk in financial assurance frameworks. Governments can also consider the financial strength of companies in tenement licensing approvals, as has been implemented in Queensland's recent reforms.

---

#### LEADING PRACTICE 7.13

Residual risk payments allow governments to be compensated for foreseeable residual risks after the surrender of a mine site, while allowing companies to surrender their liability for the site. These payments should be proportionate to the remaining level of risk and determined at the point of surrender. Risks should be assessed, and payments calculated, through a formalised process. As a focus on residual risk issues is relatively new, no jurisdiction has been identified as having a leading-practice approach, although recent reforms in Queensland look to be moving in this direction.

---

#### LEADING PRACTICE 7.14

There is merit in governments working with industry to reopen and rehabilitate legacy abandoned mines, such as through streamlined approval processes (without compromising the intent of regulation) and indemnities against past damages. The Savage River Rehabilitation Project in Tasmania is an example of a successful government–industry partnership.

Worker health and safety legislation has recently been reformed, but is only one determinant of safety outcomes

---

#### FINDING 7.5

Reforms to mining workplace health and safety frameworks in the major resources states have led to more consistent and outcomes-based approaches. Company culture is a key determinant of safety performance, but good outcomes also require ongoing regulator monitoring of safety processes and practices. In some instances, improved regulator capability may be needed to enforce safety regulations effectively.

---

## Strengthening the protection of Indigenous heritage

### LEADING PRACTICE 8.1

Heritage registers help to share information and avoid wasted time and cost in surveying areas repeatedly. Under a leading-practice approach, heritage authorities:

- require that resource explorers or other parties lodge all heritage surveys with that authority
- maintain registers which map and list all known Indigenous heritage sites
- adopt measures to ensure that sensitive information collected by a survey is only provided to approved parties (and only as necessary for the purposes of their activities).

The Commission has not identified an example of leading practice.

### LEADING PRACTICE 8.2

Leading-practice heritage regimes:

- embed heritage engagement in the project assessment process, so that heritage is considered in the earliest stages of, and throughout the life of, a project, rather than being a 'final box to check' when other approvals have been obtained
- centre traditional owners in decision making about their heritage. This means, in the first instance, that project proponents seek agreement from traditional owners on how heritage impacts will be managed
- provide a process where both traditional owners and project proponents can seek dispute resolution or appeal a heritage decision.

Leading-practice examples include:

- the Victorian *Aboriginal Heritage Act 2006*, under which a cultural heritage management plan must be approved by the Registered Aboriginal Party before planning approval can be given
- the Queensland *Aboriginal Cultural Heritage Act 2003* which requires a negotiated agreement on heritage issues before a project can go ahead.

### FINDING 8.1

The *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (Cth) was initially implemented to operate where State and Territory regimes proved ineffective. This role remains important, but the Act does not fit well with the regulatory systems operated by the States and Territories. A comprehensive review of the role of the Commonwealth in heritage regulation and its effectiveness is required.

---

## Investment is also affected by abrupt policy changes, policy inconsistency and uncertainty

### FINDING 9.1

Government policies necessarily must evolve in response to changing economic conditions, technology development and shifts in broader societal values and priorities. However, abrupt policy changes without adequate consultation can undermine investor confidence and discourage investment.

### FINDING 9.2

Uncertainty about and inconsistent climate change and energy policies across jurisdictions risk impeding resources sector investment.

### FINDING 9.3

Unclear policy objectives can lead to inconsistent and unpredictable application of regulations across resources projects, creating investor uncertainty (such as in relation to approval decisions and conditions on the basis of scope 3 emissions).

### FINDING 9.4

Not approving proposed resources projects or curtailing their exports due to potential greenhouse gas emissions in destination markets is an ineffective way of reducing global emissions.

### LEADING PRACTICE 9.1

Early public consultation on new policy proposals, accompanied by clear evidence-based articulation of why a proposed change is the best way of addressing an issue (for example, through regulatory impact assessments), can avoid policy surprises.

Clear policy objectives aid consistent and predictable regulatory decision making. Policy makers can achieve this by avoiding the use of vague language in policy documents and providing clearly articulated guidance on the intention and interpretation of policies and legislation.

---

## Changing the duration of greenfields agreements would support investment

### FINDING 9.5

Allowing parties to negotiate greenfields enterprise agreements with durations that match the life of a greenfields project would improve investor certainty.

### RECOMMENDATION 9.1

The Australian Government should amend s. 186(5) of the *Fair Work Act 2009* (Cth) to allow an enterprise agreement to specify a nominal expiry date that matches the life of a greenfields project. The resulting enterprise agreement could exceed four years, but where it does so, the business would have to satisfy the Fair Work Commission that the longer period was justified.

## Community engagement and benefit sharing help mitigate impacts on local communities and build trust

### FINDING 10.1

The effects of resources extraction, both positive and negative, are amplified for local communities. By stimulating economic activity in the community, resources extraction can contribute to effects such as house and rental price increases and strains on local infrastructure.

It is appropriate that resources companies are required to address significant negative externalities directly associated with resources extraction, such as noise and dust, and provide or pay for infrastructure that they directly use. However, indirect effects, such as fluctuating house prices, signal the need for market adjustments and thus suppressing them would have costs. Governments are better placed to assess and address related social impacts. Approaches such as appropriate planning and targeted investments can moderate the community impacts of price spikes.

Companies should not be required to fund or construct infrastructure that is not directly associated with their project (although they may do this voluntarily).



---

FINDING 10.2

Although negative externalities of resources projects on local communities should be efficiently addressed, these communities should not benefit over and above other regional or remote communities from resources royalties because of their *proximity* to resources activities. Instead, funding should be allocated wherever it generates the largest net social benefits.

FINDING 10.3

Companies have an incentive to engage and share benefits voluntarily with communities, to maintain a social licence to operate and improve the liveability of local communities for their workers. The appropriate role for government in this area is limited to coordinating resources companies' community-focused investments, providing guidance to companies and efficiently regulating negative externalities borne by communities due to resources extraction.

FINDING 10.6

Governments have a responsibility for funding and supporting services in regional areas. However, the case for hypothecating royalty payments to communities near resources projects is not compelling. There is evidence that such programs weaken governance and encourage projects that do not deliver community benefits. Royalty revenues should be spent where community net benefits are greatest, which may or may not be in communities close to resources.

Coordination and guidance can help ensure that company activities deliver benefits to communities

LEADING PRACTICE 10.4

Coordination between local communities and resources companies can improve the effectiveness of benefit-sharing activities. Coordination can involve formal partnerships, such as that between Rio Tinto and the City of Karratha, or community consultation, such as that established by Hillgrove Resources in Kanmantoo and Callington.

---

#### FINDING 10.4

There is sufficient guidance available to companies from a range of institutions on how to engage with communities and other stakeholders. Most cover similar themes, and no one set of guidelines has been identified as better than the others.

#### LEADING PRACTICE 10.1

Guidance on the social impacts that should be considered in the approvals process, and how they should be considered, helps improve the quality of social impact assessments. For example, the New South Wales Government has issued guidance that outlines:

- what social impacts should be considered in the assessment
- how to engage with the community on social impacts
- how to scope the social impacts and prepare the assessment.

The effects identified in social impact assessments should not always be the domain of companies to address. Rather, leading practice requires that social impact assessments provide a framework for companies and governments to work together to address these effects, in line with the principles outlined in finding 10.1. The Commission has not identified a leading-practice jurisdiction in this area.

### Adjustment can be supported by a range of other activities

---

#### LEADING PRACTICE 10.2

Local procurement requirements can be a relatively high-cost way of meeting development objectives. In contrast, resources companies and governments providing businesses in local communities with the support needed to engage with resources companies, such as BHP's Local Buying Program, is likely to create more enduring benefits for communities.

#### FINDING 10.5

Fly-in, fly-out (FIFO) (and drive-in, drive-out) workforces provide flexibility for companies, and distribute the employment benefits of resources development around Australia. The use of these workforces can also moderate some of the effects of resources extraction on local communities such as higher housing demand and prices, particularly during the construction phase.

---

#### LEADING PRACTICE 10.3

Early identification of fly-in, fly-out requirements and their potential social effects, together with effective community and local government engagement, can ease resistance and lead to better integration of workers into communities.

### **Specific community engagement and benefit sharing arrangements apply for Aboriginal and Torres Strait Islander communities**

#### FINDING 11.1

Agreements between resources companies and Aboriginal and Torres Strait Islander people primarily benefit traditional owners who have cultural and spiritual connections to land, as they are intended to do. However, agreements can also benefit other Aboriginal and Torres Strait Islander people who live in the community, who are sometimes voluntarily included as beneficiaries of agreements.

#### FINDING 11.2

Effective engagement with traditional owners about the use of their traditional lands for resources development is guided by the principle of free, prior and informed consent (FPIC). In Australia, traditional owners generally do not have a right of veto, but agreement-making processes are provided for through legislation. Some resources companies choose not to proceed with development unless traditional owners give their consent, but most apply FPIC by building relationships and working with traditional owners to obtain consent.

#### FINDING 11.3

The confidentiality of many agreements between resources companies and Aboriginal and Torres Strait Islander people makes it difficult to assess whether legislative frameworks and other arrangements that affect agreement making are fit for purpose and whether changes are required. It also limits the capacity for parties to agreements to share insights on leading-practice agreement making to improve the overall quality of agreements. While there would be advantages in making agreements more transparent, decisions to do so should be driven by traditional owners in collaboration with resources companies.

---

#### FINDING 11.4

Prescribed bodies corporate (PBCs) are central to the ability of native title holders to represent their interests when making agreements with resources companies. However, resourcing and capacity constraints mean that many PBCs are unable to carry out this function effectively. Both government and resources companies have a role in resourcing and building the capacity of PBCs.

#### FINDING 11.5

There is legal ambiguity about the scope of permissible economic activities that charities can undertake. Some Indigenous organisations interpret the requirement for charities to operate for a charitable purpose and for the public benefit as limiting their ability to invest money for long-term economic development.

#### RECOMMENDATION 11.1

The Australian Government should amend the *Australian Charities and Not-for-profits Commission Act 2012* to give the Australian Charities and Not-for-profits Commission (ACNC) the power and capacity to make private rulings about whether particular activities that a charity wishes to undertake are considered charitable, and to publish de-identified summaries of private rulings.

#### FINDING 11.6

Proposed amendments to the *Native Title Act 1993* (Cth) make it clear that native title applicants owe fiduciary duties to their claim group when entering into native title agreements. However, they do not address questions of whether funds arising from native title agreements entered into before a native title determination belong to the claim group or common law native title holders, and whether applicants and/or claim groups have any duties towards this group.

#### RECOMMENDATION 11.2

The Australian Government should review whether native title claim groups or common law holders are entitled to funds arising from native title agreements made before a native title determination, and, if common law holders are considered to be entitled to these funds, whether applicants and/or claim groups have any duties towards them in receiving and managing funds for their benefit.

---

#### RECOMMENDATION 11.3

The Australian Government should amend the *Native Title Act 1993* (Cth) to impose statutory obligations on private agents representing native title parties that are equivalent to those imposed on native title representative bodies and native title service providers. In particular, private agents should be required to have regard to the interests of the broader native title group affected by their actions, rather than just the native title applicant or claim group engaging their services.

### **Effective governance, conduct, capability and culture are crucial for leading practice regulation**

#### FINDING 12.1

Many of the regulatory issues presented to the Commission through the course of this study have been examined previously. Implementing enduring improvement requires that governments ensure the pre-conditions for leading-practice regulatory systems are in place; in particular, clear regulatory objectives, adequately resourced institutions and effective governance and accountability arrangements.

#### FINDING 12.3

The pre-conditions for leading-practice regulatory systems are particularly relevant in the current climate, as jurisdictions seek to boost their economic activity as part of the COVID-19 recovery. Clear Statements of Expectations of regulators and improved accountability and capacity would help expedite industry activity.

#### FINDING 12.4

The ability for regulators to operate effectively and efficiently is often constrained by capability challenges, including limited technical expertise and inadequate use of data and technology. In addition, a lack of regulator transparency inhibits accountability for their performance in achieving regulatory objectives, leads to unnecessary costs for industry and risks a loss of public confidence in the regulatory system. Not least, regulators collect a wealth of data but relatively little is made available to the public.

---

## Good ‘regulatory housekeeping’ can underpin leading-practice systems

### LEADING PRACTICE 12.1

Statements of Expectations from Ministers to regulators are an effective way for governments to clearly set out their objectives for the regulatory system. Examples include the Statements to Earth Resources Regulation in Victoria, the National Offshore Petroleum Safety and Environmental Management Authority at the Commonwealth level, and the Independent Planning Commission in New South Wales.

### LEADING PRACTICE 12.2

Regular independent review and evaluation of regulatory frameworks, objectives and performance drive continuous improvement. Victoria, for example, following an inquiry into its Environmental Protection Authority, is clarifying the Authority’s objectives, principles and functions and developing a legislative framework that embeds a risk-based regulatory approach. The Independent Review of the New South Wales Regulatory Policy Framework has highlighted that a ‘life cycle’ approach for managing regulation over time assists in maintaining fit-for-purpose regulatory frameworks.

### RECOMMENDATION 12.1

Governments in each jurisdiction should assess:

- whether regulators of resources-sector activity are appropriately funded to enable timely processing of applications and effective adoption of a risk-based regulatory system
- opportunities for enhancing regulators’ cost recovery processes, in consultation with industry stakeholders about potential cost recovery models and their impacts on regulatory outcomes, and with the appropriate accountability measures in place.

### FINDING 12.2

Governments are responsible for establishing governance and institutional arrangements that minimise the risks of interference in regulatory decisions and promote regulator accountability, to build public trust in the system. Institutional independence for regulatory and policy functions can be one mechanism for promoting this. Strong governance arrangements such as clearly defined objectives, roles and responsibilities, as well as transparent and accountable decision-making processes, are also essential.

---

## A range of actions can lift capability and regulator performance

### LEADING PRACTICE 12.3

Approaches to improving staff capability and technical expertise include:

- secondments — such as the officer exchange program between the Northern Territory Environment Protection Authority and Western Australia’s Department of Water and Environmental Regulation
- training programs — akin to those offered in Tasmania for senior management and in the National Offshore Petroleum Safety and Environmental Management Authority for all staff regarding regulatory practices
- developing strategies to target skills gaps, including technical expertise — as used by the Environment Protection Authority Victoria
- communities of practice — as in the case of the Australasian Environmental Law Enforcement and Regulators Network’s Better Regulation Working Group, which enables members to share experiences and ideas related to regulatory practice
- building cultural understanding through engaging with Indigenous organisations and visiting Aboriginal and Torres Strait Islander communities (an example of leading practice has not been identified)
- industry site visits — as have been undertaken in both Victoria and New South Wales.

### RECOMMENDATION 12.2

Regulators in each jurisdiction should consult with industry, including peak bodies (such as the Minerals Council of Australia and the Australian Petroleum Production and Exploration Association), on developing programs of site visits to enhance technical expertise. These programs should be ongoing and part of induction training provided to new staff.

---

#### LEADING PRACTICE 12.4

Senior management has a key role in fostering a culture that supports ongoing capability development and adoption of modern regulatory practices. Leading-practice approaches to promoting this type of culture include:

- appointment of a regulatory champion, akin to that established at the then Australian Department of Agriculture
- recognising and incentivising good staff performance, as occurs in Queensland's Department of Resources
- working groups to assess and promote cultural change, both internally as occurs at the National Offshore Petroleum Safety and Environmental Management Authority, and externally as with the Australasian Environmental Law Enforcement and Regulators Network's Better Regulation Working Group
- reporting on successes and learnings from failures, as occurs in South Australia's Department for Energy and Mining and Western Australia's Department of Mines, Industry Regulation and Safety.

---

#### LEADING PRACTICE 12.5

Strategies for managing information and data help promote routine use of data in regulator decision making. Examples include strategies recently developed by the (then) Australian Department of Environment and Energy, the Department of Environment and Science in Queensland and the Department of Mines, Industry Regulation and Safety in Western Australia.

---

#### LEADING PRACTICE 12.6

Digital technology and data management systems have the potential to improve the efficiency and effectiveness of regulatory processes significantly, while also leading to increased transparency and providing the foundations for more informed consultation. Leading-practice approaches include:

- developing a working group to investigate options for technologies to improve the use of data, as has occurred in the Environmental Protection Authority of Western Australia
- developing a strategy for improving the capabilities required to deploy information and technology, as has occurred at the Australian Department of Agriculture, Water and the Environment
- improving the interface between regulators and resources companies through online portals and databases, as will occur in a Commonwealth pilot with Western Australia
- developing modelling capabilities to support analysis and decision making, as has occurred at the Queensland Office of Groundwater Impact Assessment.



---

RECOMMENDATION 12.3

Resources Ministers should establish a forum for regulators to share leading-practice initiatives from their jurisdictions, including those implemented to develop the capabilities and expertise of their agencies.

Regulators can play a key role in building community confidence

LEADING PRACTICE 12.7

The provision of publicly accessible information and data by regulators can promote community confidence in the regulatory system and the sector. Examples include the National Offshore Petroleum Safety and Environmental Management Authority's website and Western Australia's offsets register. Regulators can be supported by the data and information published by other independent bodies, such as Queensland's GasFields Commission and the Gas Industry Social and Environmental Research Alliance.

LEADING PRACTICE 12.8

Regulators can improve the public's understanding of regulatory objectives and processes by:

- engaging with local communities on the regulatory process throughout the life cycle of a resources project, including in the initial scoping stage, as occurs in Canada
- conducting broader consultation on an ongoing basis to understand community expectations and provide this feedback to policy makers and the government, as occurs in New South Wales.



---

# 1 About the study

## 1.1 What has the Commission been asked to do?

### The context for the study

The resources sector is a significant part of Australia's economy. It accounted for nearly 9 per cent of Australia's GDP in 2019-20, employed just over 240 000 people (ABS 2020b, 2020e) and resources commodities contributed over 60 per cent of the value of Australia's exports (based on unpublished data from DISER). The 'mining boom' saw the sector expand markedly from the mid-2000s, with investment in the 16 years to 2019-20 totalling almost \$800 billion (ABS 2020f).

Many resources activities involve complex works of engineering, often below ground or underwater. By nature, these activities significantly affect their immediate surrounds and, sometimes, neighbouring areas. The environment, sites of cultural and heritage significance, project workers, landowners and surrounding communities can suffer detrimental impacts. For this reason, resources activities are strictly regulated to ensure that net benefits flow to the Australian community as a whole.

All levels of government in Australia have responsibilities for regulating the sector, with multiple agencies in each jurisdiction playing a role in administering and enforcing regulations.

Though essential, regulation can impose substantial unnecessary costs if not done well. Poorly designed or administered regulation can impose additional burdens on industry for negligible extra community benefit, deterring companies from investing in projects that would have been worthwhile from a national perspective. On the other hand, ineffective regulation can fail to adequately protect environmental, cultural and heritage assets, the safety of workers, or the health of local communities.

The Australian Government's National Resources Statement (DIIS 2019a), released in February 2019, had among its goals that Australia is the most globally attractive destination for investment in resources projects, and that local communities — including Indigenous communities — benefit from the sector's activities. However, recent reports have raised concerns that Australia's regulatory environment for resources is stifling investment. The Resources 2030 Taskforce Report, for example, stated that:

In its consultations, the taskforce heard general concerns regarding the efficiency of Australia's regulatory frameworks, including from an investment attractiveness perspective. ... while stakeholders feel that frameworks are generally effective, they are often inefficient, duplicative and difficult to navigate. This poses financial and time burdens for companies. (Cripps 2018, p. 31)

---

Reported experiences of some recent project proposals have also put Australia’s approach to regulating mining under a spotlight. For example, the approval process for Adani’s Carmichael coal mine took eight years (and became a hotly contested issue at the 2019 federal election).

This study reflects a commitment by the Council of Australian Governments’ Resources Ministers in December 2018 (COAG Energy Council 2018b), linked to recommendations by the Resources 2030 Taskforce, to:

- highlight best-practice regulation of resources projects
- evaluate community engagement and benefit-sharing practices by industry.

The study is occurring in a landscape of several active reviews and reforms. All State and Territory Governments are (or have recently been) assessing and amending their resources regulation systems — for example:

- the Streamline WA initiative aims to reduce red tape in Western Australia, including in the resources sector
- South Australia has made a number of changes to its land access and environmental protection rules, and the South Australian Productivity Commission conducted an inquiry into the effectiveness of regulation in the extractives supply chain (completed in August 2020)
- the Northern Territory has reworked its environmental impact assessment process.

A host of related reviews by federal agencies are also underway or have recently been completed, including the:

- review of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) (provided to the Government in October 2020) (Samuel 2019)
- Deregulation Taskforce (Treasury 2019)
- Australian National Audit Office’s audit of referrals, assessments and approvals of actions under the EPBC Act (published in June 2020) (ANAO 2020)
- Chief Scientist’s audit of the National Offshore Petroleum Safety and Environmental Management Authority’s consideration of exploration in the Great Australian Bight (reported in September 2019) (Finkel 2019)
- Senate inquiry into the destruction of 46,000 year old caves at the Juukan Gorge (due to report in December 2020) (JSCNA 2020)
- review of the offshore oil and gas decommissioning framework (due to report in late 2020) (DISER 2018)
- review of the safety regime for offshore oil and gas workers (draft policy framework released in August 2020) (DISER 2020e)
- Senate Economics Reference Committee inquiry into Australia’s oil and gas reserves (due to report in June 2021) (Australian Parliament House 2020).

---

More broadly, many jurisdictions are prioritising deregulation efforts as part of COVID-19 economic recovery (Morrison 2020b).

## The Commission's task

The Australian Government asked the Commission to identify effective regulatory approaches to the resources sector, highlighting examples of best practice both in Australia and internationally, and focusing on regulation with a potentially material impact on investment. The Commission has approached this by identifying 'leading practices' alongside its findings and recommendations in this report (box 1.1).

More specifically, the Commission has examined:

- ways in which governments can reduce regulatory costs for business without compromising environmental, heritage and other standards. Areas examined include:
  - project approval processes and government involvement to expedite them
  - environmental management and compliance arrangements
  - regulatory processes more generally
- any broader impediments to business investment.

The Commission was also asked to examine resources companies' engagement and sharing of benefits with local communities, including Indigenous communities.

### Box 1.1 Best or leading practice?

The Commission's terms of reference ask it to:

... highlight examples of best-practice regulation across the Australian resources sector and internationally, taking into account the unique regulatory challenges facing individual jurisdictions.

In approaching this task, the Commission has taken the following approach.

- As Garnett (sub. 24, p. 4) noted, 'the regulatory practice which "works best" is probably contingent on the physical, legal and market environment' — and these vary across time and place. Best practice, therefore, is not a static or universal concept. The notion also implies that the identified practice is as good as it gets. But practices can and should evolve.
- Rather than best practice, therefore, the Commission has identified many examples of regulatory practice that align closely with a sound approach to regulation. These are identified as 'leading practices' throughout the report, and are presented alongside the Commission's findings and recommendations.

The Commission has consulted with governments and industry bodies in other jurisdictions, namely Canada, Norway and Germany. Australian regulators appear to be generally at or near the frontier of leading-practice regulation globally. Accordingly, most examples of leading practice are sourced from Australian jurisdictions.

---

## 1.2 The scope of the study

### What resources are in scope?

The terms of reference do not specify which resources are within this study's scope. The resources sector is often defined to include minerals, oil and gas extraction — aligning with the definition of the mining industry in the Australian and New Zealand Standard Industrial Classification (box 1.2). This classification covers iron ore, oil and gas (conventional and unconventional), thermal and metallurgical coal, other metal ores (including gold, bauxite, copper, uranium, mineral sands, rare earths and other critical minerals), and construction material mining. The Commission has adopted this definition of 'resources' for the study.

#### Box 1.2 Activities classified as 'mining' in ANZSIC

The Australian and New Zealand Standard Industrial Classification (ANZSIC) is a system used to classify activity between industries, and to aid in the subsequent statistical and economic analysis of that activity. Division B — 'Mining' — of ANZSIC includes businesses involved in the exploration and extraction of naturally occurring minerals and other resources (namely, oil and gas). Activities undertaken to prepare ore for smelting, such as crushing, screening, washing and flotation, as well as other preparation work usually performed at the mine site or as a part of mining activity, are also included. The classification excludes:

- businesses that mainly produce products that require complex processing, such as refining or smelting minerals or ores (except the preliminary smelting of gold)
- businesses that manufacture products of mineral origin, such as coke or cement
- businesses mainly engaged on a contract or fee basis in geological and geophysical surveying, laboratory-type services and mine site preparation
- incidental services such as transport.

Source: ABS (2013).

This definition focuses on the activity of exploration and extraction, but leaves some significant parts of the resources and energy supply chain out of scope. Some participants argued for the inclusion of:

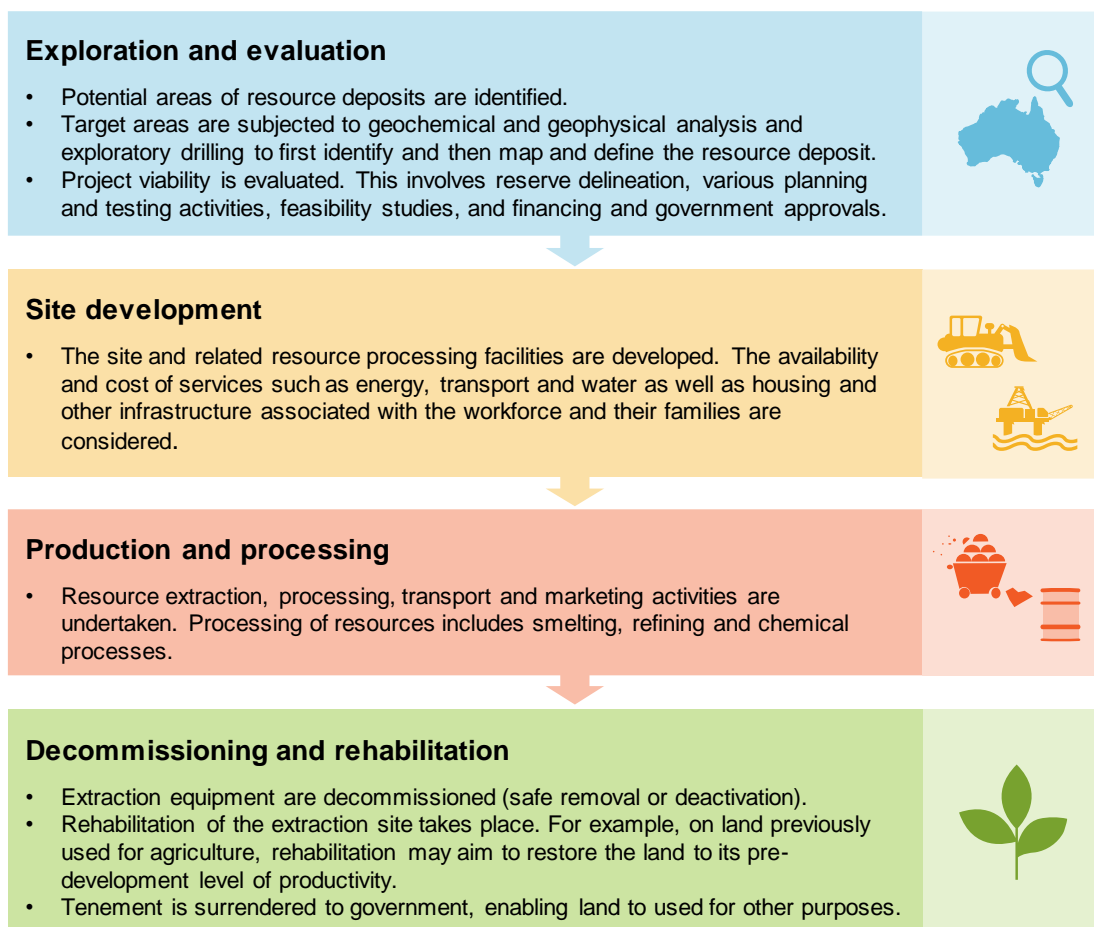
- large-scale renewables, such as wind and solar farms or hydrogen power plants (for example, the Resources Law Network, sub. 22, p. 8 and Isaac Regional Council, sub. 48, p. 2). Although renewables are subject to some of the same regulation as resources activities, regulation of the latter (particularly licensing) is sufficiently different that the Commission has limited its scope to non-renewable resources. That said, many of the identified leading practices in this report have broader application in other regulated areas such as renewables
- supporting services and infrastructure, including the processing of resources (beyond preparation work at the mine site) such as smelting and refining (for example, Peter Glazebrook, sub. 17, p. 2); energy infrastructure (for example, SACOME, sub 37, p. 5; Origin, sub. 8, p. 2); and transport (for example, shipping activity — Peter Glazebrook,

sub. 17, p. 2). The Commission does not consider that these services fall within the definition of ‘resources’. However, they fall within scope where they may impose a material barrier to resources investment (considered in chapter 9 on other factors affecting investment, discussed below).

## What *activities* are in scope?

Broadly speaking, the Commission has focused on regulation relevant to the four stages in the life cycle of a resources project: exploration and evaluation, development, production and processing, and site decommissioning and rehabilitation (figure 1.1). The specific activities undertaken at each stage depend on the resource in question and the characteristics of the particular project. For example, iron ore extraction is likely to involve digging, crushing and screening, while petroleum extraction involves drilling wells.

Figure 1.1 The life cycle of a resources project<sup>a</sup>



<sup>a</sup> Certain activities in the life cycle are not in scope, such as marketing.

Sources: Hogan et al. (2002); NSW Minerals Council (nd).

---

## **What *regulation* is within scope?**

The Commission has adopted a broad definition of ‘regulation’, including any laws, government policies and rules that are intended to control or influence specific aspects of resources activity. This encompasses legal instruments such as statutes, subordinate legislation (regulations) and ministerial orders, as well as less formal instruments that companies are expected to comply with, such as standards, guidelines and codes of conduct.

The Commission has considered regulatory activities at all levels of government. These include (but are not limited to) activities related to the EPBC Act, native title legislation and offshore petroleum regulations administered by the Commonwealth Government, the broad frameworks for resources extraction administered by State and Territory Governments, and planning and development legislation implemented by local governments.

Regulation at all stages of the project life cycle is in the scope of this study — including requirements relating to access to resources, project assessment and approval, compliance with operating conditions and site rehabilitation.

## **Other factors affecting investment**

Beyond resources-specific regulation, there are a range of factors that can affect business investment in the resources sector. These include a number of other policy areas (including energy and foreign investment policy), workforce issues, taxes and royalties, and infrastructure. Many of these factors were raised by participants in this study.

Examination of many of these issues is beyond the scope of this study. The Commission has focused on areas where regulatory practice could be improved, and on issues that the Commission has previously considered and has relevant conclusions to draw on.

## **What does ‘community engagement and benefit sharing’ cover?**

The terms of reference require the Commission to examine best-practice community engagement and benefit sharing. These activities are a range of interactions and arrangements that involve and deliver benefits to communities affected by resources activities. This includes landholders and local communities directly affected by resources projects, but can extend to the broader Australian or even global community, which may have an interest in the impacts of resources projects.

‘Community engagement’ refers to activities that are undertaken by resources companies to consult with the local community (it does not refer to interactions between the government and the community, or resources companies and governments). Community engagement is often voluntary in nature, and includes activities such as community forums and engaging with local landowners. But it can also be regulated: resources companies may be required to



---

consult with the community during assessment and approval processes. Both types of community engagement are within the study's scope.

Likewise, benefit sharing can be voluntary or regulated. While acknowledging the broader benefits that flow to the Australian community from resources activity, this study focuses on those activities that a resources company undertakes to share the benefits of resources (or mitigate the negative social effects of resources extraction) beyond its normal commercial activities. This means that, for example, the benefits of jobs created by the resources industry do not fall within the definition of community benefit sharing. However, efforts to employ a greater proportion of local people would be considered benefit sharing.

Benefit sharing can also include:

- financial payments beyond compensation payments for land access, such as contributions to local councils and payments to Aboriginal and Torres Strait Islander communities through native title and other agreements
- investment in key infrastructure, such as roads and water networks; facilities such as arts centres and gyms; and community services such as health and education programs
- approaches that seek to compensate communities for the negative social or other effects that mining can have — such as conducting social impact assessments, and plans to manage the impacts, at the outset of the project.

## **1.3 The Commission's approach**

### **The conduct of this study**

The Commission received the terms of reference for this study on 6 August 2019, and released an issues paper on 17 September 2019. The issues paper outlined a range of areas on which the Commission was seeking feedback from participants, and 53 submissions were received in response. The Commission also consulted widely. Meetings were held with regulators in all capital cities in Australia, and in regional areas including Karratha and Townsville. The Commission also consulted with overseas experts in Germany, Norway and Canada.

The Commission released its draft report on 24 March 2020 for comment and to seek additional information in some areas. With many study participants focused on managing the immediate impacts of the COVID-19 pandemic, consultation on the draft report was deferred and study timelines were extended to ensure opportunity to provide input. A further 45 submissions were received in response to the draft report. As face-to-face meetings and roundtables to receive feedback on the draft report were not possible, web-based meetings were held with a number of participants instead.

The Commission thanks all participants for their contribution to this study.

---

## Assessing leading-practice regulation

As required by its Act, the Commission has assessed resources sector regulation against the objective of improving the welfare of the community as a whole.

The main focus of this study is not on the objectives of regulations per se. Rather, the focus is on the process followed in forming regulatory objectives and more specific goals in line with them, and the regulatory approach taken to achieving these.

A leading-practice approach to regulation is one that imposes the least burden on businesses and regulators, subject to achieving clear and evidence-based objectives that promote net national benefits. Chapter 2 provides an overview of the sector, and chapter 3 introduces the Commission's framework for assessing leading-practice regulation.

This is not a benchmarking exercise. The Commission has not sought to assess or rank the regulatory practices of every Australian jurisdiction exhaustively. Rather, it has identified regulatory processes in Australia that accord with the Commission's criteria for leading practice, as well as any problem areas, with examples provided where possible. In some cases, the leading practices identified simply align with well-established norms for good regulatory practice. In other cases, the leading practices are more innovative. International examples have also been drawn upon where useful for demonstrating leading-practice approaches.

Some exercises do attempt to benchmark jurisdictions' regulatory performance — for example, the Fraser Institute's Global Survey of Mining Companies (Fraser Institute 2020). The Australian Government has referenced this study in calling for reforms to the resources sector (Canavan 2018) and the Commission understands that resources companies consider its findings of some relevance. However, while providing useful insights, particularly relating to perceptions about the comparative performance of international regulatory regimes, such studies should be interpreted carefully (box 1.3).

Chapters 4–9 of this report contain the Commission's assessment of resources sector regulation. Chapter 4 considers resource management regulation and policy, and chapter 5 considers land access regulation. Chapters 6 and 7 consider projects' assessment and approval processes and the management of outcomes. Chapter 8 considers Indigenous heritage regulation. Chapter 9 considers a mixture of regulatory and non-regulatory issues that have been identified as other factors affecting investment in the resources sector.

---

### Box 1.3      **The Fraser Institute’s Annual Survey of Mining Companies**

The Fraser Institute is a Canadian think tank founded in 1974. Its work is generally targeted at reducing government intervention in markets: the former Canadian Prime Minister Stephen Harper described the Institute as ‘a compelling advocate for the benefits of competition, open markets and economic freedom’. Although most of its work is focused on Canada, the Fraser Institute publishes a number of indices ranking jurisdictions on their competitiveness in various industries.

The Institute conducts the Annual Survey of Mining Companies. It ‘attempt[s] to assess how mineral endowments and public policy factors such as taxation and regulatory uncertainty affect exploration investment’. Two indices are produced: one assesses the overall investment attractiveness of each jurisdiction (in both mineral endowment and resources sector regulation), while the other is a separate policy perceptions index.

Australian States and Territories (which are separately identified) tend to perform favourably in both indices due to strengths in various areas including political stability, strong legal systems, and predictability of the regulatory regime. Western Australia was ranked as the most attractive jurisdiction in the world for investment in the most recent survey (taken in 2019), and as having the 5th-best policy environment based on exploration company perceptions (out of 76 jurisdictions). The lowest-ranked Australian jurisdiction in both indices was New South Wales (47th and 46th on investment attractiveness and policy perceptions respectively). The distribution of the ranks of Australian jurisdictions are roughly similar to those in the United States, Canada and Europe, and ahead of most jurisdictions in Africa.

Australian jurisdictions have moved up and down the rankings over the past five years. The lowest ranked Australian jurisdiction was Victoria in 2017, ranked 71st of 91 jurisdictions (in 2018, it ranked 43rd out of 76 jurisdictions on the investment attractiveness index). This could be attributed to the introduction of a ban on unconventional gas development in the State (chapter 4). However, because the sample of jurisdictions included in the survey varies between years, this volatility cannot be attributed solely to policy changes between years of the survey.

The survey also suffers from small response rates (in 2019, out of 2400 potential respondents, only 224 full responses were received worldwide) and a small sample size of developed countries (which are more representative of Australia’s competitors for resources investment than developing countries, which are likely to have less stable property rights and greater risks for investors generally).

*Source:* Fraser Institute (2009, p. 3, 2020).

## **Assessing leading-practice community engagement and benefit sharing**

The Commission’s approach to community engagement and benefit sharing has two key components:

- assessing whether there is a role for governments to require community engagement and forms of benefit sharing and, if so, whether the regulation is as effective as it could be
- identifying examples of leading-practice voluntary community engagement and benefit sharing, and whether there is a role for governments to improve the benefits delivered through voluntary benefit sharing, such as through playing a coordinating role.

---

Chapter 10 considers leading-practice community engagement and benefit sharing in general, while chapter 11 assesses specific community engagement and benefit sharing issues applicable to Indigenous communities.

### **Some cross-cutting issues emerge throughout the report**

While some issues considered in the study are specific to certain regulatory areas, governments' role in establishing the foundations of the regulatory system, and the conduct and activities of regulators themselves, cut across them. Chapter 12 considers these cross-cutting governance and conduct issues that influence regulatory outcomes.

---

## 2 Resources activity in Australia

### Key points

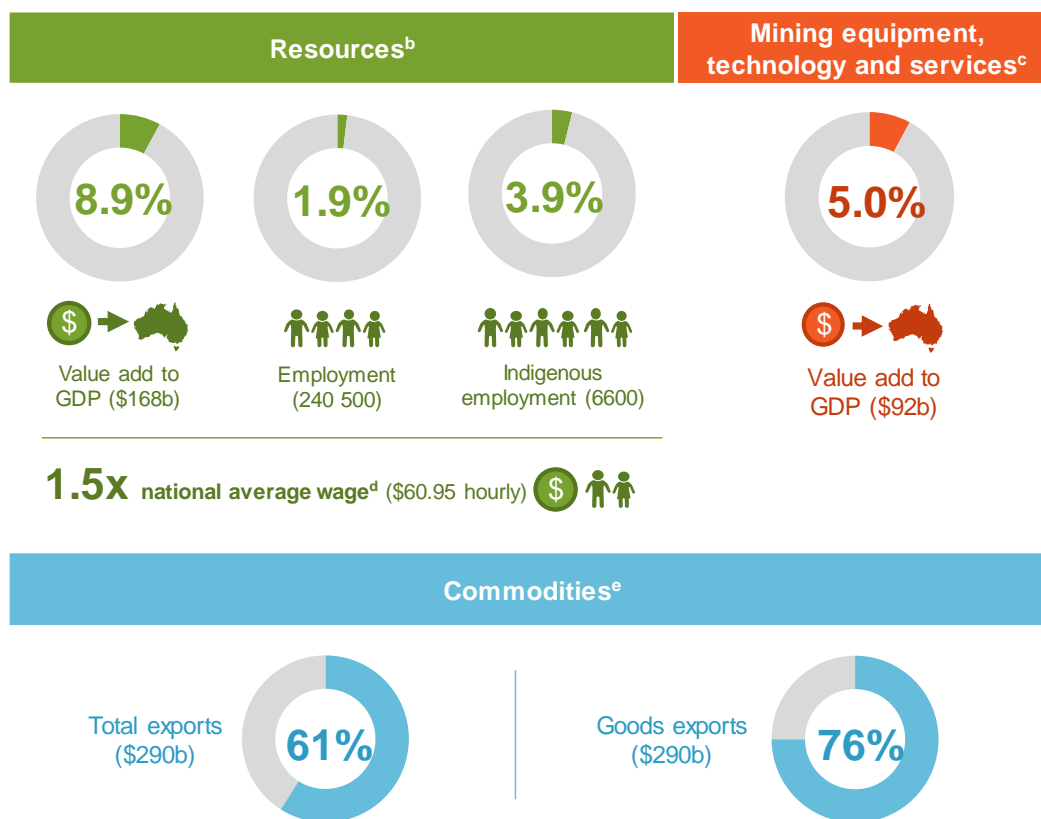
- Australia is a resource-rich country. Resources activity (including quarrying) occurs in every State and Territory and offshore — but most activity is in Western Australia and Queensland.
- The resources sector accounts for about 9 per cent of Australia's gross domestic product and 2 per cent of employment, and resources commodities account for about 61 per cent of Australia's exports.
- Australia is a major exporter of resources. China, Japan and South Korea are the top destinations for Australia's resources exports.
- Iron ore, coal and natural gas are Australia's top three commodities by value of both production and exports. Key competitors include China, the United States and Brazil.
- From the mid-2000s, Australia experienced an unprecedented resources investment boom, which peaked in 2012-13. Investment has declined since, but there has been a modest recovery recently which is expected to continue over the next few years. Major projects in the pipeline totalled about \$39 billion at October 2020.
- While the COVID-19 pandemic will affect resources demand significantly in the short term, longer-term demand for Australia's resources will be driven by many factors including global population growth, the rate of economic development, technological progress and climate change policies in Australia and overseas. The overall effect of these factors on the demand for Australia's resources is difficult to ascertain, but given the size and diversity of resources deposits, the potential for investment will likely remain substantial.
- The resources sector had a larger share of the stock of inward foreign direct investment in 2019 than any other sector (35 per cent), reflecting its capital intensity.

Australia is a resource-rich country, with global frontier expertise in exploration and extraction (DIIS 2019a, p. 36). Industrial mining has occurred in Australia since the late 18th century, when coal was discovered in New South Wales near Newcastle (ABS 2001; Geoscience Australia 2015). Today, the resources industry extracts a diverse range of minerals and petroleum (oil and gas) (Geoscience Australia 2019a, 2020, p. 10). This chapter provides an overview of Australia's resources sector (section 2.1) and investment therein (section 2.2).

## 2.1 Australia's resources sector — an overview

Resources represent a significant share of economic activity in Australia. They dominate exports, and through that avenue make a substantial contribution to GDP and employment (figure 2.1).

**Figure 2.1 Resources represent a significant share of economic activity<sup>a</sup>**  
 Contribution of the resources and mining equipment, technology and services sectors to GDP, employment, wages and exports



<sup>a</sup> Data for resources value-add to GDP and commodities exports are from 2019-20, total employment data are from August 2020, Indigenous employment data are from 2016, resources wages data are from May 2018 and mining equipment, technology and services sector data are from 2017-18. <sup>b</sup> Defined as Australian and New Zealand Standard Industrial Classification (ANZSIC) Division B – Mining, which includes exploration and other mining support services that are integral to the resources production process, such as drilling, draining and pumping services. <sup>c</sup> Includes services that specifically support resources activities such as mine construction, geological survey services, and the manufacturing of mine-specific equipment. It also includes other goods and services used in the resources supply chain, such as financial services, travel and accommodation. <sup>d</sup> Adult rate for non-managerial employees. <sup>e</sup> Refers to raw and semi-manufactured resources products, and includes the value of activities outside of the ANZSIC Mining division.

Sources: ABS (*Australian National Accounts: National Income, Expenditure and Product, June 2020*, Cat. no. 5206.0; *Employee Earnings and Hours, Australia, May 2018*, Cat. no. 6306.0; *Labour Force, Australia, September 2020*, Cat. no. 6291.0); DISER (2019a, p. 9, 2019c, pp. 6, 14); METS Ignited (2019, p. 6); unpublished data from DISER.

---

The strength of the sector is supported by its widespread adoption of new technologies. Relative to firms in other sectors, a greater share of Australia’s energy and metal mining firms have adopted technologies such as intelligent software systems and data analytics (Quinn 2019).

Value added from Australia’s resources flows through to the community via wages and salaries, taxes, royalties and domestic shareholdings. Over 2018-19, the resources sector paid about \$25 billion in wages and salaries (ABS 2020a). The minerals sector (a subset of the resources sector) paid an estimated \$25 billion in company taxes and \$14 billion in royalties in 2018-19 (DAE 2020, p. 3). The oil and gas sector paid about \$5.8 billion in taxes, royalties and other fees in 2017-18 (APPEA 2020, p. 8).

Domestic shareholders receive returns through dividends, capital gains and share buybacks. BHP and Rio Tinto, the two largest resources companies in Australia, had annual dividend yields of 4–6 per cent as at November 2020 (ASX 2020a, 2020b).

Of course, there are also costs associated with the resources sector — resources activities come with risks including to the environment and cultural heritage which may not be reflected in national accounts measures. The regulation of these risks is the focus of later chapters.

## **Resources are diverse, and typically geographically concentrated**

Resources produced in Australia (including through quarrying, box 2.1) fall into four broad categories — coal, oil and gas, metal ores and non-metallic minerals (box 2.2). Metal ore mining accounts for nearly half of the value of resources production (figure 2.2).

### **Box 2.1      Quarries**

Quarries are open-pit mines that produce construction aggregates such as crushed rock, sand and gravel. These materials, used in the building of new houses, roads and other infrastructure, are a key input to Australia’s \$200 billion building and construction industries.

There are about 2200 quarries across Australia, where more than 200 million tonnes of rock, limestone, gravel and sand are collectively extracted each year. The sector generates about \$15 billion in annual revenue and employs about 30 000 Australians directly (and a further 80 000 indirectly).

As quarries produce high-volume, low-value materials, proximity to markets and transport infrastructure is important to minimise transport costs and allow producers to supply at competitive prices. As such, quarries are often located in or close to residential areas.

*Sources:* CCAA (nd; sub. 36, p. 1); The Institute of Quarrying (nd).

---

## Box 2.2 Resources in Australia

Australia produces a diverse range of resources:

- **coal**, including black and brown coal. Black coal includes thermal and metallurgical coal, which are mainly used for electricity generation and steel production respectively. Brown coal is used almost exclusively for domestic electricity generation in Victoria.
- **oil and gas**
  - Oil extracted from conventional sources includes crude oil, condensate and liquefied petroleum gas. Australia also has prospective oil resources from unconventional sources, including oil shale, shale oil and tight oil, although these are not currently extracted. Oil and its by-products are used for fuel and for manufacturing products such as plastics and lubricants.
  - Gas is also extracted from conventional and unconventional sources (chapter 4). Gas is used as fuel and in the production of various industrial products, and can be cooled to become liquefied natural gas (LNG) for shipping and storage purposes.
- **metal ores**, including, for example, iron ore, bauxite, gold ore, uranium ore, mineral sands and rare earths. Iron ore and bauxite are mainly used for steel and aluminium production, while uranium is mainly used to fuel nuclear power plants and for medical applications. Mineral sands are used for various industrial purposes such as the manufacture of paints and paper. Rare earths are used for electronics, magnets, motors, batteries, military technology and a range of other purposes.
- **non-metallic minerals**, including gemstones, lithium, salt and construction materials such as gravel, sand and limestone.

Technological change has driven global demand for a new group of minerals that are considered vital to the economy, yet whose supply may be disrupted due to geological scarcity, geopolitical issues, trade policy or other factors. These are collectively known as ‘critical minerals’, and include lithium, rare earth elements, and various precious and base metals. Uses include the manufacture of mobile phones, flat screen monitors, wind turbines, electric cars, solar panels, and many other high-tech applications. While many of the world’s major industrial economies are heavily reliant on the imports of these minerals, Australia’s domestic demand for most of these minerals is relatively small and is far outstripped by domestic production.

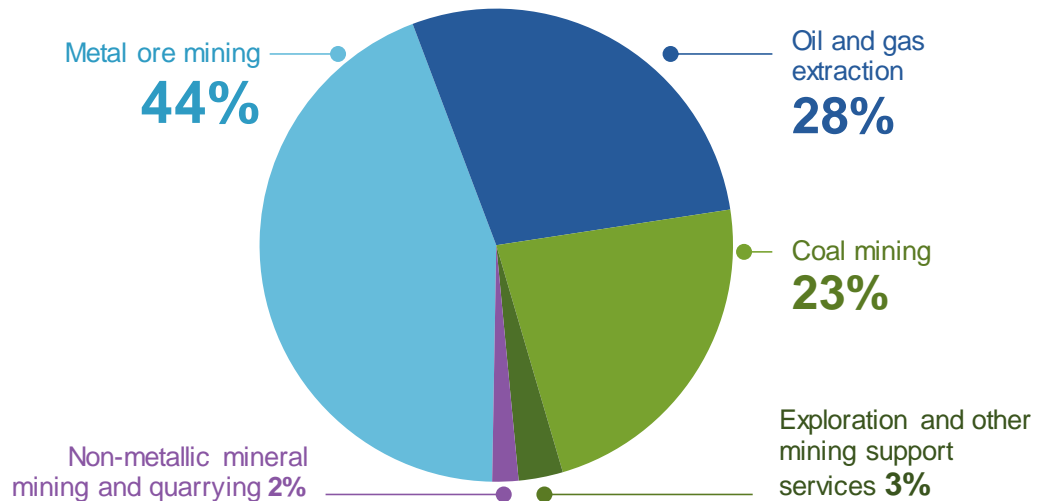
*Sources:* ABS (2013); Constable (2018); Geoscience Australia (2013, 2017b, p. 1, 2017a, p. 1, 2019a, 2019c, p. 1, nd); Thompson (2019); WA DMIRS (nd).

Resources activity occurs in all States and Territories and offshore (figure 2.3). However, production tends to be concentrated in particular areas, following naturally-occurring resources clustered in particular geographic regions. Coal mines are located almost entirely in east-coast States, while metal ore mines are mostly situated in Western Australia. Conventional oil and gas fields are located both inland (concentrated in Queensland and South Australia) and offshore (primarily off the north-west coast of Australia). In 2018, there were over 300 mines in operation (Geoscience Australia 2020, p. 3). Quarries and oil and gas wells add to the number of active sites.



---

Figure 2.2 **Metal ores make up almost half of Australia's production<sup>a</sup>**  
Resources production, shares by resource type by value, 2018-19



<sup>a</sup> Defined as ANZSIC Division B – Mining, which includes exploration and other mining support services that are integral to the resources production process, such as drilling, draining and pumping services. The mining equipment, technology and services sector is broader than these services.

Source: ABS (*Australian Industry, 2018-19 financial year*, Cat. no. 8155.0).

---

## Untapped resources represent a rich endowment

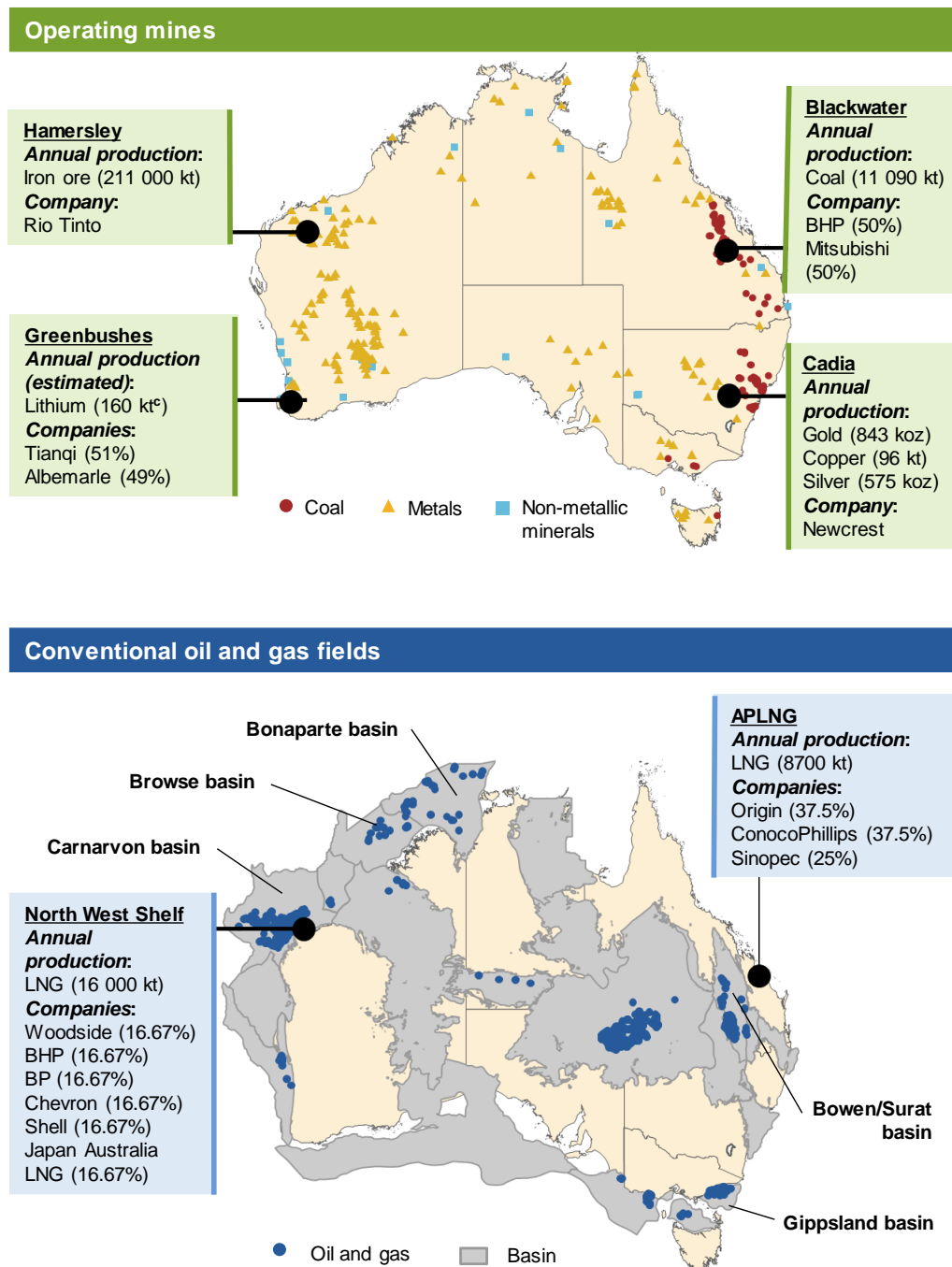
Australia has large quantities of resources that have not yet been extracted (figures 2.4 and 2.5). While some deposits have been identified with certainty and assessed as being economically viable, others are more speculative and may be difficult to extract. As at 2018, Australia had the world's largest Economic Demonstrated Resources (EDR) of eight commodities, including gold, iron ore and zircon (Geoscience Australia 2020, p. iv).<sup>1</sup> Due to the development of new techniques, producers are also recovering further resources from inactive or abandoned mines by reworking waste material such as tailings (Parbhakar-Fox 2016).

---

<sup>1</sup> Economic Demonstrated Resources (EDR) are defined under Australia's national resources classification system as resources that have been identified with a reasonable level of confidence and deemed profitable to extract or produce.

## Figure 2.3 Resources production occurs across Australia

Operating mines and conventional oil and gas fields, with selected major projects highlighted<sup>a,b</sup>



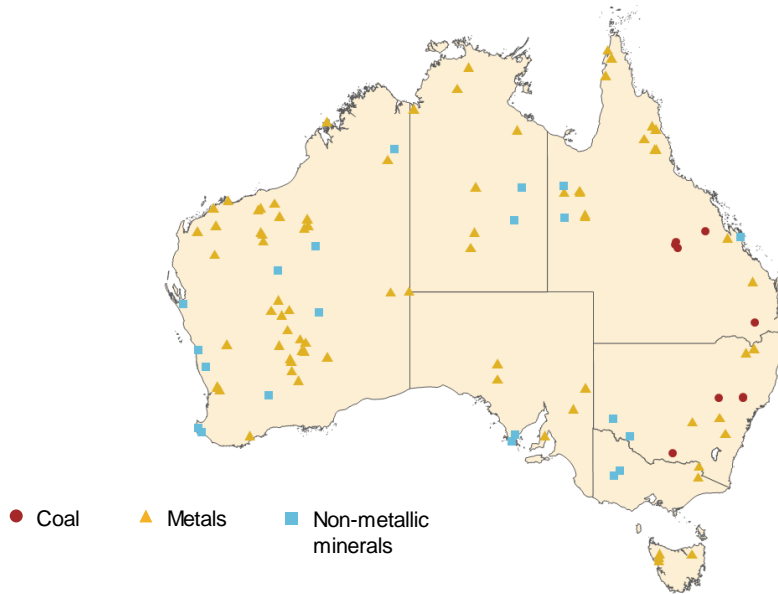
<sup>a</sup> Maps show operating mines as at 2019 and conventional oil and gas fields as at 2017. Quarries are not depicted. <sup>b</sup> Annual production data for Hamersley, Blackwater, Cadia, North West Shelf and APLNG are from 2019-20. Data for Greenbushes are pre-COVID estimated annual production. <sup>c</sup> Weight as lithium carbonate equivalent.

Sources: Albemarle (nd); BHP (BHP 2020b, p. 23); Geoscience Australia (2019b); Newcrest (nd, p. 43); unpublished data from DISER and Geoscience Australia.

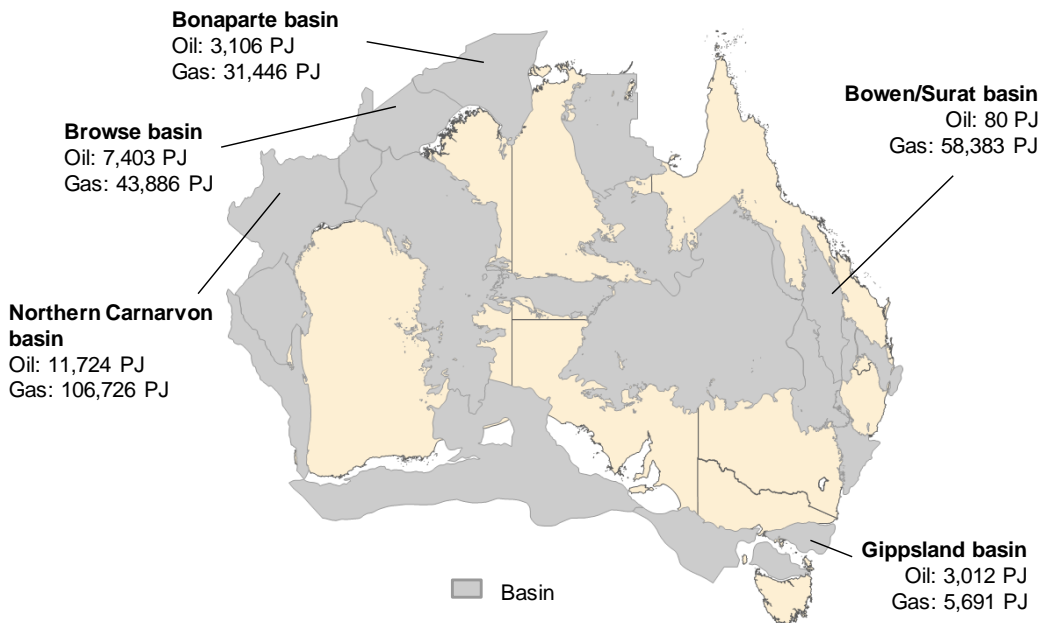
**Figure 2.4 Australia is richly endowed with a range of commodities**

Major mineral deposits and oil and gas resources remaining at major basins **a,b,c,d**

**Major mineral deposits (unmined)**



**Oil and gas resources remaining in major basins**

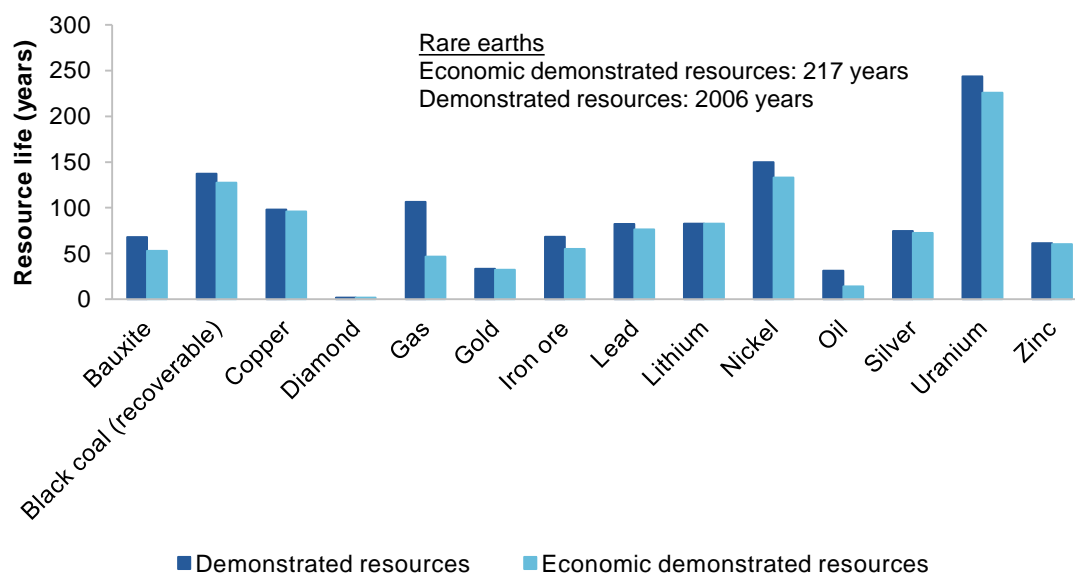


**a** Major deposits as classified by Geoscience Australia. **b** Gas resources include conventional gas and coal seam gas. Oil resources include conventional crude oil, condensate and naturally-occurring liquefied petroleum gas. **c** Major mineral deposits as at 2017 and oil and gas resources as at 2018. **d** Basins with over 3000 PJ of oil resources or over 30 000 PJ of gas resources remaining at the end of 2018.

Source: Unpublished data from Geoscience Australia.

**Figure 2.5 Large volumes of discovered resources have not yet been mined in Australia**

Remaining years of resource life, selected resources, 2018<sup>a,b,c</sup>



<sup>a</sup> Demonstrated resources defined under Australia’s national resources classification system are those that have been identified with a reasonable level of confidence. Economic Demonstrated Resources (EDR) are demonstrated resources deemed profitable to extract or produce. <sup>b</sup> Resource life is calculated as ratios of resources over production. Estimates assume that new resources are not found and production rates do not change. Estimates for EDR life also assume that uneconomic deposits do not become economic. <sup>c</sup> Data for oil and gas are from 2014.

Sources: Geoscience Australia (2019a, 2020, p. 10).

### Rates of discovery are relatively low

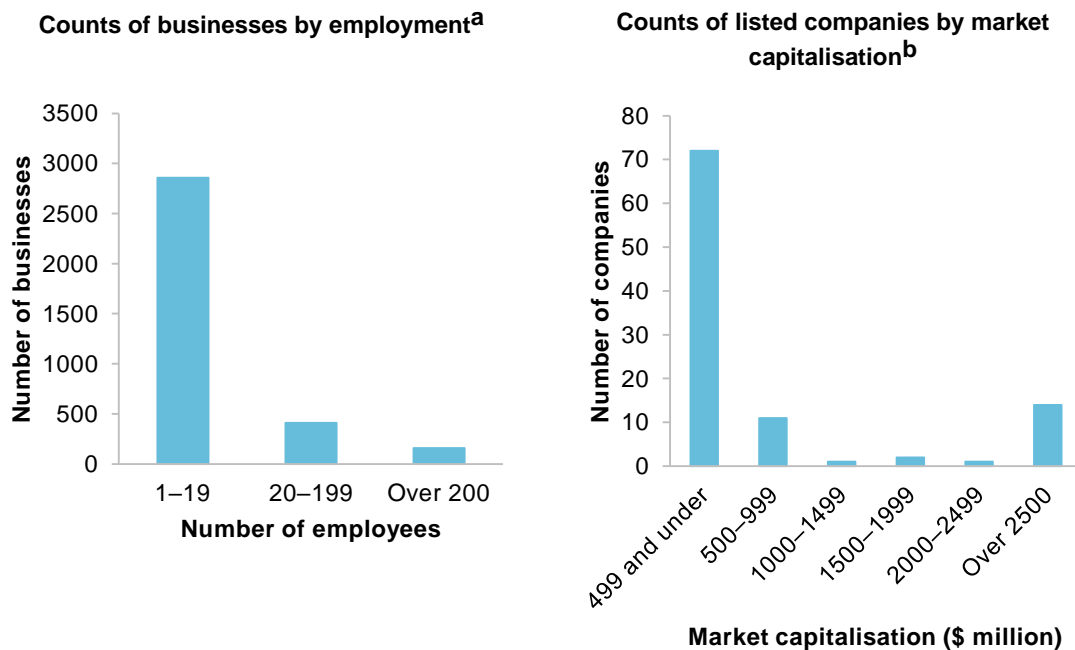
Australia has seen declining discovery rates of major new mineral resources over the past decade, even during periods with high expenditure on exploration (Geoscience Australia nd; Schodde 2018, p. 16). One key impediment to discovery is the ‘cover’ of sediments and weathered rock that conceals about 80 per cent of Australia’s prospective resources (Geoscience Australia 2014).

Difficulties in identifying new resources have driven a number of government-funded initiatives, particularly those that provide pre-competitive information, such as Exploring for the Future (chapter 4). The UNCOVER initiative also seeks to provide the knowledge base and technology to support the exploration of resources concealed below the surface, and involves collaboration between government, academia and industry (Uncover Australia nd).

## Many resources businesses operate in Australia

About 3400 employing resources businesses were operating in Australia in June 2019, the vast majority of which are small (ABS 2020c) (figure 2.6). As at July 2017, over 650 companies were listed on the Australian Securities Exchange (ASX) in the metals and mining sector. The top five metals and mining companies (by market capitalisation) accounted for 80 per cent of market capitalisation of the top 100 metals and mining companies (ASX 2017, pp. 1–3). Overall, resources companies represent about 20 per cent of the ASX (by market capitalisation, as at June 2019) (Mathews 2019).

Figure 2.6 There are many small resources businesses



<sup>a</sup> Employing businesses as at June 2019. <sup>b</sup> Top 100 ASX-listed stocks in the metals & mining sector, as at 13 July 2017.

Sources: ABS (*Counts of Australian Businesses, Including Entries and Exits, June 2015 to June 2019*, Cat. no. 8165.0); ASX (2017, pp. 2–3).

Larger resources companies tend to be multinationals and produce a wide range of commodities. They are often engaged in the full life cycle of the resources extraction process, from exploration to development, production and rehabilitation (figure 1.1). They are often also engaged in other activities such as downstream processing (including refining and smelting), marketing and operating power stations (BHP 2019a, pp. 17, 254; Rio Tinto 2019a, p. 46). Smaller resources businesses are typically engaged in exploration (28 per cent), other mining support services (27 per cent) and non-metallic mineral mining and

---

quarrying (26 per cent).<sup>2</sup> Very few small resources businesses engage in resources production as they tend to sell discoveries to large operators for development (ABS 2020c).

Joint ventures between companies are common for resources projects, and form and dissolve regularly (Bakker, Burgers and Chamberlin 2015, p. 1). For example, Rio Tinto and China Baowu Group have an iron ore joint venture in Western Australia, of which they own 54 and 46 per cent respectively (Rio Tinto 2019b).

In 2014-15, foreign businesses (defined as those with foreign ownership greater than 50 per cent) held about 36 per cent of all resources assets in Australia, or \$325 billion in assets. The United States and China held the largest stakes, accounting for about 38 per cent and 10 per cent respectively (DFAT 2018, p. 19).

Foreign direct investment<sup>3</sup> (FDI) inflows to resources businesses have shrunk over recent years, falling from 87 per cent of total FDI inflows at the peak of the investment boom in 2013 to 9 per cent in 2019 (at \$4.7 billion) (ABS 2018, 2020d). However, in 2019, the resources sector still had a greater stock of inward FDI than any other sector, totalling \$360 billion or 35 per cent of the total FDI stock (DFAT 2020a). This reflects the capital intensity of the sector (Jenner et al. 2018, p. 3).

## **Australia operates in a global market as a major exporter**

Australia operates in a global market, alongside major producers such as China, the United States, Russia, Saudi Arabia, Brazil and Canada. While resources are found in many countries, much of what they produce is often consumed domestically. For example, in 2017, China produced more resources than any country in the world — about four times that of Australia (by value) (BMNT 2019, p. 42). However, due to high domestic demand, it was also the largest global importer of resources (World Bank nd).

In contrast, Australia is a major exporter, exporting about 90 per cent (by value) of the top 10 commodities it produces (unpublished data from DISER). Australia's top three resources by value of both production and exports are iron ore, natural gas and metallurgical coal (figure 2.7) — commodities usually used for energy and steel production. Australia's major commodities face competition from China, the United States and Brazil, among other countries (figure 2.8).

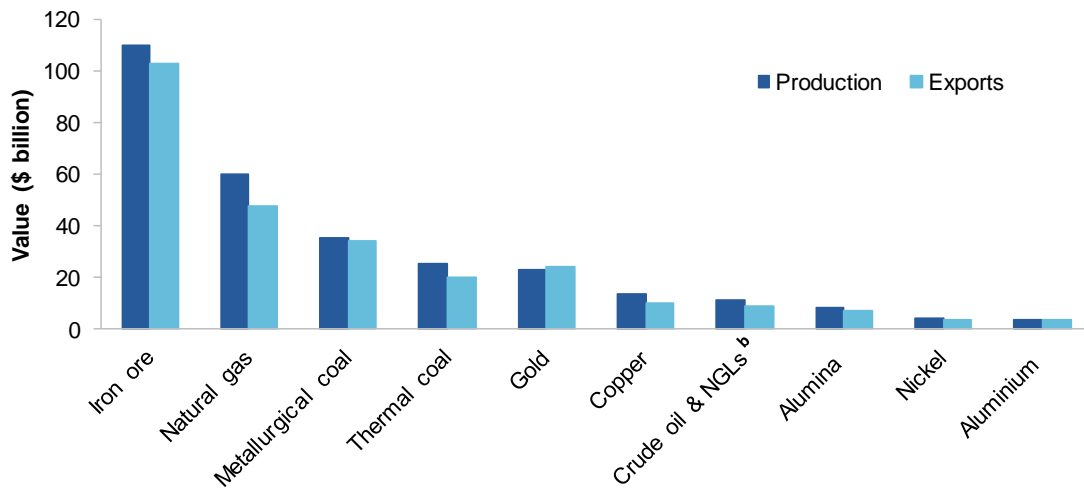
---

<sup>2</sup> Among resources businesses with one to 19 employees.

<sup>3</sup> Foreign direct investment refers to investment in an enterprise or asset where the foreign investor has control or a significant degree of influence over management. Generally, investment is considered to be 'direct' when an investor has 10 per cent or more of the voting power in the company, so is often associated with an equity stake (such as through shares), rather than debt securities (ABS 1998; IMF 2009).

**Figure 2.7 Iron ore, natural gas and coal make up the bulk of Australia's production and exports**

Production and exports of major commodities by value<sup>a</sup>, 2019-20



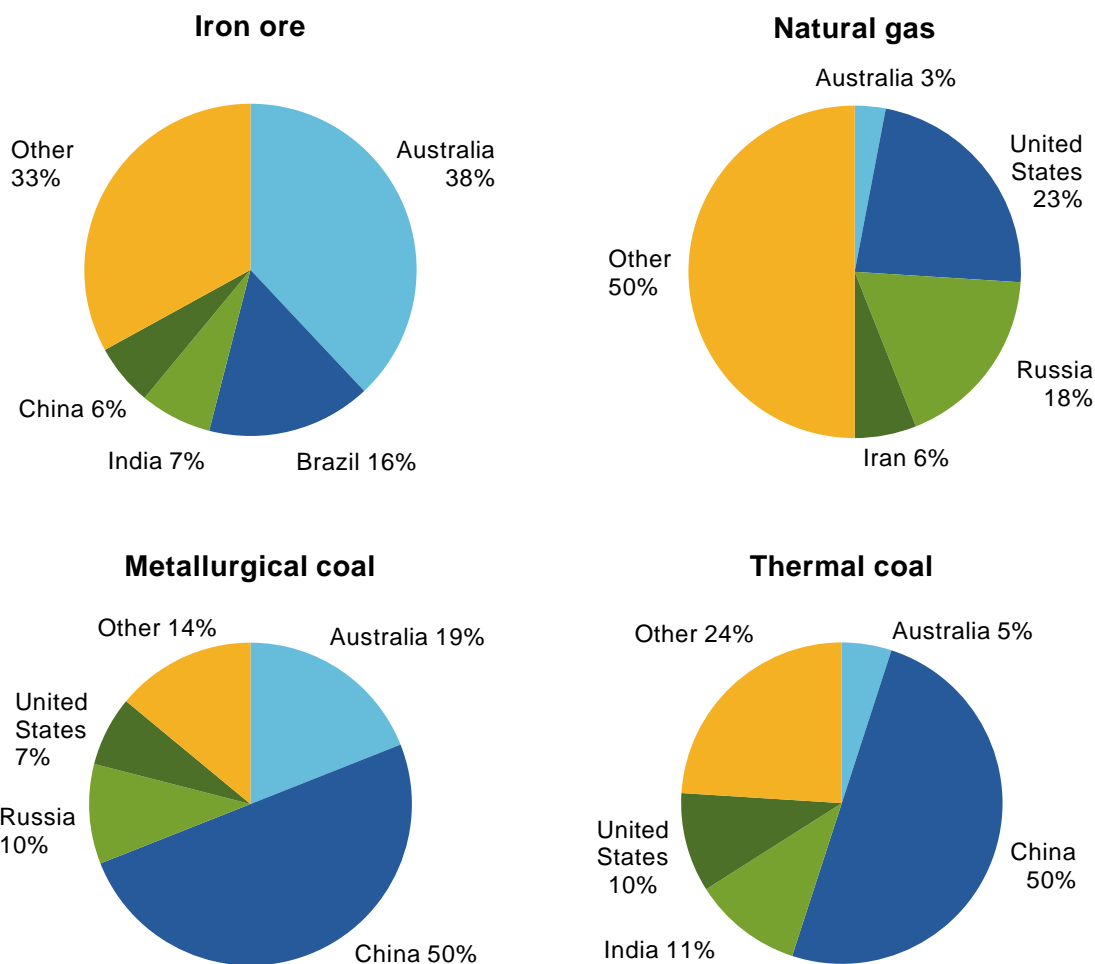
<sup>a</sup> Production value is estimated based on export unit values or assumptions about domestic prices. Natural gas exports are liquefied natural gas. <sup>b</sup> Natural gas liquids.

Source: Unpublished data from DISER.

While many mines around the world paused their operations in response to COVID-19 outbreaks and restrictions (Hume 2020), Australia's mines were able to continue their operations as an essential service, albeit with greater safety protocols applied (MCA 2020). This allowed them to continue exporting to the world during the crisis.

**Figure 2.8 Key competitors for Australia's major commodities include China, the United States and Brazil**

Global resources production shares of Australia and key competitors, by volume, 2019

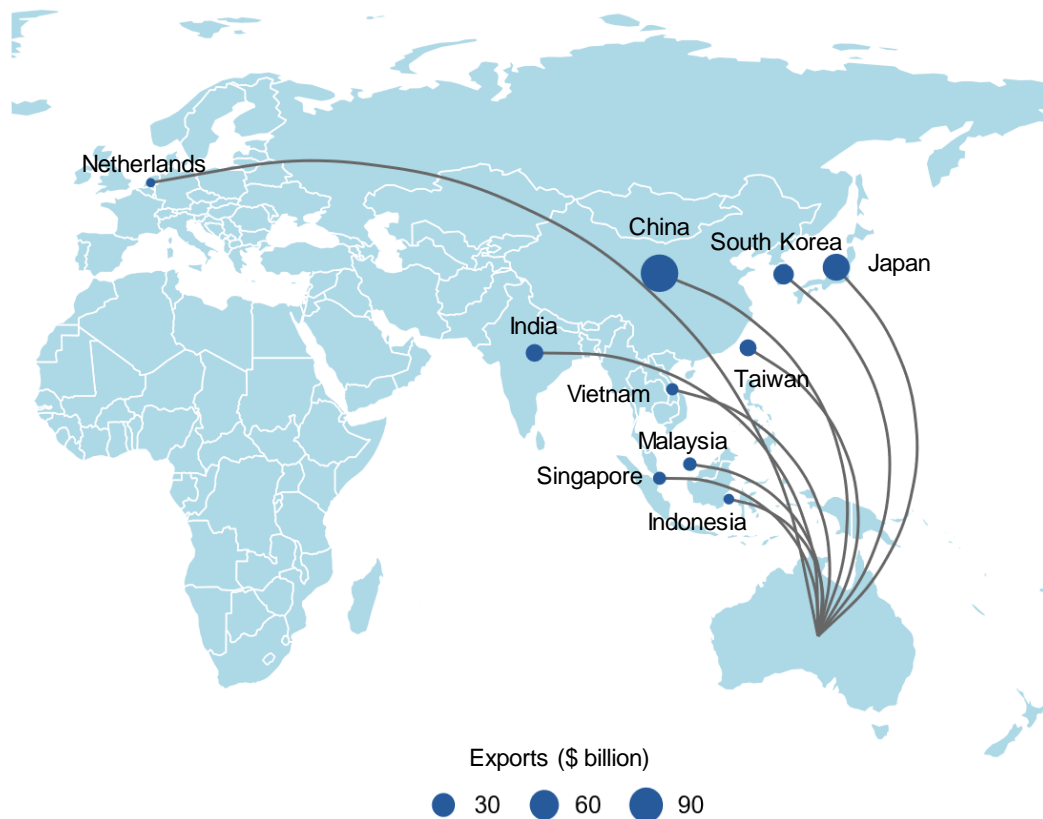


Source: Unpublished data from DISER.

Australia exports most of its resources to countries in Asia, with 73 per cent going to China, Japan and South Korea, its top three destinations (figure 2.9). In part, this reflects geographic proximity and thus lower transport costs.



Figure 2.9 **Asia is Australia's key export market for resources<sup>a</sup>**  
Top 10 export destinations, 2019



<sup>a</sup> Minerals and fuels as classified according to the United Nations Standard International Trade Classification, Revision 4.

Source: DFAT (2020b).

## Future demand for Australia's resources will depend on a range of factors

The resources sector provides the raw materials for various other sectors worldwide. As such, it is subject to many influences within the global economy. In the short term, temporary demand events and supply disruptions in competitor countries, such as those due to the COVID-19 pandemic (box 2.3), trade tensions, weather events or political unrest, can have significant impacts (DIIS 2019e, p. 4). However, in the long term, demand will be driven by sustained influences such as population growth, the rate of economic development, climate change policies (box 2.4) and technological progress.

---

### Box 2.3 COVID-19 and demand for Australia's resources

World economic activity is expected to contract by about 5 per cent in 2020 due to the COVID-19 pandemic. Government policies implemented to suppress the spread of COVID-19 have shut down or restricted large parts of the economy, and business and consumer confidence have declined significantly. While stimulus measures have provided substantial economic support and restrictions are being gradually eased in some countries, a full recovery may take many years.

The resulting fall in global industrial activity reduced demand for many commodities. These include energy commodities (such as oil, liquefied natural gas (LNG) and thermal coal) and commodities used in manufacturing such as metallurgical coal and base metals.

Oil, which is used in transportation, saw a particularly dramatic plunge in demand as countries imposed travel restrictions, and oil prices fell by about 70 per cent between early January and late April. Oil prices have since partially recovered as the Organization of the Petroleum Exporting Countries agreed on supply cuts, and travel restrictions in some countries have been gradually lifted. While Australia benefits from lower oil prices as a net oil importer, a reduction in oil prices has also negatively impacted the price of Australia's LNG exports, as the bulk of LNG is sold via long-term contracts linked to oil prices (with a one- to two-quarter lag).

Some Australian commodities have also experienced higher demand as a result of COVID-19. These include:

- **iron ore**, due to increased construction activity and industrial production in China from fiscal stimulus measures focused on infrastructure projects
- **gold**, which investors tend to purchase as a safe store of value during periods of uncertainty.

In the medium to longer term, demand for Australia's critical minerals may also increase. The pandemic has highlighted the potential costs of disruptions to international supply chains, which is causing some governments (for example, the United States) to consider how to diversify their supplies of critical minerals to other countries (particularly diversifying away from China, which is currently the major international producer).

*Sources:* ACCC (2020); DISER (2020f); Home (2019); IMF (2020); RBA (2020, pp. 16–18); Toscano and Bagshaw (2020).

---

### Box 2.4 Climate change policies and demand for Australia's resources

Climate change policies in Australia and key export markets will affect future demand for Australia's energy resources. The ACF (sub. 32, p. 23) noted that:

The international market for Australia's fossil fuel resources is undergoing a fundamental transformation. The main driver is the commitment by governments around the world to reduce [greenhouse gas] emissions and address the urgent threat of climate change.

Japan, China and South Korea (which together account for about three-quarters of Australia's thermal coal exports) are all targeting net-zero emissions by 2050 or 2060 and are investing heavily in renewable energy — for example, China accounted for more than 45 per cent of total global renewable energy investment in 2017. In addition, India announced that it will stop importing thermal coal from 2023-24 (Singh 2020). All else equal, the shift towards net-zero emissions is likely to reduce long-term demand for Australia's non-renewable energy resources.

However, demand for non-renewable energy also depends on the energy needs of other economies more generally. While COVID-19 has put downward pressure on total energy demand in the short term, medium-term outlooks in Asia remain strong as populations grow and economies recover and ramp up industrial production and development. As part of meeting its growing energy needs, China is still rapidly building new coal-fired power stations. The extent to which future growth in Asian energy demand will translate to demand for Australia's non-renewable exports is unclear.

The shift towards cleaner sources of energy also brings new opportunities for Australia.

- Countries shifting away from thermal coal may do so in favour of natural gas, of which Australia is a major exporter. Deputy Governor of the Reserve Bank of Australia, Guy Debelle, noted in 2019 that Australia is already experiencing an increase in the demand for natural gas due to falling thermal coal demand.
- The production of renewable energy-related goods such as solar panels, electric vehicles and batteries, require a range of minerals such as aluminium, copper, lithium and rare earth elements which Australia is well placed to supply.
- Australia may have greater export opportunities for renewable energy fuels, such as hydrogen generated by renewable energy sources.

*Sources:* Debelle (2019); Global Energy Monitor (2020); Heath (2019); IRENA (2019, pp. 28, 48, 60); Kim (2020); Newell et al. (2020); Singh (2020).

## 2.2 Resources investment in Australia

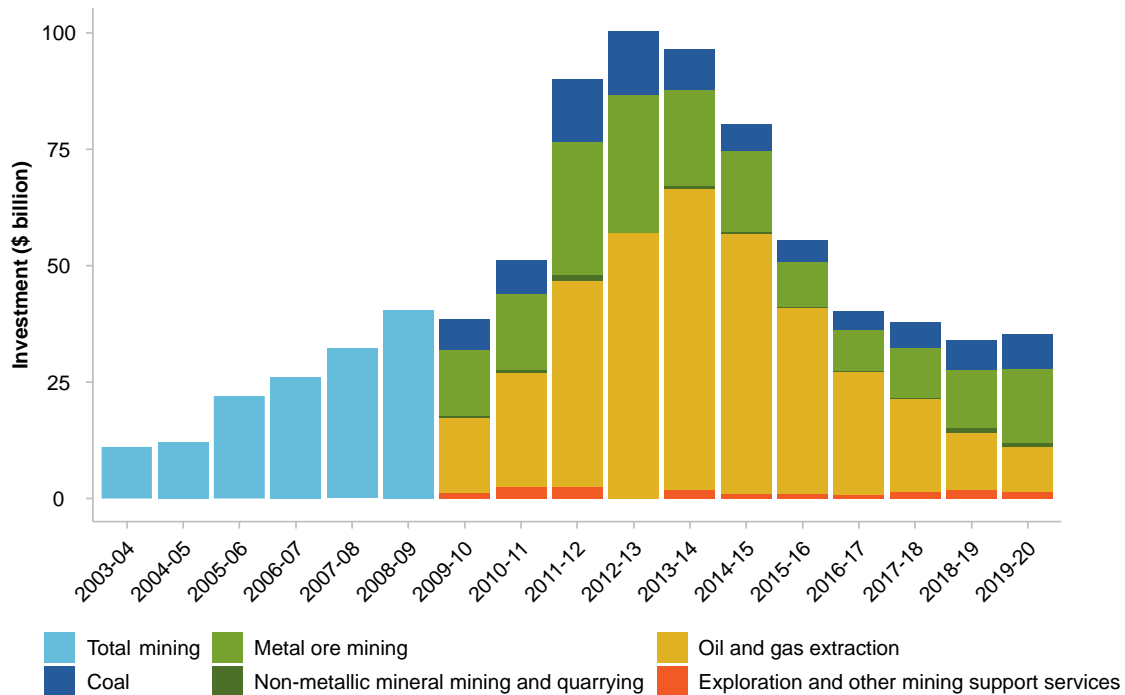
From the mid-2000s, Australia experienced an unprecedented resources investment boom. Rapid industrialisation and urbanisation in emerging economies drove a spike in global prices for commodities used in steel and energy production, leading Australian producers to set about expanding production capacity, particularly in coal, iron ore and liquefied natural gas (LNG).

Investment peaked in 2012-13 at \$95 billion (\$103 billion in 2019-20 dollars), about ten times the level of the early 2000s (ABS 2020f) (figure 2.10). At the height of the boom, the sector attracted more private business investment than all others combined (DIIS 2019a,

p. 8). With resources sector investment totalling almost \$800 billion in the 16 years to June 2020 (ABS 2020f), the sector has built up a large capital stock.

**Figure 2.10 The resources investment boom has wound down but is seeing a modest recovery**

Resources sector investment by broad commodity<sup>a,b</sup>, 2019-20 dollars



<sup>a</sup> Data missing for non-metallic minerals and services in 2012-13. <sup>b</sup> Total mining investment depicted for years prior to 2009-10 as disaggregated data are unavailable for those years.

Source: ABS (Australian National Accounts: National Income, Expenditure and Product, June 2020, Cat. no. 5206.0, Private New Capital Expenditure and Expected Expenditure, Australia, June 2020, Cat. no. 5625.0).

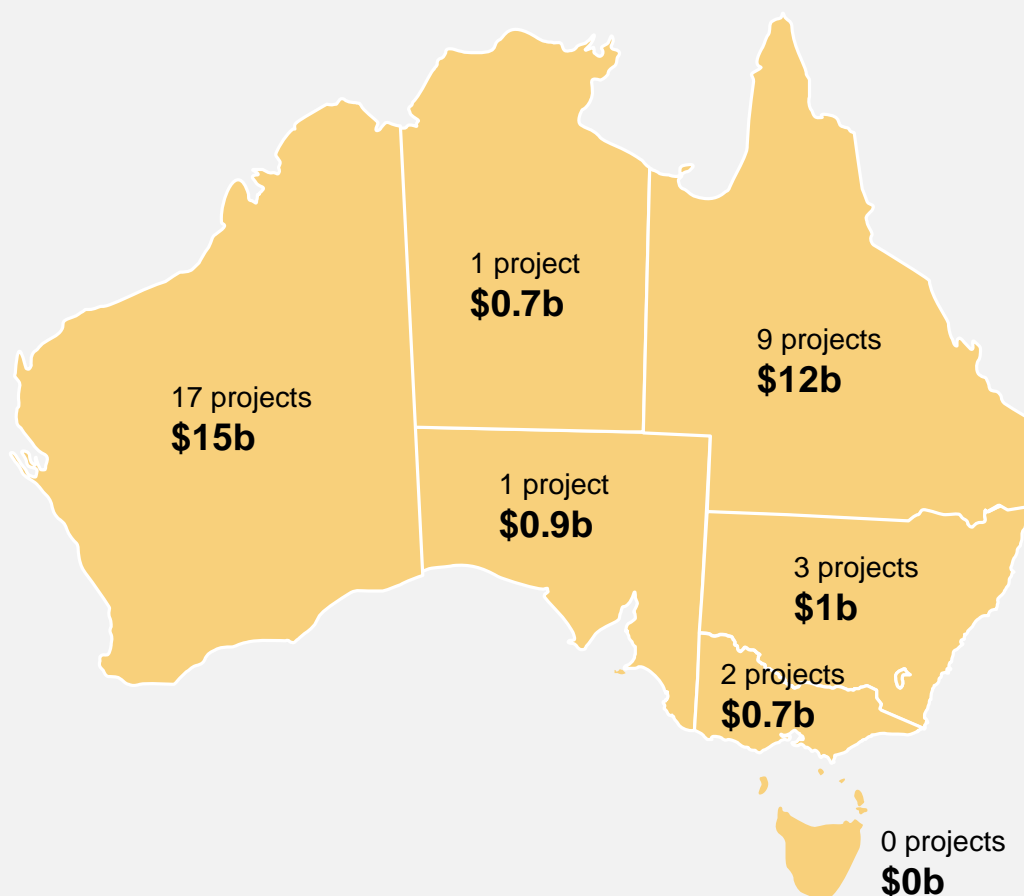
Since the peak of the boom, investment in resources has wound down considerably, and new projects have transitioned to production. In 2019-20, resources investment was about \$35 billion (ABS 2020f).

Increasing prices for some resources has prompted a moderate recovery in resources investment since mid-to-late 2019 (ABS 2020f). While some companies deferred LNG investments in the first half of 2020 due to the COVID-19 pandemic and the resulting declines in prices (Treadgold 2020), recent strength in gold and iron ore prices has led to new investment plans for these commodities (DISER 2020f, p. 10). At October 2020, about \$39 billion of committed major resources projects were in the pipeline – \$9 billion more than the previous year (box 2.5), but still about 85 per cent below the level at October 2012 (Ker 2020b).

### Box 2.5 Major committed resources projects as at October 2019

Across Australia, there were \$30 billion of committed major resources projects in the pipeline as at October 2019, covering over 30 different mineral varieties. Examples include the \$1.7 billion Eliwana iron ore project and the \$5.1 billion expansion of the Gorgon gas project in Western Australia. By value, most projects involve liquefied natural gas (LNG), gas or oil (47 per cent), or iron ore (25 per cent). Although most States and the Northern Territory have at least one project afoot, most are occurring in Western Australia and Queensland.

#### Number of major committed projects and their total value by State and Territory, October 2019<sup>a</sup>



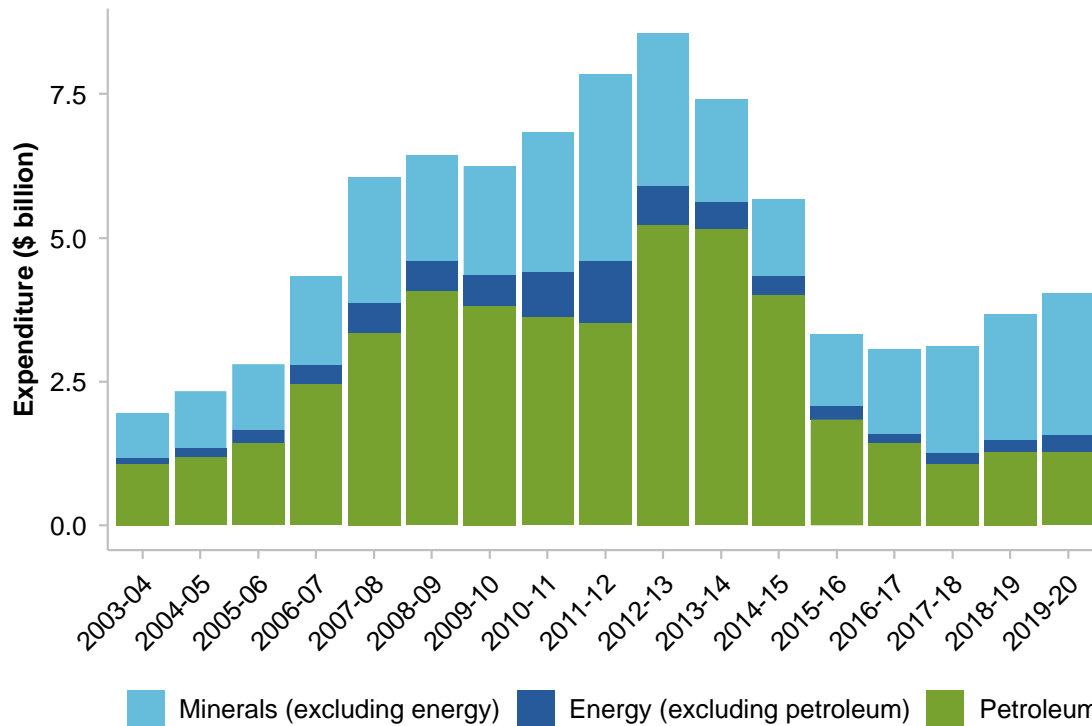
<sup>a</sup> Includes new and expansion projects valued at over \$50 million.

Sources: DIIS (2016a, p. 3, 2019c, pp. 124, 140, 2019d).

These trends are also reflected in exploration expenditure, which leads investment (figure 2.11). The COVID-19 pandemic had a particularly negative impact initially on small explorers, as they had dwindling cash reserves and were struggling to raise capital (Claughton, Fowler and Fitzgerald 2020; Lucas 2020). Federal and State Governments implemented support measures to assist the resources exploration sector over this period, such as simplified application processes around existing work programs; deferrals of rents, fees and taxes; and

awards of grants (Queensland, for example, awarded individual grants of up to \$200 000 to 24 companies) (AMEC 2020; Business Queensland 2020; DISER 2020b).

**Figure 2.11 Exploration expenditure has fallen since peak of the resources investment boom, but has seen a recent recovery**  
Exploration expenditure, 2019-20 dollars



Sources: ABS (Australian National Accounts: National Income, Expenditure and Product, June 2020, Cat. no. 5206.0, Mineral and Petroleum Exploration, Australia, June 2020, Cat. no. 8412.0).

It is challenging to predict the future mix and level resources investment in Australia, as these will depend on various factors affecting global demand including emissions policies, technological advances and economic and population growth as well as local factors affecting production costs including policy and regulatory settings. However, given Australia’s diverse and significant resources deposits and global demand, the *potential* for investment will likely remain substantial (AMEC sub. 31, p. 1; APPEA sub. 44, p. 4; Qld DNRME sub. DR95, p. 1).

**FINDING 2.1**

Global factors including emissions policies, technological advances, and economic and population growth that drive demand as well as local factors affecting production costs make it challenging to predict the future mix and level of resources investment in Australia. However, given Australia’s diverse and significant resources deposits and likely growth in global demand, the potential for investment will likely remain substantial.

---

# 3 Regulation: rationales, principles and landscape

## Key points

- Primary responsibility for regulating the resources sector, including relevant environmental outcomes, lies with the Australian, State and Territory governments. Local government plays a subordinate role.
- There are two key reasons why governments are involved in the regulation of resources.
  - Resources and minerals are owned by the Crown — governments have a role in determining the conditions under which resources can be exploited, including determining who has the right to develop and sell resources, and setting appropriate royalty rates.
  - Resources activities can cause harm to the environment, sites of cultural and heritage significance, workers, landowners and surrounding communities.
- Effective regulation seeks to promote economic, social and environmental outcomes that benefit the community overall. However, while regulation can provide community benefits, it is not costless.
  - Regulations typically increase the costs of doing business (through delays and compliance costs) and can affect investment, output, resource allocation and innovation. This in turn can reduce the income generated from projects that flows to workers, capital owners and governments, and hence the community more broadly.
  - Governments also incur costs developing, administering and enforcing regulation.
- To maximise *net* community benefits, the benefits of regulation must be weighed against the costs. If regulation imposes unnecessary costs, overall community income and wellbeing are lower than they could be.
- Effective and efficient regulation:
  - is designed well to promote certainty and limit unnecessary costs for businesses and the community. Key elements of good regulatory design are consultation and community engagement, and clearly defined objectives.
  - ensures that regulatory roles, responsibilities and functions are clear, with adequately resourced regulators that have staff with an understanding of the issues they are regulating.
  - has open and transparent regulatory processes that promote impartiality and accountability and help build community confidence. Regulators should ensure that outcomes are consistent with policy objectives, including through monitoring and enforcing compliance.
- Regulation and regulatory practice should be reviewed periodically to ensure that they remain fit for purpose.

---

Resources activities are subject to a significant amount of regulation administered by all levels of government to varying degrees. Given the risks involved in resources activities, rigorous regulation of the sector is clearly warranted. As outlined in chapter 1, this study focuses mainly on whether current regulatory regimes are as effective and efficient as they could be in achieving policy objectives.

This chapter examines the rationales for, and core elements of, an effective and efficient regulatory system. It also provides a ‘helicopter’ view of the regulatory framework for the resources sector in Australia.

### **3.1 Why do governments regulate resources?**

Government involvement in the resources sector is motivated by two key factors. First, resources (with a few exceptions) are owned by the Crown, giving governments the responsibility to manage them on behalf of the community. This means that government has a role in determining who has the right to develop and sell resources, setting the conditions (including environmental) under which resources can be exploited, and setting royalty rates.

Second, governments may have a role in intervening where markets fail to produce socially- or economically-optimal outcomes (box 3.1). This is particularly important in the resources sector, where the commercial assessment of a resources project may fail to fully take into account the potential negative impacts of exploration or extraction activity on the environment, sites of cultural and heritage significance, workers, landowners and surrounding communities.

Regulation also underpins well-functioning markets — for example, by facilitating safe and efficient transactions and protecting property rights. As noted by the AEPLG (sub. 29, p. 3), regulation has the potential ‘to create new “rules of the game” that generate new entrepreneurial opportunities’.

Government intervention is only one of several possible options for responding to policy issues or risks, including market failures. Alternatives include voluntary codes of conduct, self-regulation, co-regulation, or information and education. The approach chosen will depend on the relative costs and benefits under particular circumstances.

#### **How far should regulation go?**

Most regulations applying to the resources sector aim to mitigate some type of negative effect, such as harm to the environment, sites of national significance, Indigenous heritage, or worker health and safety. While companies have some incentives to mitigate negative impacts (because of reputational effects, for example (chapter 10)), they may not reduce impacts to a level that is acceptable to the community. In these circumstances, governments often regulate to further reduce them.



---

However, there is no easy way to determine what constitutes an acceptable level of harm in the eyes of the community. This is because it is difficult, if not impossible, to quantify what the community is prepared to pay to avoid the detrimental impacts that might occur in the absence of regulation. The community will naturally have expectations that governments and industry reduce negative effects as far as practicable, and governments must make judgments that balance these expectations against the costs of regulation, including those that may result in lower levels of resources activity.

### Box 3.1 Rationales for government intervention

A market with effective competition is generally the best mechanism for ensuring that the level and nature of transactions and economic activity is optimal. Prices established within the market signal how much should be produced, prompt production by the most efficient companies and ensure that output goes to the consumers who value it most highly.

But when these conditions for well-functioning markets are not met, there is a potential role for governments to improve community wellbeing through regulation or other means such as government provision, taxes and subsidies. For example:

- **spill-over effects or 'externalities'** occur when the costs and benefits of undertaking an activity do not fully reflect its effects on others. Examples of negative spill-overs associated with resources activity may include air or noise pollution, damage to heritage sites or lowered public amenities for local residents
- **public goods** exist where provision for one person means the product is available to others at no additional cost. Public goods are also said to be non-excludable, meaning that it is difficult or costly to exclude any one person from benefiting from the good. They may therefore be underprovided because 'free riders' cannot be excluded from enjoying the benefits. Examples include national defence, flood-control dams or intellectual property such as innovations in mining technology
- **information failures** arise when consumers and investors are unable to make fully-informed decisions where they lack adequate information about matters such as costs, quality or the behaviour of other parties to a transaction. For example, employers may know more about the health and safety risks of working in quarrying than prospective employees.

Sources: PC (2006a, 2009).

Almost invariably there will be a tipping point where further efforts to reduce negative effects through regulation will come at an additional cost greater than any additional expected community benefits. One implication is that it is generally unlikely that net community welfare will be maximised by eliminating all negative effects of an activity because the costs will be very high and could require stopping the activity itself (although there will be exceptions).

The EDO (sub. DR62, p. 22) countered that this suggested that 'there is almost no level of environmental harm or nuisance that would justify refusing to grant an authorisation allowing a resources project to proceed'. This is not the case. When determining whether activities should proceed, regulators need to weigh potential benefits against possible external costs, which include effects on the environment, Indigenous heritage, and worker

---

health and safety. Typically, these costs can be mitigated effectively at a reasonable cost through regulation and management practices, thus allowing projects to proceed that generate net benefits to the community overall. However, there will be some instances where the external costs may be so large (and unable to be mitigated at reasonable cost) that they outweigh potential benefits, in which case the project or activity should not proceed.

## Regulation has benefits and costs

While regulation has the potential to promote economic, social or environmental outcomes, it is not costless. Regulation increases the costs of doing business, for example, by increasing the time and money spent on compliance. It can also affect investment decisions by prohibiting economic activity or making it too costly to undertake — for example, excessive delays can threaten the commercial viability of a project by reducing its expected returns. A lower level of resources activity reduces labour and capital incomes, in addition to royalty and tax revenues that could otherwise be spent on community services. Governments also incur costs during policy development and in monitoring and enforcing compliance with regulations.

Regulations can also fail to improve outcomes (relative to doing nothing) or create unintended consequences when they are not carefully designed or enforced (box 3.2). This can lead to failures to adequately protect environmental, cultural and heritage assets, the safety of workers and the health of local communities. The risks of ineffective regulations are heightened when governments face barriers to obtaining information required to design and implement effective and efficient regulations. Ineffective regulations can create unnecessary costs for individuals, industry and the community, which can lower productivity and living standards. As noted by the MCA (sub. 11, p. 14):

Unnecessary regulatory ‘burden’ occurs where ineffective, inefficient regulation ... increases the compliance costs to industry and undermines productivity without tangible benefit. These costs represent a loss to the affected industry, the community and the economy as a whole.

Leading-practice regulations maximise net benefits to the community, with administration costs to governments and compliance costs to businesses the minimum necessary to achieve policy objectives.

The ACF (sub. 32, p. 23) argued that any study of the impact of regulation on industry investment should also consider factors such as government assistance and subsidies designed to promote investment, suggesting that a ‘more balanced discussion on resource regulation would include information on the way governments already provide substantial support to the resources industry’.

The Commission is not in a position in this study to evaluate all policies affecting the resources sector. However, it regularly publishes estimates of net effective rates of assistance to major industries, including mining. In recent years, the mining industry has consistently received negligible net assistance, and less than other industries (PC 2019c, p. 30, 2020e, pp. 2–4). Most of the assistance it does receive comes in the form of tax concessions such as the research and development (R&D) tax incentive, which is targeted to address private

---

underinvestment in R&D. In other words, net assistance can largely be justified on public interest grounds. However, the estimates do not incorporate all measures affecting industries (positive or negative), such as interventions by State governments (which may or may not be justifiable on public interest grounds).

### **Box 3.2 Potential sources of unnecessary regulatory costs**

#### **Problems with the regulations themselves**

- Regulations can be overly complex or excessively prescriptive, requiring legal interpretation that may make them costly to comply with or administer (box 3.4).
- Regulations may have unclear, questionable or conflicting objectives. Clear objectives allow regulators to determine the boundaries of their authority and areas of responsibility, making it easier to assess their performance.

#### **Regulatory duplication and inconsistency**

- Unnecessary compliance costs can occur where industry participants need to provide information to multiple regulators, or go through multiple regulatory processes or regulatory bodies.
- Industry participants may be required to comply with inconsistent regulations and respond to differences in regulator practices, both within and across jurisdictions (or even within regulators). In addition, government policies and objectives may change frequently or abruptly. These inconsistencies can significantly increase compliance costs for businesses.

#### **Poor enforcement and administration**

- Heavy-handed administration of regulation, such as excessive reporting or recording requirements, can lead to unnecessary compliance costs for individuals or businesses.
- Inadequate resourcing of regulators can also lead to unnecessary costs, for example, through delays and greater uncertainty in responding to permit or licence applications. A lack of resources may also undermine regulatory objectives where regulators are unable to invest in appropriate skills and expertise, leading to poor regulatory decision making.

*Sources:* PC (2006a, 2009, 2013b).

Of greater relevance to this study, regardless of whether the resources industry is subsidised or taxed on a *net* basis, inefficient regulation imposes unnecessary costs. A widely accepted policy rule is to address inefficiencies as directly as possible at their source. Leaving in place inefficient and costly regulatory practices to counter a potential subsidy to some industries would be a blunt and costly instrument — inefficient, untargeted and quite possibly ineffective.

---

## 3.2 What does Australia's resources regulation look like?

Resources activities are regulated by Australian, State and Territory governments in their jurisdictions, with multiple agencies in each jurisdiction playing a role. Broadly speaking, the Australian Government is responsible for regulating matters of national environmental significance and certain heritage matters under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) (box 3.3). It also regulates developments on Commonwealth land (such as some airports and defence facilities) and waters beyond the three nautical mile limit. In addition, the Commonwealth Attorney-General administers the *Native Title Act 1993* (Cth).

### Box 3.3 The EPBC Act

Responsibility for regulating matters relating to the environment and resources generally rests with State and Territory Governments. However, the Australian Government has drawn on some of its constitutional powers (for example, those relating to external affairs, including giving effect to international treaties) to make laws on environmental matters. The *Environmental Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) is one example of this.

The EPBC Act protects matters of national environmental significance, including:

- the world heritage values of World Heritage properties and the national heritage values of National Heritage places
- the ecological character of Ramsar wetlands
- listed threatened species, ecological communities and migratory species
- nuclear actions, including uranium mines (the 'nuclear trigger') (chapter 6)
- Commonwealth marine areas and the Great Barrier Reef Marine Park
- water resources in relation to coal seam gas developments and large coal mining developments (the 'water trigger') (chapter 6).

Each of these matters are linked to the constitutional powers used by the Commonwealth to enact the Act, such as Australia's international obligations to conserve particular environmental features.

As ownership of most mineral and gas resources is vested in the States and Territories, they are primarily responsible for the framework through which the right to explore for and extract resources can be obtained by private operators. The resources-specific Acts in each State and Territory are the major legislation determining conditions of resources development. These Acts cover matters such as:

- tenement and leases, licences and permits relating to prospecting, exploration and mining
- land access negotiation and compensation
- other miscellaneous issues such as royalties or dispute resolution processes.

Additional State and Territory legislation exists, covering issues such as environmental and cultural heritage, workplace health and safety and land use planning.

---

Finally, while resources projects are usually assessed and approved at the State level, local governments often have a range of responsibilities, such as granting permits and other approvals within their jurisdiction.

## **Resources regulation is complex**

Given government ownership of resources and the potential for resources activity to harm individuals and the environment, it is unsurprising that the resources sector is subject to a significant amount of regulation. As Peabody Australia (sub. 33, p. 3) stated:

Mining is subject to more regulatory requirements than any other Australian industry, covering all stages of industry activity — from grant of tenure, exploration, extraction, processing, transportation, rehabilitation and mine closure through to relinquishment of tenure.

The sheer volume of legislation, and associated regulatory requirements, applying to the sector is difficult to synthesise. Producing comprehensive depictions of the regulatory landscape is challenging, even for regulators themselves. Figure 3.1 outlines some of the key regulatory requirements faced by proponents at different stages of the life cycle of resources projects, although it likely understates the regulatory complexity faced by resources companies. The CCAA (sub. 36, p. 6) provided an example of the process to obtain a permit to operate a commercial quarry in Tasmania, describing it as ‘difficult and cumbersome’.

Further complicating the resources regulatory framework is the interaction of various State, Territory, and Commonwealth regulations, which sometimes overlap. As noted by the IPA (sub. 5, p. 8):

Not only do businesses have to deal with state government imposed regulation, they have to make sure their actions are in line with Commonwealth Government regulation. This adds to the red tape burden by increasing compliance costs that are exacerbated when the laws are inconsistent.

Even within jurisdictions, resources companies will generally need to work with the numerous agencies that play a role in administering and enforcing resources sector regulation. This can create challenges for project proponents when there is a lack of coordination between agencies (as noted by the BCA, sub. 43, p. 5).

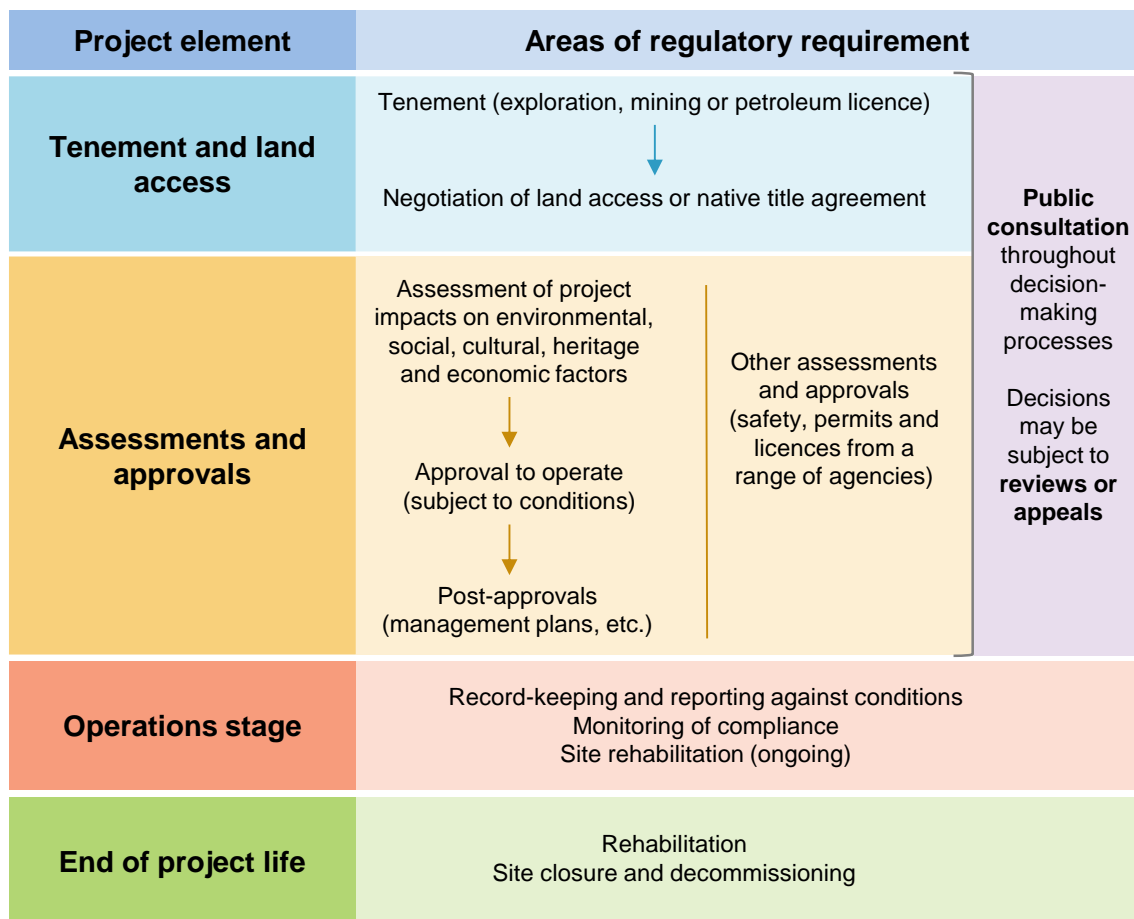
Appendix B outlines some of the key features of resources regulation in each jurisdiction.

## **3.3 A framework for leading-practice regulation**

The terms of reference for this inquiry require the Commission to identify examples of best-practice regulation in the resources sector. As noted in chapter 1, the Commission has used the term ‘leading practice’ when highlighting these examples. Leading-practice regulatory approaches require governments and regulators to set clear, evidence-based regulatory objectives, then take the course of action that delivers these objectives while imposing the least burden on businesses. This delivers the greatest possible net benefit to the community.

Figure 3.1 **Spheres of regulatory requirement for resources activities**

A stylised life cycle<sup>a,b</sup>



<sup>a</sup> Some spheres of regulatory effort are State and Territory responsibilities only. <sup>b</sup> Public consultation and community engagement is a regulatory requirement during tenement, land access, assessments and approvals processes. In practice, it also occurs during the operations and end of project life phases, but not always as a regulatory requirement.

The Commission has developed assessment criteria (table 3.1) for determining whether current regulatory approaches are effective and constitute leading practice, drawing upon its previous work and a large body of work by others, including the Council of Australian Governments’ principles of leading-practice regulation. While participants’ views varied, submissions to this inquiry were generally supportive of these principles (discussed further below).

**Table 3.1 Assessment criteria for leading-practice regulation**

<i>Regulatory design</i>	<i>Regulator governance</i>	<i>Regulator conduct</i>
<ul style="list-style-type: none"> <li>• Objectives of regulation are clearly defined and consistent across different regulations</li> <li>• Consultation during regulation making is sufficient</li> <li>• Regulation is not overly complex or excessively prescriptive</li> <li>• Regulation is reviewed regularly</li> </ul>	<ul style="list-style-type: none"> <li>• Roles, responsibilities and requirements of different regulatory agencies are clear and duplication is avoided</li> <li>• Decision makers are accountable</li> <li>• Regulators are free of undue political interference</li> <li>• Regulators are adequately resourced and have the necessary capabilities</li> </ul>	<ul style="list-style-type: none"> <li>• Regulators' processes are clear, predictable, open and transparent</li> <li>• Regulators use their resources efficiently</li> <li>• Administrative costs are no higher than necessary</li> </ul>

Sources: COAG (2007); OECD (2014); PC (2009, 2013a, 2013b).

## Regulatory design

Regulatory design refers to the processes for regulatory development, maintenance and change. Well-designed regulation helps limit uncertainty and unnecessary costs for businesses and the community. Adequate consultation and engagement during the regulatory design phase, including through regulatory impact assessments, can help ensure that regulations are fit for purpose and minimise unintended consequences.

Good regulatory design requires clearly defined objectives that are consistent across different regulations. Clear objectives allow those operating within the regulatory system to determine how to achieve governments' policy goals. They also set an objective standard against which regulatory outcomes can be evaluated (PC 2013a, p. 86).

A further design consideration is the extent to which regulations are overly complex or prescriptive, discouraging businesses from developing cheaper or more effective ways of meeting regulatory objectives (box 3.4). It is also important that duplication and overlap are minimised, including across jurisdictions.

Finally, regulation needs to be reviewed regularly and updated to ensure that outcomes are in line with stated policy objectives. Reviews provide an opportunity for regulation to be improved by drawing on industry experience, or to be updated to reflect community attitudes and expectations. Policy makers can ensure that regulation remains relevant by creating requirements for a review process as part of the development of new regulatory proposals — for example, by incorporating such requirements into legislative instruments.

---

However, review requirements should be balanced against the desirability of regulatory and policy stability to minimise compliance costs and support long-term investment. As noted by APPEA (sub. 44, pp. 7–8):

... regulations that are reviewed and or revised too frequently that result in constantly changing regulations is not best practice as it lends to uncertainty that negatively impacts decision making by companies, increasing project risk and costs.

### Box 3.4 Prescriptive or outcomes-based regulation?

Prescriptive regulation sets out in specific detail how regulated entities should behave, stipulating precisely what they can or cannot do. For example, in Victoria, regulation 44 of the Mineral Resources (Sustainable Development) (Mineral Industries) Regulations 2019 prescribes that, before any mining activity commences, a work plan which details, among other things, all risks the mining or exploration works may pose to the environment, the public, or nearby land, property or infrastructure must be approved by Earth Resources Regulation.

Prescription does have its place in the regulatory framework, and there are instances where it is necessary — for example, where there is a high degree of uncertainty regarding the nature or severity of project impacts. Prescription may also be warranted if there are longstanding safety issues associated with an activity, such as in protecting the safety of mine and oil rig workers. However, prescriptive regulation is generally inflexible, and cannot automatically adapt to changes in the regulatory environment, such as the development of new technologies. It may also encourage ‘box ticking’ rather than compliance with the spirit of the law, and discourage innovation.

By contrast, outcomes-based regulations set out the outcomes or standards that regulated entities must achieve, without specifying what steps must be taken to comply. For example, section 23 of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) requires that a person not take any action that *will or is likely to have a significant impact on the environment*, but does not specify in detail what specific actions are prohibited. Outcomes-based rules are flexible enough to accommodate different or changing circumstances, including material changes to how an industry operates. They also allow businesses and individuals to choose the most cost-effective ways of complying. However, outcomes-based strategies can be associated with regulatory uncertainty.

Sources: ALRC (2008); David Campin (sub. 49, p. 5); PC (2013a, 2013b).

## Regulator governance

Regulator governance refers to the structures through which the roles, responsibilities and objectives of regulators are set, and the means of achieving these objectives are determined. Leading-practice governance attributes — such as clear objectives, accountable decision makers who are free of undue political interference, and adequate resourcing and capabilities — provide the foundation for regulators to deliver outcomes that yield community benefits, and build confidence and trust in the efficacy of the regulatory system. Policy statements, such as ministerial Statements of Expectations, offer an important opportunity to clarify a government’s expectations of how a regulator will operate (for example, with respect to their treatment of risk and use of risk-based approaches (box 3.5)).



---

**Box 3.5      A risk-based approach to regulation**

A risk-based approach to regulation involves basing regulatory decisions and priorities on the likely risks posed by an activity, taking into account both the potential seriousness of a risky outcome and the likelihood of it occurring. Appropriate and proportionate levels of control are then adopted.

Risk-based regulation requires regulators begin by identifying the risks that they need to manage, not the rules they have to enforce. This requires that regulators have accurate information and data about the operation of regulated industries, and adequate resources to target their efforts to the areas presenting the greatest risks. In an ideal setting, a risk-based approach can facilitate the efficient and effective use of regulatory resources.

Regulators need to have the powers and discretion to implement a fully risk-based approach, including flexibility in how they enforce the law. Policy makers need to ensure that the degree of prescription in regulation does not unduly constrain regulators in how they respond to breaches, or preclude the use of some tools that may be necessary for effective and low-cost compliance. Ultimately, the authority for the necessary tools, powers and discretion to implement a risk-based approach must come from the relevant government.

*Sources:* Black and Baldwin (2010); PC (2013a, 2013c).

Clear regulatory roles, responsibilities and functions are particularly important. Where multiple bodies are responsible for regulating an industry without clearly defined roles, gaps may appear within or between regulatory regimes. This creates the risk that some behaviours or activities may be monitored ineffectively, and makes it difficult to hold regulators accountable for outcomes. A lack of clear regulatory boundaries may also lead to duplication of processes, overlapping compliance requirements or contradictory obligations.

Regulatory bodies must have adequate resources for monitoring, research and communication to provide effective administration and enforcement of regulation. They also need staff with an understanding of the industry they are regulating. Industry knowledge is important for the credibility of the regulator, and can help avoid impractical or unnecessarily costly demands.

While the level of regulator funding will ultimately reflect political and budgetary priorities, regulators can only achieve what their resources will allow. A lack of resources can lead to unnecessary delays in completing regulatory processes and poor decisions. In some circumstances, cost recovery measures may be an efficient source of funding for regulators (box 3.6).

## **Regulator conduct**

The efficiency of regulatory regimes is highly dependent on the conduct of regulators. For example, overly heavy-handed administration of regulation can introduce complex and costly regulatory processes, which may unduly impede investment or discourage the entry of new firms. Risk-based approaches to compliance and enforcement, supported by capable staff and data analytics, can reduce costs for businesses and regulators while promoting the achievement of regulatory objectives (box 3.5).

---

### Box 3.6 Cost recovery for government activity

Cost recovery through levies or fees-for-service can provide an important means of improving the efficiency with which government services are produced and consumed. The rationale for cost recovery is that assessments and approvals generate a private benefit for project proponents, and therefore the associated costs should not be borne by the wider community. Further, charges for goods and services consumed can send important messages to users or their customers about the costs of the resources involved.

As a general rule, cost recovery for government products and services is desirable where:

- it can be achieved efficiently and cost effectively
- the beneficiaries of the product or services are a narrow and identifiable group
- it would not unduly stifle competition and industry innovation
- charging is consistent with policy objectives.

However, it is generally inappropriate to cost recover government activities that provide a public good (for example, general policy development, defence and national security). In other cases, cost recovery may be contrary to the intended policy outcomes — for example, charging mine operators a fee for reporting safety incidents may discourage self-reporting.

Cost recovery should be subject to the same public administration principles that apply to all government activity. Governments have published guidelines to ensure that cost-recovery arrangements are administered transparently and efficiently, and consistent with policy objectives.

*Sources:* PC (2001, 2013a); Vic DTF (2013).

Leading-practice regulator conduct involves clear and predictable decision-making processes, which minimise unnecessary regulatory costs or delays in decision making. Roy Hill (sub. 7, p. 6) noted, ‘the opaque nature of regulatory processes makes it very difficult for business to accurately predict the time required to attain the necessary government approvals at all levels of government, which is a significant risk to business’. Regulators should also ensure that they apply regulations consistently over time and across similar projects, that compliance with rules is consistently monitored and enforced, and that processes are open and transparent. Transparency is particularly important as it facilitates impartiality and accountability, and promotes the legitimacy of the regulatory framework for industry and the broader community.

Where multiple agencies are responsible for administering regulation, unnecessary costs can be reduced through greater coordination of regulatory activity, for example through memorandums of understanding or bilateral compliance arrangements. Regulators can also lower costs for industry by publishing timely and comprehensive guidance.

---

## 4 Resource management

### Key points

- Governments own and manage resources on behalf of their communities. They have a role in finding potential resource deposits, facilitating their commercial development and deciding who can undertake those developments.
- Information spillovers and public good characteristics of exploration information can lead to underinvestment in greenfield exploration, making a case for government intervention. Australia's pre-competitive geoscience arrangements are operating well and do not require major reform.
  - Although some study participants supported additional government funding, the Commission is not in a position to say whether the benefits of additional spending would outweigh the costs.
  - There would be benefits in all jurisdictions adopting sunset confidentiality periods for public release of private exploration and production reports prior to the end of the tenure of a project.
- No significant issues have been raised with the approaches taken to the allocation of licences.
- To address the risk of repeated non-compliance with obligations, every jurisdiction has legislative provisions allowing them to examine the past compliance of licence holders before issuing new licences. A risk-based application of these provisions would focus regulators' limited capacity on those applications where non-compliance risk is high.
- Some State and Territory Governments have temporarily or permanently banned onshore gas exploration and development in response to concerns about environmental and other detrimental impacts. Governments should weigh the scientific evidence on the costs of a particular project on the environment, other land users and communities against the benefits on a project-by-project (or regional) basis.
- Provision of factual information about contentious resources projects by trusted independent agencies can help to inform the public debate and improve community confidence in the resources industry.
- Pressure to keep gas prices low for consumers and domestic industry has led several governments to implement domestic gas reservation policies. These may reduce domestic prices relative to global prices in the short term, but will reduce incentives to invest and reduce potential output over time. Community wellbeing is lower than would be the case if gas could be sold for the highest possible price (which may be on export markets).

Resources companies are required to navigate a range of regulatory processes to explore for and extract resources (chapter 3). But there are pre-conditions to the broader approval process for resources projects. This chapter examines the way that governments support industry's development of resources by providing pre-competitive geoscience information (section 4.1); how resources activities are licensed (section 4.2); and other direct measures

---

taken by governments (such as domestic gas reservations and bans and moratoria) to manage resources (section 4.3).

## **4.1 Government provision of pre-competitive geoscience information encourages exploration investment**

Decisions to invest in resources exploration are heavily influenced by the expectation of discovering substantial viable resources. A well-established mechanism for government to increase incentives to undertake exploration activity is by acquiring and publicly providing pre-competitive geoscience information. This is information generated from the collection and analysis of geophysical and geochemical data about the Earth's surface. The intent in collecting it is to inform understanding of the likely prospectivity of resource deposits rather than to locate specific mineral and resource deposits.

### **The case for government involvement in geoscience information provision**

There are two main arguments justifying government involvement in the provision of pre-competitive geoscience information.

First, mineral and energy resources are owned by the Australian people through their governments (the Crown). The Australian, State and Territory governments have a responsibility to ensure that those resources are used in a manner that best promotes the community's wellbeing. To that end, governments require information about the location and nature of these resources to make informed decisions (PC 2013b, p. 55). The production and distribution of pre-competitive information is, therefore, akin to the cost of developing and distributing a prospectus when marketing other investment opportunities:

Typically, the first application for pre-competitive information is in informing government decisions on which specific areas within a region or basin are viable to offer for private exploration. Pre-competitive information is then used by governments in promoting the exploration potential of Australian territory, either in general terms or for specific areas being offered for exploration permits. (DoFD 2011, p. xiii)

Second, when exploration is undertaken by an entity and information is made public, significant information benefits potentially spill over to other explorers interested in adjacent areas, comparable geological structures and environments or similar exploration concepts (ACIL Tasman 2012, pp. 62–63). Therefore, information generated in early-stage exploration possesses some attributes of a public good. While it might be possible to restrict access to this information, it might not be practical or appropriate. Setting up systems to prevent the sharing of this information can be costly and limiting access can reduce overall efficiency in its use (DoFD 2011, pp. 38, 44). An explorer's inability to capture the full benefits of their activity would likely lead to an inefficiently low level of early-stage exploration.

---

It follows that there is a role for government in producing and publicly providing pre-competitive information (PC 2013b, p. 246). Other mechanisms to address the public good nature of exploration information include subsidisation of exploration in least-explored areas and subsidisation of novel exploration methods, combined with the public collection and release of the information generated.

## **Government involvement in geoscience information in Australia**

Responsibility for collecting geoscience information is shared between the Australian and the State and Territory Governments. Each State and Territory has its own geological survey agency that collects and disseminates onshore pre-competitive geoscience information. Geoscience Australia (GA), an Australian Government agency, has primary responsibility for offshore pre-competitive information and mapping activities and shares responsibility with the States and the Northern Territory for onshore pre-competitive geoscience. It also conducts applied research and provides data, information and services to a wide range of government agencies, industry and international partners (PC 2013b, p. 247).

Each government also undertakes geoscience initiatives that aim to encourage private exploration activity within its jurisdiction. These initiatives include acquisition of pre-competitive information for targeted geographic regions, co-funding drilling and facilitating the transfer of exploration technology.

In addition to publicly acquired pre-competitive geoscience information, GA and State and Territory geological survey agencies collect exploration and production reports from resources companies. After a period of confidentiality, the reports are publicly released and the information is then integrated into public geoscience datasets. The length of the confidentiality periods varies by jurisdiction and sometimes by resource category.

## **There is no case for major change**

Submissions to this study generally commended the quality of Australian pre-competitive data and did not identify it as a material impediment to investment. Indeed, it is regarded as an enabler of investment. There is no reason on the basis of evidence presented to the study to revisit the Commission's overarching conclusion from 2013:

Australia's pre-competitive geoscience information is not viewed as a barrier to resource exploration. To the contrary, the information available in many jurisdictions, and for Australia more generally, is highly regarded by domestic and international explorers and is seen as an asset that encourages exploration investment in Australia ... Comprehensive reform of Australia's pre-competitive geoscience information arrangements is not required. (PC 2013b, p. 245)

Nor does the involvement of both the Commonwealth and State and Territory agencies in the collection and dissemination of pre-competitive data necessarily give rise to wasteful duplication of effort: a 2011 strategic review of GA observed that there was 'minimal overlap' between the geoscience agencies' work and capabilities (DoFD 2011, p. 68). The

---

nature of the working relationship between GA and State and Territory agencies appears to have remained unchanged since the 2011 review, which suggests that the review's conclusions remain relevant.

That said, two issues merit consideration.

### Is further funding required?

Some submissions supported more government funding for pre-competitive data and for expansion of exploration incentive programs, such as Exploring for the Future — an Australian Government initiative to produce 'an integrated resource prospectus for key targeted regions in northern Australia and parts of South Australia' (GA 2016). For example, the MCA (sub. 11, p. 24) saw the Exploring for the Future program as 'essential for developing the next wave of mining projects in Australia', while the South Australian Government (sub. 25, p. 8) considered that 'now is an appropriate time to establish an equivalent national geoscience initiative for southern Australia'.

These submissions are largely consistent with the National Resources Statement (DIIS 2019a, p. 32), which proposed expanding the scope and length of the program. In 2020, this initiative was expanded to two corridors along the east and west borders of the Northern Territory, South Australia and adjacent states, with \$125 million of further funding. Exploration activity is expected to commence later this year (GA 2020).

On the other hand, Rio Tinto (sub. 26, p. 12) submitted that 'greenfield exploration programs ... ordinarily should be funded through a company's own or investor risk capital', and that public funding should be confined to 'research programs to improve the predictive and detection capabilities for searching under cover'.

As a general principle, government intervention should be targeted at correcting market failures, taking into account the costs of doing so. In the context of resources exploration, there are two reasonable bases for government intervention:

- market failures of information spillovers and public good characteristics of information, particularly in broad-area exploration in least-explored areas
- research and development of new exploration technologies — to the extent that spillovers from technological innovation cannot be captured by the innovator and cannot be realised without support (PC 2007).

The Commission does not have data to quantify the spillovers arising from resources exploration in different geographic areas — or from innovation in exploration technologies. Therefore, it does not have the evidence to assess the adequacy of the current levels of government funding for pre-competitive data and other initiatives to encourage exploration activities.

---

## Coverage of geological databases could be extended

The Commission observed in 2013 that:

... there is scope to improve the coverage of Australia's geological database by extending the public collection of data to those exploration companies which do not report publicly on their mineral and energy reserves. This would help to address gaps in the resource reserve information base and improve the attractiveness of Australia as an exploration destination. (PC 2013b, p. 245)

Resources companies listed on the Australian Securities Exchange (ASX) are required to report publicly on exploration results, mineral resources and reserves. However, the lack of consistent reporting data for foreign entities and privately-owned Australian companies resulted in a gap in the resources information base across commodities and jurisdictions. The Commission (PC 2013b, pp. 263–265) recommended that private exploration companies be required to publicly disclose on the same basis as listed companies.

The Australian Government, in response to this recommendation stated that, while a broad range of accurate data was important to resources investment:

... to require reporting by all exploration companies on the same basis as ASX reporting would require non-ASX companies to comply with the requirements of the Joint Ore Reserves Committee Code, imposing costs which may not be warranted. Unlisted entities may be choosing to forego the advantages of ASX listing in order to retain information in-confidence for commercial reasons. (DIIS 2014)

In 2013 the Commission also noted (PC 2013b, p. 264) that States and the Northern Territory reporting requirements varied by commodity and jurisdiction and were primarily focused on production. Since 2013, jurisdictions have improved their reporting standards to enhance the quality and scope of the collected data and to support efforts to make it more accessible electronically. For example, the Queensland Department of Resources requires all exploration data to be lodged in digital form. The Department has recently released new reporting guidelines (Qld DNRME 2018c, 2019c) specifying the digital formats for data submission and providing guidance on best practice reporting. The collected data (other than that protected by confidentiality requirements) will be made available via the Geological Survey of Queensland's Open Data Portal, which 'will progressively replace the array of legacy systems, platforms and databases used to make data available to industry' (Qld DNRME 2020).

Further, the Commonwealth's Government Geoscience Information Committee (GGIC) maintains a 'minimum National Standard for the receipt of digital data related to mineral exploration activities' that 'addresses the future use of digital files and their ability to be uploaded into another database' (GGIC 2018, p. 1). The standards are regularly reviewed by the GGIC.

The National Resources Statement (DIIS 2019a, p. 37) also proposed a 'holistic long-term Resources Data Strategy for the sector', which 'will provide a new approach to how data can

---

be collected, integrated and used'. The strategy has potential to further improve the collection and management of, and access to, geoscience information.

Since 2013, several jurisdictions have introduced legislative changes that require public release of collected information after a limited confidentiality period, even when a tenement is still in force. For example, in late 2015 and early 2016 New South Wales made significant changes to its *Mining Act 1992* and regulations. These changes introduced a five year 'sunset clause': annual operations reports lodged on or after 1 June 2016 will not be kept confidential for longer than five years after the lodgement date and the reports lodged before 1 June 2016 will not be kept confidential after 1 June 2021. Before this legislative change, annual reports in New South Wales could remain confidential for much longer periods. For instance, if a company holding an exploration licence subsequently was granted an assessment or mining lease, the company's annual reports (including exploration reports) could remain confidential until those leases were no longer in force. This resulted in large volumes of data generated by resources companies being collected, but not being made publicly available (as mining leases are not always relinquished — chapter 7).

When information is kept confidential, its external benefits might not be fully realised and inefficient duplication of exploration effort may occur. On the other hand, if information generated by a private entity is made public before that entity has had an opportunity to benefit from its efforts, exploration would likely be discouraged. As NSW Minerals Council (sub. DR83, p. 5) observed, the promotion of data access and resource development 'needs to be balanced with the interests of titleholders, who in many cases have invested significant amounts of private capital undertaking exploration'. In this vein, some participants (such as Fortescue Metals Group, sub. DR92, p. 4) submitted that geological data should remain confidential while a lease is active. While the Commission is not in a position to recommend an optimal confidentiality period, nor to define exactly which data are and are not published, it seems reasonable that the length of confidentiality periods for public release of private exploration and production reports is less than a project's tenure.

Further, the Commission notes that the National Resources Statement (DIIS 2019a, p. 32) suggested the expansion of the Australian Bureau of Statistics' Survey of Mineral Exploration, which collects information about current greenfield exploration activity. The proposed expansion might address some gaps in publicly released information on exploration activities.



---

#### FINDING 4.1

There is no case for a major reform of the Australian pre-competitive geoscience arrangements given the quality of the information is highly regarded. However, the coverage of geoscience databases could be further improved, for instance, by all jurisdictions adopting sunset confidentiality periods for public release of private exploration and production reports prior to the end of the tenure of a project. The public benefits of open access to exploration information must be balanced against the private incentives to explore.

#### LEADING PRACTICE 4.1

To promote data access while balancing private incentives to explore, confidentiality periods before public release of private exploration and production reports generally should be shorter than the tenure of a project. New South Wales' new regulations are one example of this practice. Many other jurisdictions have similar arrangements in place.

## 4.2 Where can resources developments take place?

Governments grant permission to explore for resources in particular locations through their resources regulators. If the deposits are assessed by resources companies to be commercially viable, then those companies can apply to government for the exclusive right to extract those resources and keep the minerals or petroleum found. The right to explore for and extract resources in particular areas is referred to as a tenement, lease or licence.

In State and Territory Governments, these decisions are usually made by a Minister or by the mining or resources department; for offshore petroleum resources, the primary regulator is the National Offshore Petroleum Titles Administrator (NOPTA) (appendix B).

If the resources are located on private land, then the resources company must also negotiate an agreement to access that land (chapter 5).

Most tenements are allocated on a 'first-come, first-served' basis: the resources company that first applies to explore in an area is entitled to do so, provided its application meets basic administrative requirements. Exploration permits for offshore petroleum or gas are allocated by NOPTA through a work-bid or cash-bid process, rather than a first-come, first-served process. No single method is likely to suit all situations, but first-come, first-served approaches are preferred in areas of lower prospectivity and cash-bid processes are preferred in highly-prospective areas (PC 2013b, p. 59).

Each State and Territory has similar information requirements and decision-making processes for the issuing of licences for exploration and extraction. The application must

---

indicate the area where activity will take place, what the resource is, any known information about the prospectivity of the deposit, and the proposed program of work. Many older projects in Western Australia, and Roxby Downs in South Australia, are subject to a separate set of arrangements for certain large projects, which exclude them from ordinary licensing requirements (box 4.1). Exemptions like this have been used occasionally to attract investment, but they have questionable merit: they run the risk of the benefits of investment being oversold and the costs understated (Banks 2002).

#### Box 4.1      **Special licensing arrangements apply to some large projects**

##### **Western Australia's State Agreements**

For many major mining operations in Western Australia, State Agreements replace the ordinary licensing arrangements. After obtaining an exploration licence and identifying a significant resource deposit, the Western Australian Government and the proponent negotiate an agreement. Once the agreement is passed by the State Parliament, it overrides any inconsistent provisions of Western Australian law. For example, special provisions are often set in relation to project royalties. However, State Agreements do not override the *Environmental Protection Act 1986 (WA)*. Today, there are sixty-five State Agreements.

Many projects that are ratified by State Agreement are large enough to require significant project-specific infrastructure investments. Security of tenure for project proponents, and local content requirements, are cited by the Western Australian Government as advantages of this approach.

##### **South Australia's Roxby Downs indenture**

The Olympic Dam mine, approximately 560 kilometres north of Adelaide, produces copper, uranium, silver and gold. The mine's remote location required the establishment of a local township, Roxby Downs. Today, the mine and town are operated by BHP.

The *Roxby Downs (Indenture Ratification) Act 1982 (SA)* overrides any inconsistent provisions of other laws, such as licensing, environment, heritage, and freedom of information, in the area of the town and mine. Instead, BHP has the power to make decisions about this legislation independently (in consultation with the South Australian Government). This arrangement has been subject to some controversy since its introduction for the various privileges offered to the mine:

Olympic Dam ought to be subject to legislative and regulatory controls and standards at least as rigorous as those that apply to smaller projects. To apply considerably weaker standards is indefensible. (Green and Mudd 2011)

*Sources:* Hunt, Kavenagh and Hunt (2015, pp. 12–23); Western Australian Department of Jobs, Tourism, Science and Innovation (nd, nd); BHP (2020d).

However, these types of 'regulatory holiday' arrangement are not the norm for new projects. No evidence has been presented to this study indicating that differences between jurisdictions' approaches to licensing have created impediments to investment, nor that any particular regime for the allocation of tenements is 'leading practice'. As Fortescue Metals Group (sub. DR92, p. 5) put it, 'every regime has its positive and negative implications'.

---

#### FINDING 4.2

No evidence has been presented to this study indicating that differences between jurisdictions' approaches to licensing have created impediments to investment, or that any particular regime for the allocation of tenements is 'leading practice' in all circumstances. However, exemptions from normal licensing requirements aimed at attracting investment have questionable merit.

### Who should be granted a licence to explore and extract resources?

Any person can apply for a resources tenement. Because of the capital-intensive and risky nature of the industry, most resources development is pursued through corporate entities (rather than by individuals in their own capacity). When a tenement is granted, it comes with various compliance obligations. However, not all companies effectively discharge their obligations as tenement holders — in particular, rehabilitating the sites of resource development, or paying fines for environmental non-compliance (box 4.2).

#### Box 4.2 **Failure to comply with regulatory obligations might indicate a lack of suitability to hold a resources tenement again**

There have been numerous public instances of non-compliance with environmental regulation. The Senate Environment and Communications References Committee's inquiry into mine rehabilitation observed that many operators avoided environmental obligations by entering liquidation, then relying on insolvency laws to disclaim tenements with rehabilitation obligations attached to them, or avoid environmental penalties (SECRC 2019, pp. 50–54, 96).

One recent instance of this was the case of Linc Energy's underground coal gasification project in Queensland's Darling Downs, which contaminated nearby air, soil and water over a period of six years. Although the company received a \$4.5 million fine, Linc Energy was already in liquidation; as a result, the fine was at the 'back of the queue' of \$320 million of other debt owed by the company and thus was likely never paid (Ludlow 2018; Sibson 2018).

The Resources Law Network (sub. 22, pp. 17–18) indicated that this incident was not isolated, outlining a number of incidents where it considered that more active regulation, and awareness of past misconduct, could have averted environmental damage and later compliance enforcement.

Poor behaviour by a few can contaminate community sentiment towards resources activity more generally, with an adverse effect on 'social licence to operate' (chapter 10):

... the industry's reputation is only as good as its weakest operators. Those more incapable or unscrupulous and unable to run a professional operation within the industry, damage the reputation of all, and destroy industry credibility within the communities in which they currently, or will hope to [operate] in the event of a mineral discovery. (Lacy quoted in SECRC 2019, p. 34)

---

To address the risk of repeated non-compliance, governments have introduced assessments of potential licence holders. These restrictions can generally be put into one of three categories:

- a ‘fit and proper person test’ (used in New South Wales, Victoria and the Northern Territory), where a Minister can refuse an application on grounds that the applicant:
  - has historical non-compliance with mining or environmental legislation
  - has other character issues (such as past criminal conduct)
  - lacks technical competency
  - has previously been insolvent
- a general ‘public interest’ test (used in Queensland, Western Australia and South Australia), which, although not specifically defined in legislation, can encompass nearly any matter outside of the application itself, including historic non-compliance and character grounds (Hayward 1995, pp. 115–116; Wheeler 2013, pp. 39–45)
- ‘compliance tests’, where applications can be refused for non-compliance with resource-specific legislation (such as licence conditions, health, safety and environmental legislation). Some jurisdictions only examine breaches within their territory (Tasmania) while others examine breaches in any jurisdiction (NOPTA).

Transparency International Australia (sub. 12, p. 2) questioned whether regulatory agencies make any meaningful examination of the track record of resources companies. Examining the Queensland and Western Australian approvals processes, it raised concerns that ‘government departments involved in the mining approvals process do not undertake adequate due diligence into the character and integrity of applicants’, or their business track records in Australia or overseas (TIA 2017, p. 50)

In particular, Transparency International Australia observed that:

- financial due diligence did not go far enough to determine the ‘real owners’ of resources companies (TIA 2017, p. 50)
- governments relied on self-reporting by proponents of conduct issues (TIA 2017, p. 28).

If proper due diligence is not undertaken, there is a risk that operators who consistently fail to meet environmental or community standards (as reflected in regulation and policy) may still be granted tenements. These operators may continue to fail to meet basic compliance requirements in their work.

It is also important that due diligence covers not just the licence applicant, but companies related to them. An individual may have a consistent history of non-compliance, but that may only become clear when their ownership of other corporate entities are uncovered. Incoming measures, such as unique director identification numbers that allow the Australian Securities and Investments Commission and other regulators to track the same individual working for multiple companies, should help to reduce the cost of this exercise (Zuchetti 2019).

---

Having legislative requirements to undertake due diligence, however, of itself is not sufficient. The ACF (sub. DR94, p. 3) suggested that ‘environmental history considerations are under-used and under-applied [by] many Australian State jurisdictions’ — a sentiment echoed by CFMEU Mining and Energy (sub. DR77, p. 2).

Due diligence comes with administrative costs for both regulators and resources companies. It is important that the material sought by regulators is materially relevant to the assessment (a concern raised by the NSWMC, sub. DR83, p. 6). It is not known how common issues of repeated non-compliance are; it is possible that they are rare enough that the costs of the due diligence do not exceed the benefits of avoided compliance issues from stricter licensing requirements. It is also possible that other measures such as rehabilitation bonds (chapter 7) help to mitigate the risk of resources companies disavowing their own projects, and may do so more effectively.

However, a risk-based approach would help to focus regulators’ limited capacity onto those applications where non-compliance is most likely. Ensuring that potential licence holders were assessed for character and other risks was supported by BCSDAustralia (sub. DR89, p. 4).

The Commission considers that a range of historical behaviour is relevant to, and ought to be considered in, the decision to issue a licence. Decisions to grant or renew a tenement should examine whether the applicant has previously complied with licence conditions, as well as health, safety and environment legislation in other domestic and international jurisdictions, and broader grounds such as past criminal conduct, technical competency and past insolvency.

#### LEADING PRACTICE 4.2

Thorough assessments of potential licence holders address the risk of repeated non-compliance. Leading practice involves regulators taking a risk-based approach to due diligence when granting, renewing or transferring tenements and considering:

- whether the applicant has previously failed to comply with licence conditions or health, safety and environment legislation (whether in the same jurisdiction, or in other domestic and international jurisdictions)
- past criminal conduct, technical competency and past insolvency.

While all jurisdictions undertake some due diligence, none fully follows leading practice.

### 4.3 Resource management policies

In the process of extracting resources, multiple competing interests come into play. Resources companies, landholders and communities near mines have readily apparent interests. The Australian community more broadly also has varying interests — in the economic activity, government revenue and dividend streams generated by projects, and in

---

maintaining the natural environment, Indigenous heritage, supplies of resources, and local amenity. This section examines two particular issues that engage competing interests: gas reservation policies and bans and moratoria on certain types of mining activity.

## **Domestic gas reservation policies can discourage investment in the gas industry**

Since Australia became linked to the wider Asia-Pacific gas market, it has become a significant exporter of liquefied natural gas (LNG) — though Australian LNG plays a reasonably small role in global gas production (chapter 2). Gas producers face the choice of selling their product domestically or to international markets (which requires gas to be liquefied). In the long term and in the absence of interventions, the local price for gas will reflect international LNG prices (adjusted for the costs incurred in processing gas into LNG, and the different transport costs involved in exporting versus domestic supply).

Some Australian jurisdictions have introduced policies aimed at reserving some level of gas supply for domestic use.

- Western Australia has a domestic gas reservation policy, requiring local producers of LNG to reserve up to 15 per cent of their product for the domestic market (WA DJTSD). In late 2020, an additional requirement was introduced that gas from new onshore projects cannot be exported to other Australian jurisdictions (although, without a pipeline or established facilities for LNG export and import between the west and east coast, no such exports are currently taking place) (McGowan 2020). Under some Queensland petroleum licences, any gas that is extracted can only be supplied to the Australian market (*Petroleum and Gas (Production and Safety) Act 2004* (Qld), Part 2A). Many new licences (though not the majority) are subject to this condition (Qld DNRME 2018d).
- The Australian Government introduced the Australian Domestic Gas Security Mechanism in July 2017. The mechanism gives the Minister for Resources and Northern Australia the power to control exports if he or she believes there will be a shortfall in domestic gas supply. This power has not yet been used (DISER 2020a).
- In a related measure, the Australian Government established an Australian East Coast Domestic Gas Supply Commitment with three large east coast LNG exporters that any gas not subject to an export contract will be sold on the domestic market. The agreement expires at the end of 2020; the Government has stated its intention to renew this agreement (Morrison et al. 2018; Morrison, Taylor and Pitt 2020).
- Separately, in December 2019, the Australian Government announced that it intended to implement a national gas reservation scheme aimed at replicating the Western Australian scheme to ensure that gas is ‘available and affordable for industry’ (Canavan 2019). The Government is continuing to consider this policy as a post-COVID-19 recovery measure (Morrison, Taylor and Pitt 2020) and released an issues paper on the policy in October 2020 (DISER 2020c).

---

Gas reservations, assuming they ‘bind’ and divert to the domestic market supplies that would otherwise be exported, effectively act as a tax on gas production which is paid as a subsidy to domestic gas use (DAE 2013, pp. 10–12). On face value, lower gas prices would appear to be beneficial for domestic gas consumers. Some resources companies with significant energy demand, such as Fortescue Metals Group (sub. DR92, p. 5) supported domestic gas reservations. However, because lower average prices result in a lower expected return on investment, gas reservation policies will likely reduce incentives to invest in gas exploration and development (PC 2015b, p. 128) and potentially limit gas supply (Andrew Garnett, sub. 24, p. 3). As INPEX (sub. 34, p. 13) put it, domestic gas reservations ‘create a risk that companies will not be free to develop and sell the developed resources to the market that best suits their individual project’.

Furthermore, the Australian community overall benefits from the higher returns offered for gas on international markets. Lower revenues due to reservation policies lower the overall economic benefit generated by gas extraction (PC 2015b, pp. 52–54, 127). Neill et al. (2019, pp. 108–109) estimated that Western Australian gas reservations impose a net loss of approximately \$600 million on Australia’s annual gross domestic product, albeit with a ‘negligible’ effect on local household income. In the longer-term, domestic gas reservation would encourage investments in gas-intensive (and related) industries on the basis of gas prices that are below levels that would have otherwise prevailed in the market. This pulls resources — land, labour and capital — into activities using the cheaper gas, and out of more economically-valuable activities that would otherwise have taken place (ERA WA 2014, pp. 377, 382; PC 2019a, p. 5).

The Commission has previously recommended against measures to reserve gas for domestic use only (PC 2009, pp. 98–100, 2015b, pp. 128–129), as has the Economic Regulation Authority of Western Australia (ERA WA 2014, p. 383). The longer-term impacts of such policies have not changed: they are likely to impose net costs on the community.

#### FINDING 4.3

Domestic gas reservation schemes that remove the link between domestic and export prices reduce returns to investors and discourage investment in gas exploration and extraction, leading to higher prices in the longer run and imposing net costs on the community.

## **Bans and moratoria can prohibit activity of potential value to the community**

Resources projects are usually subject to environmental conditions or offsets requirements that aim to ensure that the net environmental impact is limited to levels broadly acceptable to the community (chapter 6). However, in response to strong community views that certain

---

types of mining activity carry an unacceptably high level of risk, some governments have legislated that particular types of activity should not occur anywhere in their jurisdictions.

Most notably, different types of onshore gas development (box 4.3) — specifically, hydraulic fracturing, a technique used in unconventional gas developments, and coal seam gas — have been subject to bans and moratoria (that is, temporary restrictions on development of projects) across the country.

- The New South Wales Government stopped granting new coal seam gas exploration licences in 2014. Later that year, the Government extinguished all existing exploration licence applications and bought back gas exploration licences as it ‘paused, reset and recommenced’ the gas industry in the state (NSW Government 2014). The freeze on exploration has since been lifted and the first approval for a coal seam gas operation in New South Wales following the freeze was granted in September 2020 for the Narrabri Gas Project (NSW IPC 2020).
- The Victorian Government has a moratorium on conventional onshore gas exploration until 30 June 2021; legislation has recently passed to re-establish gas exploration in Victoria from July 2021. The State still has a permanent ban on unconventional gas exploration and a Bill remains before the Victorian parliament proposing to entrench this ban in the Victorian Constitution (Symes 2018; Vic DJPR 2019e, 2020).
- The Western Australian Government partially lifted its hydraulic fracturing moratorium in September 2018 (in place since September 2017) following an independent inquiry (Hatton 2018; Johnston 2019). However, 98 per cent of the State’s area remains subject to bans.
- The Northern Territory Government undertook an independent inquiry into hydraulic fracturing in 2014, imposed a moratorium on the practice in September 2016, then lifted the moratorium in 2018 following a further inquiry (Gunner 2018; Pepper 2018, p. 11).
- South Australia has implemented a legislated moratorium on unconventional gas exploration on the Limestone Coast in the State’s south-east (SA DEM 2018; SACOME, sub. 37, p. 10).

Each State and Territory with the exception of Queensland has conducted an inquiry into the safe operation of the onshore gas industry in their jurisdiction (GasFields Commission Queensland 2019).



---

### Box 4.3      **Types of onshore gas development**

Onshore gas developments can be divided into conventional and unconventional projects.

**Conventional gas** is stored in porous and permeable sedimentary rocks, such as sandstone or limestone. The gas itself is trapped in the ground by impermeable rocks above the gas deposit; a well is drilled into the permeable rock and gas flows into the well.

**Unconventional gas**, by contrast, is found in less porous and less permeable rocks. It can be divided into three types:

- **tight gas**: where, rather than being trapped by the surrounding rocks, as in the case of conventional gas, the gas is trapped inside impermeable sandstone or limestone
- **shale gas**: where gas is trapped in layers of sedimentary shale rocks (which are also less permeable than the sandstone or limestone deposits where conventional gas is found)
- **coal seam gas**: where methane gas, which naturally occurs in coal seams, is trapped by water pressure inside the gaps and cracks in the coal seams.

For all tight gas and shale gas developments, and some coal seam gas developments, **hydraulic fracturing** (fracking) is used to extract the gas. In this process, pressurised fluid is used to fracture the rock where the gas is trapped, releasing it.

A separate process for extracting gas from coal is **underground coal gasification**, which involves injecting gases into coal seams at a high temperature to encourage the coal to release its gases.

*Sources: CSIRO (2011, 2019).*

Since their commencement 20 years ago, Australia's unconventional gas developments now account for a third of national gas production, and more than two-thirds of production in east coast gas markets (DoEE 2019b, p. 24).

Development of multiple projects in a relatively concentrated area can exacerbate community concerns, particularly those relating to cumulative impacts. As the Western Australian inquiry into hydraulic fracturing observed:

The history to date of onshore oil and gas development in Western Australia has been such that there is no opportunity for the community (or the regulators) to see the projected scale of an oil and gas field development across their region, or its impacts. Rather, development tends to proceed almost well by well. Thus, the community is left to imagine what it might eventually look like, how close to them it will be, and the cumulative impact across the landscape and on their community. (Hatton 2018, p. 461)

Onshore gas production, both conventional and unconventional, undoubtedly creates risks of detrimental impacts to the local environment, the local community and its amenity, and agricultural activities. In both the United Kingdom and in Oklahoma in the United States, wastewater injection near fault lines has been linked to an increased risk of seismic activity (Gernon 2018; United Kingdom Department for Business, Energy & Industrial Strategy et al. 2019). In some instances, these impacts can be significant: for example, as noted above, Linc Energy's underground coal gasification project in the Darling Downs (box 4.2).

---

Some risks are immediate, some may arise over the course of a project, and some may not arise until extraction is completed. And some of the impacts are uncertain — they may not arise in every project, or the scientific evidence to assess their likelihood may still be developing. This uncertainty has underpinned a precautionary approach by some governments.

However, strict application of the precautionary principle brings its own risks: in particular, that no effort is made to assess the potential upsides of the banned activity (Peterson 2006, p. 16), including the benefits of increased gas supplies (PC 2019b, p. 6) and additional royalty and tax revenues. There is emerging evidence that onshore gas development has contributed to improved local employment outcomes and helped to prevent the outward migration of young workers from regional areas (Fleming and Measham 2015, pp. 91–92; Measham and Fleming 2014, p. 378).

Some participants argued that the downside risks of onshore gas, in particular, are so significant that bans and moratoria are the only appropriate regulatory tool. For example, the EDO (sub. DR62, pp. 9, 26) suggested that climate change and ‘the risk that rehabilitation may fail’ are long-term impacts of unconventional gas that justified banning new projects. However, each of these risks can be separately assessed and regulated. Although the Commission has pointed out inadequacies in the regulation of each of these policy problems (chapters 7 and 9), the best solution is unlikely to be banning the activity entirely: it is to improve the state of Australia’s regulation and enforcement on these issues.

Although the risks of unconventional gas development can cause widespread community concern, that should not preclude governments from carefully weighing the risks of each potential project, and from exploring actions to mitigate those risks. Governments have a well-established regime for assessing the risks of mining activity — particularly through the environmental approvals process and environmental conditions placed on projects (chapters 6 and 7). APPEA (sub. 44, p. 26) claimed that the moratoria appear not to be driven by a technical approach to regulation but rather are driven by politics (a sentiment endorsed by AMEC, sub. DR90, p. 5 and CFMEU Mining and Energy, sub. DR77, p. 3). A risk-based approach would allow projects to proceed where it could be demonstrated that they could operate without generating undue environmental or other harm.

For unconventional gas development, State and Territory Governments have undertaken many inquiries into the specific geographic, geological and industry circumstances of their jurisdictions (APPEA, sub. 44, p. 26). The weight of evidence presented to these inquiries, and the experience of jurisdictions where unconventional gas development takes place, suggests that its risks can be managed effectively. The evidence base from operations in Queensland and overseas is building over time and likewise suggests that the risks of unconventional gas (and other controversial resources projects, such as offshore petroleum) can be managed effectively with proper regulation.

With effective regulation, resources companies face the full costs of the adverse risks and impacts of resource extraction and have greater incentive to manage those risks. And with regards to social impacts, resources companies often undertake voluntary activity to improve the amenity of the areas in which they operate and to secure ‘social licence’ (chapter 10).

---

In short, bans and moratoria are not the only way to regulate resources activity where there is uncertainty. The scientific and other evidence of impacts should be weighed against the benefits of resources development on a project-by-project or regional basis (particularly where there are likely cumulative impacts). There may be specific geographic or geological characteristics of a region that make it unsuitable for particular project types. In this circumstance, bans or moratoria may improve certainty for investment by specifically limiting exploration in defined areas (as suggested by the ACF, sub. DR94, p. 4). But blanket bans fail to consider the circumstances where gas exploration or other projects can take place safely and with appropriate precautions taken against environmental harm. The Commission has previously recommended the removal of these bans and moratoria (PC 2017a, p. 161), noting that they are ‘contributing to gas price pressures ... and there are better ways to address community concern’ (namely, better community engagement) (PC 2017a, p. 122).

#### FINDING 4.4

Bans and moratoria are a response to uncertainty about impacts of unconventional gas operations. However, proper application of risk-based regulation would allow projects to proceed where it could be demonstrated that they would not generate undue environmental or other harm. The weight of evidence available, and the experience of jurisdictions where unconventional gas development takes place, suggests that risks can be managed effectively.

#### RECOMMENDATION 4.1

Rather than maintaining bans and moratoria on certain types of resources activity such as onshore gas, governments should weigh the scientific evidence on the costs of a particular project on the environment, other land users and communities against the benefits on a project-by-project (or regional) basis.

### **Provision of information by trusted sources can help allay community concerns**

Calls for greater restrictions on resources development arise in part from concerns about the impacts of projects, and a lack of confidence in governments to regulate projects effectively. These concerns are far-reaching, and include:

- potential impacts on the environment, particularly groundwater
- consequential health impacts from chemical use and changes to air quality
- impacts on property values and land access (chapters 10 and 5)
- social issues associated with a rapid increase in population, or with an influx of fly-in, fly-out workers (chapter 10)

- 
- disturbance of Indigenous land
  - questions about the adequacy of monitoring and compliance activity by regulators (chapter 7)
  - flow-on impacts of these risks to other industries such as tourism (Hatton 2018, pp. 71–75; Pepper 2018, pp. 22–27; SLR Consulting 2014, p. 39).

Public debate about the environmental and social impacts of projects is important for ensuring a strong regulatory environment, but it is also important that debate makes use of factual and comprehensive information. Crucially, information must be perceived as independent of those who stand to gain from resources projects. Establishing agencies as ‘honest brokers’ or ‘trusted advisors’ can help to progress public policy debates when there is no values consensus and high levels of uncertainty in the community (Cham and Stone 2013, p. 262). Transparency International Australia (sub. DR85, p. 4) likewise emphasised the importance of improved information to community participation, engagement and oversight of resources projects.

The Commission has received positive feedback about the regulatory architecture for gas development in Queensland (Andrew Garnett, sub. 24, p. 5; Local Government Association of Queensland, sub 50, p. 11). In particular, the GasFields Commission, the Office of Groundwater Impact Assessment and the Gas Industry Social and Environmental Research Alliance (box 4.4) have made a positive contribution by providing scientific information and research that is conducted independently from the regulators and proponents of resources projects. A recent report of the Queensland Audit Office (2020, p. 7) stated that ‘the [coal seam gas] industry [in Queensland] has matured and is now more viable because ... the regulators, GasFields Commission ... and companies have invested in their relationships with landholders and communities’.

#### Box 4.4 ‘Honest brokers’ in the Queensland regulatory environment

##### The GasFields Commission

The GasFields Commission was established by the Queensland Government in 2013 as an independent statutory body in response to issues between landholders and the (then newly-emerging) coal seam gas industry. Its functions under the *Gasfields Commission Act 2013* include:

- facilitating better relationships between landholders, regional communities and the onshore gas industry
- reviewing regulatory frameworks and advising governments about regulation, implementation and coexistence of gas and agricultural activity
- bringing landholders, regional communities and industry together to resolve disputes
- publishing information about the industry.

(continued next page)

---

**Box 4.4** (continued)

An independent review in 2016 concluded that the GasFields Commission ‘has contributed substantially to the improved coexistence of landholders, regional communities and the onshore gas industry in Queensland particularly by influencing the methods employed by [coal seam gas] companies’ (Scott 2016, p. 5). However, a 2020 audit noted that the GasFields Commission was ‘not fulfilling all of its legislative functions’ (QAO 2020, p. 1), particularly that it was not overseeing the regulatory framework.

**Gas Industry Social and Environmental Research Alliance**

The Gas Industry Social and Environmental Research Alliance (GISERA) is an initiative operated by the CSIRO in collaboration with Commonwealth, State and Territory Governments and the Australian gas industry. It undertakes a wide range of research on the environmental, social and economic impacts of the onshore gas industry. Although its work covers all parts of the country where onshore gas has taken place or been considered, it has done a large share of its work in Queensland where there is a mature unconventional gas industry.

Some critics have suggested that, because GISERA is partly-funded by industry, its research committees are selective about sampling and reporting in a way that makes their findings flawed. However, GISERA’s regional committees have strong community and government representation to direct its research. Its research makes appropriate caveats about its representativeness, GISERA maintains the peer review requirements of other CSIRO research, and industry participants do not have the right to alter or edit research outcomes.

*Sources:* Business Queensland (2019), GISERA (2019), Ogge (2020).

The Queensland approach has focused on easing tensions between agriculture and coal seam gas development. However, its core elements — provision of factual material from bodies outside of the regulator and encouraging early and effective communication between stakeholders — may have broader applicability across the resources sector, particularly for types of development that are new to a particular area. For example, in South Australia, the increasing proximity of resources to more intensive agricultural activity has heightened community concerns about resources activity (Fraser Ellis MP, sub. DR57, p. 1; Hough 2019), with a flashpoint in one particular development in the Adelaide Hills (Campbell 2016; MacLennan 2019).

**LEADING PRACTICE 4.3**

Where resources project proposals are contentious and generate intense public concern, establishing institutions, independent of resources companies and regulators, to provide accessible information to landholders and the broader community can help inform debate. The GasFields Commission, the Office of Groundwater Impact Assessment in Queensland and the Commonwealth’s Gas Industry Social and Environmental Research Alliance provide examples in relation to coal seam gas developments.



---

## 5 Land access

### Key points

- A resources company must have permission to access the land where resources are located before other approvals can be granted.
- Resources companies and private landholders are required to negotiate conditions of land access across the different types of land tenure. However, landholders cannot generally refuse consent to a development.
- Resources are owned by the Crown on behalf of the community, and consequently, there is a public interest in resources development. A right of veto over resources activity on private land would be inconsistent with Crown ownership of resources and significantly affect distribution of the benefits of resources.
- Leading-practice policies seek to balance the trade-offs between resources development and other land uses to maximise economic benefits for the community. These policies should thoroughly consider the costs and benefits of allowing resources development, and have approval processes proportionate to the risks of resources development on the relevant land.
- Early engagement between resources companies and landholders should be encouraged (institutions such as the Queensland GasFields Commission facilitate this). Formal negotiation should only be required at the stage when exploration is likely to have an impact on the land.
- Many landholders likely enter land access negotiations with resources companies with little prior experience or relevant knowledge. A standard template for land access agreements can help to set expectations for landholders and resources companies, and improve confidence in the regulatory system.
- Low-cost dispute resolution methods that take an investigative approach to resolving problems appear effective in reducing tensions between landholders and resources companies.
- Native title recognises the traditional rights of Aboriginal and Torres Strait Islander people over their land. More than 60 per cent of resources projects take place on areas with a native title claim or determination. Resources companies must either negotiate with native title holders or claimants, or show that resources activity will not affect native title holders' or claimants' interests.
- The *Native Title Act 1993* (Cth) sets out an expedited procedure that can enable low-impact exploration activity to take place without negotiation with traditional owners, potentially reducing impediments to investment. However, a case-by-case approach is needed to considering whether the expedited procedure applies.
- State and Territory Governments have some processes that depart from the Native Title Act, aimed at improving agreement making between Aboriginal and Torres Strait Islander groups and resources companies. These processes have developed from the varied experiences and contexts of the jurisdictions but no single approach appears to be leading practice.

---

Although resources are owned, controlled and allocated by government, different property rights apply to the land where those resources are found. Each State and Territory has developed processes through which resources companies and landholders can negotiate conditions of land access across the different types of land tenure (box 5.1). Agreements provide for access to the site of the deposit, as well as access to other parts of the property for incidental uses (for example, to transport equipment, store waste and provide electricity and water to a mine). However, some aspects of these processes remain contentious. This chapter outlines the processes for accessing land for resources development on private land, Crown land and Indigenous land.

### Box 5.1 Land tenure — property rights in Australia

Different forms of land tenure — or ‘titles’ — are granted by the Crown (represented by Commonwealth, State and Territory Governments) to individuals and organisations that own them (**landholders**). Different types of title come with different rights in relation to the land. The key types of title referred to in this chapter are:

- **freehold land**: grants owners practically unrestricted use of their land, subject to State and Territory laws such as planning and building regulations
- **Crown land**: all land that has not been granted as freehold, including:
  - land granted to others for particular purposes under **Crown leases**. In particular, **pastoral leases** are a common form of leasehold title, which allow the lessee to graze livestock
  - Crown land can be **reserved for particular purposes** (for example, as a park or reserve)
  - Crown land may also be subject to **native title**, a form of recognition for the traditional connection to land held by Aboriginal and Torres Strait Islander people prior to colonisation.

Both pastoral leases and freehold land are **private land**, as they are managed by a private owner (even though, in the case of pastoral leases, the Crown legally owns unrestricted title to the land).

## 5.1 The process for obtaining access to private land

The legal process for obtaining access to private land (figure 5.1) is broadly similar across the States and Territories.

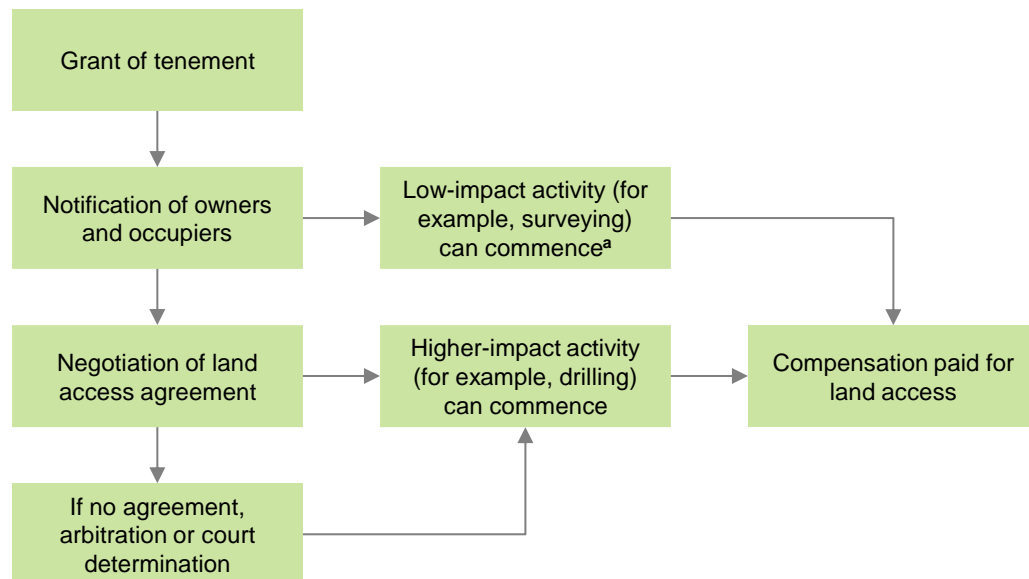
Land access agreements set out compensation to be paid by the resources company to the landholder. The exact items that are expected to be compensated for differ between States and Territories but broadly include:

- deprivation of possession of land
- diminution of land value
- damage to the surface of, or any buildings and improvements on, land
- severance (separation of parts of a landholders’ land)



- the costs of negotiating an agreement.<sup>4</sup>

Figure 5.1 **The process of obtaining land access for resources projects**



<sup>a</sup> Except in New South Wales and Victoria, where a negotiated agreement is required before undertaking any exploration activity.

## Land access can be a contentious issue

Landholders report a number of concerns with resources projects on their land, including:

- risks of contamination and long-term degradation of land and environment (SECLC 2015, p. 14)
- difficulty enforcing the conditions of access with potential effects on their ordinary business — for example, ensuring that gates are closed to prevent the intermingling of stock breeding lines (SECLC 2015, p. 13; SLR Consulting 2014, p. 106)
- a sense of intrusion on their property
- difficulty communicating their concerns to resources companies using their land (Huth et al. 2018, p. 107).

Although concerns primarily relate to the interaction between agricultural and resources land use, similar concerns can emerge even when projects are taking place near residential land (as is often the case with quarries — box 5.2).

<sup>4</sup> Even where it is not legislatively required, professional costs are usually provided as a matter of practice (for example, in the Northern Territory) (Pepper 2018, p. 391).

---

## Box 5.2      **Quarrying poses unique regulatory challenges**

Quarries are open-pit mines that produce aggregate construction materials such as sand, stone and gravel (box 2.2). These materials are a key input to the building of infrastructure, roads and new houses.

There are many suppliers of construction materials, and for companies to be able to minimise transport costs and supply at competitive prices, quarries ‘need ... to be close to markets and efficient transport links’ (CCAA, sub. 36, p. 1). However, this simultaneously creates competing pressures from nearby residents, particularly as the outer boundary of residential zoning in large cities increases.

Cement, Concrete and Aggregates Australia (CCAA) identified some of the unique issues affecting the quarrying sector:

- rezoning of quarries or adjacent land for residential development, without adequate buffer protections or proper access for transport
- ‘NIMBYism’ — a focus on those saying ‘not in my backyard’ to developments rather than industry or broader community development, particularly at a local government level
- consequent ‘sterilisation’ of aggregate construction material resources.

CCAA (sub. 36, p. 2) argued that the industry, in order to succeed, needed ‘long-term protection ... from adjacent, incompatible development’.

In particular, these risks have been raised in the context of the rapid growth of onshore gas development (SLR Consulting 2014, pp. 39–51; section 4.3), and with small exploration operations facing compliance issues (for example, NSW RR 2019).

Consequently, many landholders have called for a right of veto over all resources development on private land.

A right to say yes or no [to resources development], that is reasonably exercised, will provide farmers with greater protection in these negotiations. (National Farmers Federation, sub. 14, p. 5)

Landholders should have the right of veto, so new exploration or a mine cannot proceed without the approval of the landowner. (Grain Producers SA 2017)

Allowing farmers say over the ownership of their own land would not materially affect the ownership of the minerals; it would merely reinforce the landowner’s rights. (Fraser Ellis MP, sub. DR57, p. 2)

While a veto right might not entail a formal transfer of property rights, it would have a similar effect in practice. Owners of property with resources deposits, rather than government and the broader community, would become principal beneficiaries of payments for the resources themselves, rather than only receiving payments for access; prices of properties with prospective resource deposits would also rise. While governments could continue to levy royalties should projects be permitted by landholders to proceed, these would effectively move from being a payment for the resource, to a tax on resource production or profits (with a likely consequence of reduced investment in resources development).

---

While the approach taken in Australia does not please all stakeholders, it seeks to balance the trade-offs between mining and other land uses to provide economic benefits for the community as a whole.

Indeed, resources activity does not always prevail over agricultural or other uses (in spite of its legislated precedence over other forms of title). Compensation payments should reflect the value of the foregone land use, meaning that the costs of accessing high-value agricultural land will tend to make mining less attractive in such areas (unless the mining activity is of even higher value).

In some circumstances, there may be a case for government to delineate areas where mining activity can occur. The WWF (sub. DR93, p. 2) endorsed such an approach, noting that existing processes under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) could be used ‘to protect and manage natural areas at a bioregional scale and support sustainable development’ (strategic assessments in the context of environmental approvals are discussed in more detail in chapter 6).

However, it is important that such approaches are used only where the benefits demonstrably outweigh the costs. For example, where mining activity would affect multiple landholders in an area (such as urbanised areas) governments may rule out resources activity because of the high costs of numerous case-by-case negotiations and where the impacts of resources activity are likely to be widespread, significant and cumulative.

The Council of Australian Governments’ Multiple Land Use Framework (MLUF) (COAG SCER 2013) sets out several goals which provide a useful toolkit for governments determining land use issues:

- maximising the social, economic, environmental and heritage values of land use for current and future generations
- ensuring land use decision making does not exclude other potential uses without considering the benefits and consequences for other land users and the wider Australian community
- ensuring that directly affected landholders are informed and consulted on multiple land use options and potential for coexistence
- open and constructive debate and analysis of different multiple land use options, with stakeholders being willing to listen and appreciate the views of all land users
- easy access to accurate information regarding land capability, and examples of multiple and sequential land uses.

The MLUF’s direct impact on policy appears to be limited (with only South Australia explicitly developing its own MLUF). However, similar ideas have been incorporated into the development of strategic land use policies in other jurisdictions. These policies encourage the early identification of land with non-resources value, and introduce safeguards for resources activity on that land without entirely excluding them.

---

For instance, the New South Wales strategic regional land use policy has identified land with the highest agricultural value in the Upper Hunter and in the north-west of New England. Any state significant resources project taking place on this land is subject to an additional degree of scrutiny through the Gateway assessment process, where an independent scientific panel assesses risks associated with the project (NSW DPIE 2019). Similarly, in Queensland, resources activities on designated strategic cropping land require a regional interests development approval from the Department of State Development, Tourism and Innovation (which may apply further relevant conditions to the project).

As noted above, however, it is important that strategic land use policies fully consider the costs and benefits of allowing resources development — they should not simply act as a barrier to development on agricultural land. Such policies should also only require additional processes that are proportionate to the risks of using certain types of land. There is a risk that strategic land use policies simply duplicate other environmental assessment processes, and do not specifically target the issues associated with mixed land use (a risk raised for the Gateway assessment process by the NSMC, sub. 28, pp. 25–6).

#### FINDING 5.1

Landholders frequently express concern about resources projects, and some have called for a right of veto over resources activity on their land. This would be inconsistent with Crown ownership of resources and would affect the distribution of the benefits of resources significantly. Landholders have a right to full and fair compensation for access to their land, but not payment for the resources under it.

#### LEADING PRACTICE 5.1

Where resources project proposals affect multiple landholders in a region, it may be appropriate for governments to develop strategic land use frameworks to assess the trade-offs between resources development and other land uses on a regional, rather than case-by-case basis. However, the aim of these frameworks should be to maximise economic benefits for the community, rather than prohibit activity on certain types of land. These frameworks should thoroughly consider the costs and benefits of allowing resources development, and have approval processes proportionate to the risks of resources development on the relevant land. The Council of Australian Governments' Multiple Land Use Framework provides a leading-practice example.

---

## Leading-practice approaches to land access

Negotiation should only be required when mining activity is likely to have a significant impact on the land

In most States, low-impact exploration activity can proceed without negotiating with the landholder — giving the landholder notice is sufficient. For example, in Queensland, once an exploration permit has been granted over an area, a resources company can generally undertake ‘preliminary activity’, such as taking soil and water samples or surveying the land, by providing ten days’ notice (*Minerals and Energy Resources (Common Provisions) Act 2014* (Qld), ss. 39, 43, 70).

Some jurisdictions, however, require negotiation before *any* activity can take place. For example, in New South Wales, a land access agreement must be negotiated prior to any exploration activity (*Mining Act 1992* (NSW), s. 140). This is the case whether the activity is likely to impact the land or not. The same process applies for ‘reconnaissance’ (for example, aerial surveying activity), early ‘follow-up activity’ (such as collecting soil samples) or higher impact activity (such as drilling) (NSW Minerals Council 2013, p. 2).<sup>5</sup> These requirements aim to balance the rights of landholders and resources companies, ‘to ensure the orderly search for resources, while recognising the rights of landholders to conduct their activities free from unreasonable interference or disturbance’ (NSW Resources and Geoscience nd).

Victorian legislation similarly requires a negotiated agreement before an explorer can enter or access privately-owned land. However, ‘informed verbal consent’ is sufficient to begin activity that does not require the use of equipment, explosives or removal of trees and shrubs (Vic DJPR 2019a).

An advantage of the New South Wales and Victorian approaches is that they encourage landholders to communicate early with project proponents. This may help to solidify a working relationship, reducing the risk of a breakdown in subsequent negotiations over potential future activities. It also allows the landholder and resources company to reach early agreement about particular types of activity that are, and are not, permitted on the land — under the standard process in place in other States and Territories, there may be ambiguity about what is permitted as low-impact activity.

However, the approach also has drawbacks. ‘Front-loading’ negotiations in this manner increases the cost of the earliest stages of exploration, and may consequently reduce investment in exploration. Negotiation at a stage well before the interests of the landholder are materially affected could increase resistance to resources activity if landholders perceive an exploration agreement as providing implicit permission for more extensive resource extraction.

---

<sup>5</sup> Low-impact exploration licences which avoid negotiation procedures are only available in relation to native title land (*Mining Act 1992* (NSW), Div. 5).

---

There are potentially less burdensome ways of encouraging communication between the landholder and the project proponent than mandating it in legislation. For example, the Queensland Land Access Code requires the first notification of exploration activity to be made in person (Qld DNRM 2016, p. 6). This provides an opportunity for a landholder to develop a relationship with project proponents and to raise questions that develop as early exploration activity takes place.

---

#### LEADING PRACTICE 5.2

Where planned activity will be low impact, requiring early personal engagement between resources companies and landholders can ease potential tensions and be less costly than a negotiated agreement. The Queensland Land Access Code's notification requirements provide a leading-practice example of this approach.

---

### Standard terms of land access and reliable dispute resolution processes can improve landholder confidence

Many landholders are likely to come to access negotiations with little experience or knowledge of resources projects, in contrast to resources companies (PC 2016c, p. 101). Consequently, they may not know what exactly is involved in the conduct of resources activities and the quantum of compensation they can expect. Governments therefore have a role in establishing reasonable expectations for the relationships between parties and for the terms of the agreements they negotiate. Governments also have a role in providing a framework to allow users of the land to resolve disputes and enforce the terms of their agreements.

To ensure that both resources companies and landholders have reasonable expectations, some (but not all) governments have established standard terms for land access agreements. For example, the Queensland Land Access Code sets out a number of best practice guidelines for good relations between landholders and resources companies:

- both sides should liaise with each other in good faith
- tenement holders should advise landholders of their intentions on the land well in advance of any works being undertaken
- tenement holders should minimise damage to the land, and rectify any damage caused
- landholders should provide reasonable access to the land, and engage in negotiation about appropriate terms of conduct and compensation (Qld DNRM 2016, p. 3).

The Code also sets out a number of mandatory conditions covering matters of importance to agriculture generally, such as minimising disturbance to livestock and preventing the spread of pests (Qld DNRM 2016, pp. 6–9).

---

Queensland has also released guidance for landholders for negotiating compensation, along with a standard compensation agreement template for landholders when negotiating compensation (Qld DNRME 2019a).

FINDING 5.2

Many landholders enter land access negotiations with resources companies with little prior experience or relevant knowledge. This information asymmetry provides a basis for government intervention.

LEADING PRACTICE 5.3

A standard template for land access agreements can reduce information asymmetry, help to set expectations for landholders and resources companies, and improve confidence in the regulatory system. The Queensland Land Access Code, providing a combination of mandatory conditions as well as guidelines, provides a leading-practice model.

With respect to dispute resolution, although all jurisdictions provide avenues for terms of agreements to be enforced in ordinary courts and tribunals, a more active approach could help to improve landholder confidence that they will be able to access mediation, should it be needed. For example, the Land Access Ombudsman (box 5.3) was established in Queensland in September 2018, with the support of both resources companies and agricultural groups. It takes a more active and investigative role than tribunals ordinarily would, and although the institution is still in its infancy, it has been assessed as effective by those familiar with land access issues.

... the Ombudsman's processes are less prescriptive than litigation and arbitration, which may avoid time delays and reduce costs. Additionally, the Ombudsman's role in assisting other government departments with regulatory compliance, advising on systemic land access issues and educating the government and public on land access generally, should result in future positive policy and legislative changes to the land access regime in Queensland. (Clifford and Roettgers 2019)

Alongside the other support offered to landholders who are approached for resources development on their property (such as the GasFields Commission, chapter 4), participants stated that this framework appears to be useful in overcoming the information gaps that would otherwise prohibit effective agreement-making. The QRC noted that:

One area in which Queensland leads the country is land access. Over the years community sentiment in resource regions, particularly in the gasfields, has evolved into a benefit sharing arrangement. (sub. 27, p. 4)

---

### Box 5.3 Queensland's Land Access Ombudsman

The Land Access Ombudsman provides a free service to resolve disputes between landholders and resources companies in Queensland. It investigates breaches of conduct and compensation agreements, as well as 'make good agreements' that provide for the reparation of damage to water bores affected by resources developments. The Ombudsman typically assesses each complaint that it receives for its materiality, investigates the dispute, and may assist the parties in resolving the dispute through mediation and similar processes. Where the parties cannot resolve the dispute together, it can make a non-binding recommendation for the issue to be remedied. It is expected that parties comply; if they do not, or if parties are unhappy with the decision of the Ombudsman, then the Land Court can make an enforceable decision.

Sources: Clifford and Roettgers (2019).

#### LEADING PRACTICE 5.4

Low-cost dispute resolution methods that take an investigative approach to resolving problems between parties can reduce tensions between landholders and resources companies. The recently established Queensland Land Access Ombudsman provides an example.

## 5.2 Resources development on Indigenous land

Historically, there were very few legal barriers to mining on the traditional lands of Aboriginal and Torres Strait Islander people. Today, it is broadly recognised by the mining industry that co-operating and partnering with Aboriginal and Torres Strait Islander communities in the establishment of mining projects on Indigenous land is important for developing social licence to operate (MCA 2018b) and delivering sustained returns for investors (Mackenzie 2019). Langton (2015, p. 7) characterised this shift as a 'transformation from ... acrimonious conflict to mutually beneficial agreement-making'.

This section deals with issues relating to resources development on Indigenous land for resources companies. Issues relating to sharing the benefits of resource development with Indigenous communities are considered in chapter 11 and issues relating to protecting Indigenous cultural heritage are considered in chapter 8.

### How do Indigenous property rights affect resources investment?

Two key property rights affect mining activity on Indigenous land:

- Land rights laws permit the transfer of Crown land from State and Territory Governments to Aboriginal and Torres Strait Islander traditional owners.



- 
- Native title recognises the traditional rights and interests of Aboriginal and Torres Strait Islander people over their land. The *Native Title Act 1993* (Cth) (NTA) sets out the processes of claiming and determining native title land, as well as the process for agreements to be made about other activity taking place on native title land.

The two rights differ in important ways: in particular, land rights generally provide exclusive possession of land, while native title can either be exclusive or non-exclusive (although the latter is more common). Consequently, most (but not all) land rights land is not subject to native title (since its owners can do everything that they would be permitted to do as native title holders, and more). Native title is also removed (‘extinguished’) over land when freehold rights are granted over it, or when it is developed by government. However, it can exist alongside other property rights such as pastoral leases.

More than 60 per cent of Australia’s resources projects are on areas covered by a native title claim or determination (figure 5.2).

The Commission has heard that native title is the predominant focus across Australia for resources companies in terms of approvals required to develop resources. Accordingly, this chapter focuses on the extent to which processes for negotiating access to native title land can impose barriers to resources development. However, some unique circumstances exist in the Northern Territory relating to its land rights laws that have been raised as an impediment to investment; they are discussed below.

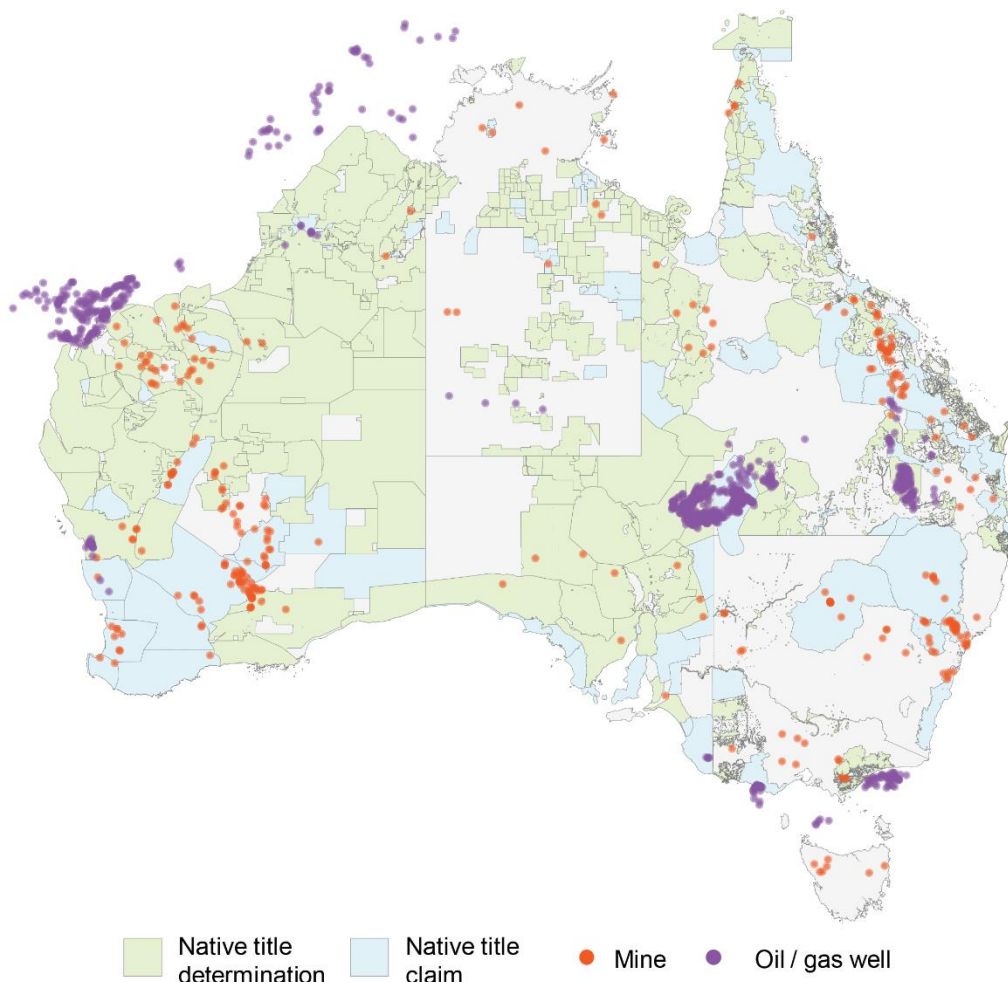
As with other types of land in Australian law, resources found on Indigenous land generally remain the property of the Crown.<sup>6</sup> To extract these minerals, resources companies are required to negotiate with Aboriginal and Torres Strait Islander groups who have claimed native title (‘native title claim groups’) or for whom native title has been determined (‘native title holding groups’). Collectively, these two groups are referred to as ‘native title groups’. An agreement is also required where land rights have been established, or where there is Indigenous heritage in the proposed development location (chapter 8).

---

<sup>6</sup> Ownership of ochre may be incorporated into a native title claim, as ochre has had traditional uses for some time (Edgeworth et al. 2016, p. 214). Land rights grants in New South Wales include mineral rights, though not gold, silver, coal, petroleum or uranium, and resources already subject to prior tenements (*Aboriginal Land Rights Act 1983* (NSW), s. 45).

---

**Figure 5.2 More than 60 percent of Australia’s resources projects are on areas covered by a native title claim or determination**  
Operating mines and petroleum fields (as at 2017) and native title claim and determination areas



*Data sources:* NNTT (2014a, 2017); unpublished data from DIIS and Geoscience Australia; Productivity Commission estimates.

Resources companies may choose to pursue agreements even when no Indigenous property rights apply, for example, where a tenement has been held prior to the establishment of native title in law, or a development is taking place on freehold land near an Aboriginal and Torres Strait Islander community.

Land rights and native title laws have been fundamental in giving Aboriginal and Torres Strait Islander people a ‘seat at the table’ in negotiations about resources activity on their traditional land. However, some elements of the native title system in particular can impose barriers to investment.

---

## The typical determination process is complex and lengthy

Determining native title is a complex process (box 5.4), involving the native title claim group, government, resources companies, and other land users. It is also lengthy: in 2012, the average native title claim took over 6 years to resolve, and longer still if the claim was subject to litigation (NNTT 2012, p. 2). When multiple groups have claimed native title over an area, each group has the right to negotiate an agreement with a project proponent and potentially receive compensation from the proponent until the overlap is resolved. These additional negotiation and compensation requirements, though intended to balance the interests of project proponents and traditional owners, can act as a barrier to investment. Differences in views of the project between and within native title groups can also add to delays.

The Australian Law Reform Commission (2015) noted that some of the complexity, delay and costs in determining native title are unavoidable. Key causes of delay include:

- the difficulty of establishing connection to country — time-consuming anthropological research plays a key role in this process, particularly given the gender-restricted or secret nature of material from communities
- the relatively recent history of the NTA — litigation has been required to clarify its operation
- the process of demonstrating extinguishment — when dealing with a native title claim, the State or Territory must determine whether any other land rights have been granted over the land since colonisation.

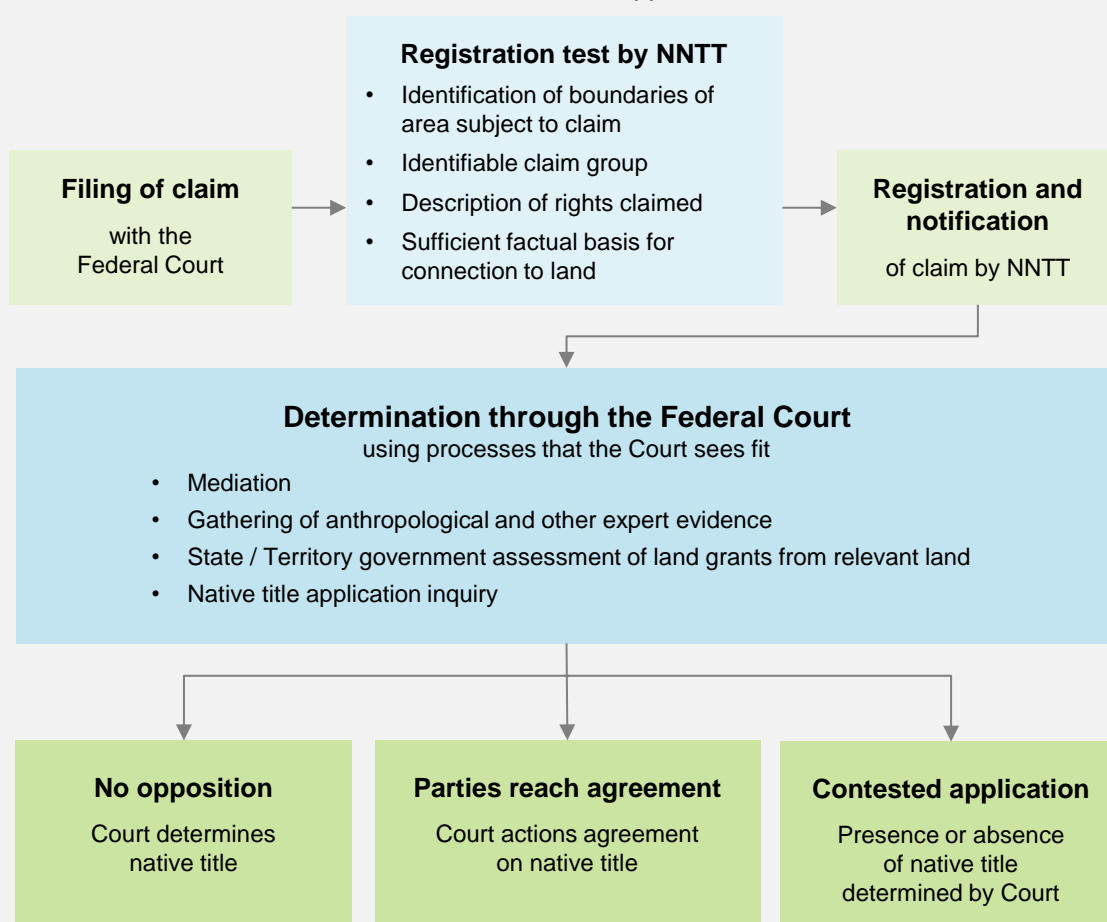
The length and complexity of the native title process has been acknowledged by those involved in the process. The Federal Court has put significant effort into ‘case management’ — encouraging parties to co-operate and resolve issues quickly — to encourage more cases to be resolved by consent (ALRC 2015, p. 358). In Victoria, the *Traditional Owner Settlement Act 2010* (discussed further below) was introduced to overcome the inflexibilities of the native title system (ALRC 2015, p. 112). Proposed Commonwealth legislation would also allow parties to native title claims to disregard extinguishment of areas historically set aside for preservation purposes (such as national, State and Territory parks) (box 5.5).

The Commission supports efforts to reduce the length and complexity of the native title determination process. However, it is beyond the scope of this study to assess and recommend any changes. Nonetheless, the Commission considers that reforms to the law should be mindful of the impact of the native title process on resources activities, not only to allow for more streamlined development of resources, but also to enable the benefits of negotiated agreements to flow more quickly to Aboriginal and Torres Strait Islander communities.

## Box 5.4 The native title determination process

The native title process (illustrated in the figure) begins with an applicant group filing an application in the Federal Court of Australia. If the claim passes the National Native Title Tribunal's basic procedural requirements (the 'registration test') it is registered and published. At this point, native title is not determined to exist over the land, but resources companies looking to operate on the claimed land must negotiate with the native title claim group.

After registration, the native title claim group negotiates via the Federal Court with the relevant State or Territory Government to have the claim determined. Government must then consider whether the claim group has a connection to country in the claimed area, and whether that connection was later extinguished. The government party may then consent to native title being determined over the land, or contest elements of the application.



Sources: ALRC (2015, pp. 88–90); NNTT (2014b).

---

### Box 5.5 The Native Title Legislation Amendment Bill 2020 (Cth)

The Australian Government introduced the Native Title Legislation Amendment Bill 2019 to Parliament in October 2019. The Bill was previously introduced in February 2019 but failed to pass prior to the dissolution of Parliament before the May 2019 federal election. It was reintroduced in 2020 and is before the Senate at the time of this report's release. Its core measures relevant to the resources sector are:

- validating future act agreements where not all members of the applicant entered into the agreement
- allowing a majority of the members of the applicant to make decisions such as entering into future act agreements, rather than requiring unanimity
- allowing native title groups to set out the conditions of their authority over the applicant, so that certain decisions must be approved by the entire group
- allowing parties to agree to disregard extinguishment where an area was set aside for preservation purposes (such as national, State and Territory parks)
- improving transparency and accountability of prescribed bodies corporate who manage native title.

The process for developing resources on native title land depends on the impact of the proposed activity

Once a claim is registered by the National Native Title Tribunal (NNTT), any resources company proposing to develop on native title land must comply with one of three processes (figure 5.3).

- For activity that is not likely to interfere with traditional activities or disturb areas of significance, an *expedited procedure* applies. Notice is given to the native title holder, and if they do not object to the use of the expedited procedure, negotiation is not required. If they object to its use, the project proponent and native title group can either negotiate an agreement for the activity or seek a determination on the matter from the NNTT.
- If an expedited procedure does not apply, then the project proponent and any native title group can negotiate an agreement with the claim group (a *future act agreement* or *section 31 agreement*).<sup>7</sup>
- The State or Territory Government, a project proponent and any native title group can reach an *Indigenous land use agreement* (ILUA). Although there are multiple types of ILUAs, area and body corporate ILUAs are of the most relevance for resources projects. These agreements can make general terms about any resources activity on the land that they cover. ILUAs also bind any other future native title claimant. In order to be

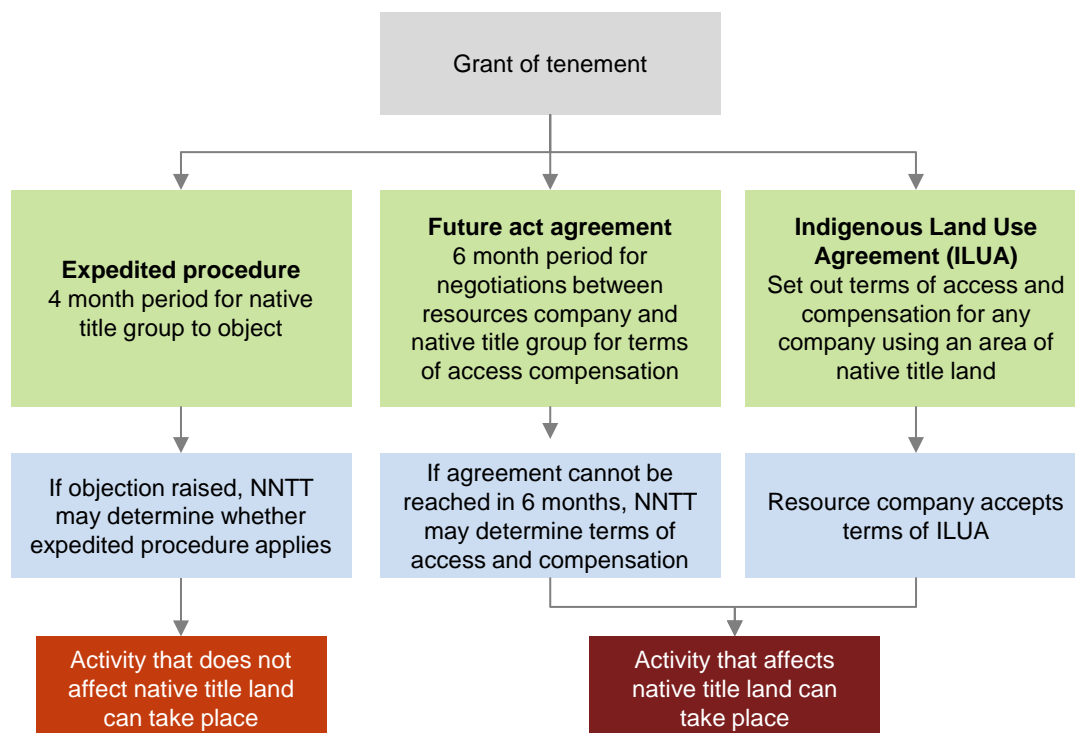
---

<sup>7</sup> State and Territory governments are technically party to these agreements, but in practice, they are rarely involved in negotiations, and are not party to the commercial-in-confidence terms of agreements: *Xstrata Coal Queensland Pty Ltd & Ors/Mark Albury & Ors (Karingbal #2)*; *Brendan Wyman & Ors (Bidjara People)/Queensland* [2012] NNTTA 93, [94].

registered, area agreements must be authorised by all people who hold or may hold native title in the area covered by the agreement — the ‘native title claim group’.

Each of these processes has advantages and disadvantages, depending on the nature of the traditional rights and interests held by the native title group, the relationship between the native title group and the project proponent, and the duration and size of the resources project.

**Figure 5.3 Processes to explore for and extract resources on native title land**



Source: *Native Title Act 1993* (Cth) (ss. 31–2; Division 3, Subdivision B).

The expedited procedure is the fastest access option for resources companies, but can only cover early-stage exploration. In general, future act agreements are the default process. Future act agreements, however, generally apply only to one activity at a time, meaning that further agreements may be required as a project is developed (although some future act agreements are conjunctive, and may also cover an entire project). Future act agreements also only bind the parties to the agreement (the State or Territory, the resources company and the listed native title groups).

ILUAs, on the other hand, are more involved and require a commitment to making a longer-lasting agreement. ILUAs are more likely to be used for larger projects. They can also be used to develop a single agreement covering an entire area and potentially multiple resources companies. Issues negotiating ILUAs cannot be referred to the NNTT, as they are an ‘optional’ agreement-making approach.

---

The following sections discuss issues that have been raised with this agreement-making framework.

*Many current agreements may not be binding*

Generally, when a native title group negotiates an agreement with a resources company, it does so through a representative individual or group known as the ‘applicant’, or through a legal entity established to engage in transactions with native title, known as a prescribed body corporate. Once an applicant has been authorised by the group, they can deal with all matters under the NTA relating to a determination, including the signing of future act agreements and ILUAs.

The *McGlade* decision of the Full Federal Court of Australia in 2017<sup>8</sup> created concerns about the validity of agreements that had only been signed by the majority of the individual members of the applicant. Prior to *McGlade*, many agreements were made on the basis that it was not necessary for all members of the applicant to be party to an ILUA, so long as the ILUA had been properly authorised by a claim group (King & Wood Mallesons 2017). The *McGlade* decision, to the contrary, suggested that *all* members of the applicant needed to sign an ILUA for it to be valid.

Amendments were made to the NTA to ensure that ILUAs need only be signed by the majority of members of the applicant (unless the native title group decides otherwise), and to maintain the validity of existing ILUAs. However, similar amendments were not made with respect to future act agreements, which has ‘cast doubt over the validity of [future act agreements] which were not signed by all members of the applicant, and consequently the status of mining and petroleum leases granted on the basis of those agreements’ (MCA 2018d, p. 5). This was identified as an issue of urgency by the Association of Mining and Exploration Companies (AMEC, sub. 31, pp. 8–9).

The Native Title Legislation Amendment Bill 2019 (Cth), which at the time of this report’s drafting was being considered by the Senate, proposes to make a number of amendments to the NTA, including some that will resolve this issue (box 5.5). These amendments should address the concerns raised by industry regarding the validity of agreements that have already been made.

FINDING 5.3

The *McGlade* decision of the Federal Court in 2017 created concerns in the resources industry about the validity of native title agreements that had only been signed by the majority of the individual members of the applicant. Amendments proposed in the Native Title Legislation Amendment Bill 2020 (Cth) should address these concerns.

---

<sup>8</sup> *McGlade v Native Title Registrar & Ors* [2017] FCAFC 10.

---

### *The level of compensation*

The level of compensation paid for resources developments on native title land has typically been a matter for proponents and native title groups, with the details of agreements generally not made publicly available (Hunt, Kavenagh and Hunt 2015, p. 349). However, a recent decision by the High Court has brought compensation, and particularly the value of native title rights and land, into public view for the first time. In the 2019 Timber Creek case,<sup>9</sup> the High Court of Australia ruled that the economic value of non-exclusive native title rights and interests of the Ngaliwurru and Nungali peoples was 50 per cent of the freehold value of land. The decision also established that traditional owners could further claim compensation for cultural loss deriving from the loss of traditional attachment to land.

The application of the Timber Creek case to resources activities is so far untested. A key difference between compensation for resources activity, and the compensation dealt with in the Timber Creek case, is that the latter was for full extinguishment of native title interests to build infrastructure.

Some native title groups have already brought claims seeking compensation for the effect of historical resources activity on native title land. Native title compensation is an emerging area of law and uncertainty remains about various issues including the practical operation of measures that purport to shift certain compensation liabilities from State Governments to the resources sector (Ludlow 2019). This uncertainty could pose an impediment for agreement making with native title groups. However, the question will likely be resolved by one of the several ongoing matters testing the application of Timber Creek in the specific context of resources development, for example, the case brought by the Gumatj clan in late 2019 disputing mining leases granted over the Gove Peninsula (Gordon and Roberts 2019).

#### FINDING 5.4

The level of compensation paid for resources developments on native title land has typically been a matter for proponents and native title groups. However, the Timber Creek decision of the High Court in 2019 went to the value of native title rights and interests and could affect agreement making with native title groups. Any uncertainty will likely be resolved as access negotiations occur over time.

### **Some jurisdictions take unique approaches to reducing barriers to resources investment on Indigenous land**

The NTA is designed to offer flexibility in the way it is used by State and Territory Governments. They can use the process in an atypical manner, or to develop their own

---

<sup>9</sup> *Northern Territory v Mr A. Griffiths (deceased) and Lorraine Jones on behalf of the Ngaliwurru and Nungali Peoples* [2019] HCA 7.



---

process to replace that set out in the NTA. And there are other systems of recognising Indigenous interests in land that interact with the NTA. This section covers approaches taken to resources development on Indigenous land in Western Australia, South Australia, Victoria and the Northern Territory.

### Objections to Western Australia's use of the expedited procedure

As noted earlier, the expedited procedure allows activity that is unlikely to interfere with native title groups' activities or areas of particular significance. However, the Western Australian Government, as a matter of practice, declares that all exploration and prospecting licences in the state are covered by the expedited procedure. The basis for this position is that project proponents are required to comply with the State's heritage laws, which, in theory, should mean that the impact of exploration activity on native title land is managed (WA DMIRS nd).

But in practice, some exploration licences will necessarily involve a risk of damage to the native title land or interference with the native title group's activity (NNTT 2019, p. 3). In practice, more than a third of all expedited procedure declarations face objections from the native title holders (NNTT, pers. comm., 11 March 2020). Resolving these objections takes time:

- The resources company and native title group can negotiate an agreement — precisely the task that the expedited procedure seeks to avoid.
- The resources company can seek a determination in the NNTT, which can involve a potentially significant delay before a hearing can take place. In some determination hearings, the original objections are not followed up or defended. The NNTT dismisses these cases out of hand, meaning that the project has been delayed even though the expedited procedure still applies to the project.

The issue is not the expedited procedure per se — rather, that it is being used as a matter of course for all exploration licences. Early activity that does not materially affect the activities or rights of native title holders should be permitted once notice is given — negotiation should not be required. But by asserting the expedited procedure as a matter of course, objections that could easily have been anticipated put the matter before the NNTT. Somewhat perversely, in these instances the expedited procedure leads to more delay than the ordinary process of negotiating an agreement.

To avoid this cause of delay, State and Territory Governments should take a case-by-case approach to assessing whether the expedited procedure applies to a particular exploration licence. The NNTT has previously published guidance on new cases that describe the principles surrounding the expedited procedure. It is currently developing a new and more-accessible resource for practitioners (NNTT, pers. comm., 28 February 2020). Providing this guidance once again would assist State and Territory Governments in understanding the circumstances in which the expedited procedure does, and does not, apply.

---

#### FINDING 5.5

Exploration activities have differing impacts on native title land. Consequently, a case-by-case approach by States and Territories to assessing whether the expedited procedure under the *Native Title Act 1993* (Cth) applies is necessary to give effect to the intention of the Act.

#### RECOMMENDATION 5.1

The National Native Title Tribunal should publish guidance about the circumstances in which the expedited procedure will apply.

### South Australia's efforts to streamline agreement making

South Australia's scheme for resources development on native title land, set out in Part 9B of the *Mining Act 1971* (SA), has significant overlap with the standard approach set out in the NTA. However, there are key differences, particularly at the exploration stage (Bradshaw 2016, p. 27).

- Low-impact exploration activity can be carried out as soon as a licence is granted and the native title group is notified — there is no statutory period for objections to be raised before activity can begin, as occurs with the expedited procedure and objection process under the NTA. The project proponent self-assesses whether its activity affects the native title rights of claimants, and can risk their project being stopped and financial penalties if they harm native title land.
- As under the NTA, activity that is expected to affect the rights and interests of native title groups requires an agreement. However, if an agreement cannot be reached, parties can seek a determined outcome from the Environment and Resources and Development Court to intervene. For exploration licences, this can be done after four months of negotiation compared with six months under the ordinary NTA process. Unlike under the NTA, the NNTT is not involved in decisions under the South Australian legislation.

These measures are aimed at encouraging both parties to reach a negotiated outcome more quickly than in other States and Territories. The South Australian Government considers that its framework provides more flexibility and helps to encourage exploration investment. The approach also has potential to reduce the time spent on early negotiations for exploration activity:

Part 9B provides several advantages to explorers in terms of streamlining the process and reducing government red tape. ... The Part 9B system was designed to facilitate a risk management approach to dealing with native title issues, so as to avoid imposing unnecessary regulatory burdens on explorers for low risk activities, but at the same time, providing clear processes and requirements to be followed for activities likely to affect native title. ... These

---

advantages result in it being possible for explorers to satisfy native title requirements more quickly and often with less expense than through the equivalent right to negotiate process under the *Native Title Act 1993* (Cth). (SA DMITRE 2013, pp. 13–14)

However, the approach is not without its risks. The South Australian Department for Energy and Mining is currently reviewing its impact, observing that ‘the current system of self-assessment by exploration companies can sometimes create uncertainty and hinder the building of good relationships’ (SA DEM 2019, p. 22).

South Australia’s alternative negotiation framework does streamline certain elements of the process of making agreements. But even within South Australia, it remains contentious. And if it were introduced in other States, Aboriginal and Torres Strait Islander groups would need confidence in self-assessments made by project proponents for it to be an improvement on the ordinary procedures in the NTA.

### Victoria’s traditional owner settlements

The Victorian Government established the *Traditional Owner Settlement Act 2010* (TOSA) in part, in recognition of the complexity of native title. The TOSA allows the Victorian Government and traditional owners to reach settlements over Indigenous land and can include financial compensation for past government actions. Traditional owners waive their right to pursue a native title claim if a settlement is in place. The TOSA is currently being reviewed by the Victorian Government (FVTOC 2019).

TOSA agreements also allow traditional owners to establish land use activity agreements (LUAA), which set out the terms on which resources developments may take place. Like an ILUA, the LUAA sets out that certain exploration activities can take place without negotiation between traditional owners and project proponents, so long as the project proponent minimises interference with the traditional owners’ land. Exploration with a significant impact on land, and extraction, are subject to negotiation. To date, two LUAA’s have been established, namely with the Dja Dja Wurrung people and Taungurung people.

One advantage of Victoria’s LUAA’s is that they allow project proponents to agree to a standard set of terms and conditions to develop resources on the land, and set default compensation amounts for particular activities (such as drilling holes for exploration) likely to arise in all projects covered by the agreement. This can help to set clear expectations, and aligns with leading-practice approaches taken under the NTA (discussed in more detail below).

The mining industry in Victoria was supportive of the introduction of the TOSA in 2011, because it can more rapidly determine the rights of Aboriginal and Torres Strait Islander groups over land than the native title determination process. After its introduction, some concerns were raised about how the resources industry did not have a role in the LUAA negotiation process (MCA Victoria 2012, p. 26). No evidence has been put to the Commission about whether this remains an issue.

---

A difficulty with the TOSA is that it does not, and cannot, totally exclude the operation of native title. Several native title determinations were made in Victoria prior to the introduction of the TOSA; one native title determination took place in 2011 after the introduction of the TOSA (Vic DJCS 2019). Where there is a TOSA settlement and an existing native title determination, the requirements of both Acts need to be met (unless native title land is excised from the licence application area) (Vic DJPR 2019d). The benefits produced by more rapid determination of settlements between government and traditional owners may well be offset by the additional regulatory requirements of complying with both systems. However, when a TOSA settlement is agreed, an ILUA under the NTA is generally signed simultaneously to confirm that agreements under the TOSA take the role otherwise fulfilled by native title claims and agreements, and preventing conflicting native title claims.

### Aboriginal land rights in the Northern Territory

The *Aboriginal Land Rights (Northern Territory) Act 1976* (Cth) (ALRA NT) returned nearly 50 per cent of the Northern Territory's land to traditional owners. Land councils assist Aboriginal and Torres Strait Islander communities to claim and manage their land. The ALRA NT predates native title, and confers full ownership of land (including exclusive possession) on traditional owners. But the ALRA NT also provides for certain rights and processes that do not apply to other types of land tenure.

#### *The ALRA NT allows for long-standing restrictions on development*

The most significant feature of the ALRA NT regime is that traditional owners have the right to veto exploration for resources on their land. This veto can only be overruled by the Governor-General, and in the life of the legislation, this has not taken place. Once a resources company makes a proposal, traditional owners have 22 months (under s. 42(13) of the ALRA NT) to negotiate terms and reach a decision (on whether to refuse or allow the proposal to explore for resources on the land).

This places traditional owners of ALRA NT land as essentially the only group with the power to veto resources development on their property. Industry participants have argued that this is inconsistent with Crown ownership of resources and their management for the benefit of all Australians (for example, the Northern Territory Chamber of Commerce and Industry, sub. 35, p. 3; FMG, sub. DR92, p. 9).

Many stakeholders have contended that it is difficult to develop resources on ALRA NT land. The Minerals Council of Australia (Northern Territory Division) (2014, p. 10) reported that 'there have been few mining projects, if any' that have been successfully approved by land councils in spite of these amendments.

Likewise, the Mansfield review of the ALRA NT's mining provisions found evidence that there was a 'sizeable gap' between the number of exploration licences approved on ALRA NT land, and those on native title land (Mansfield 2013, p. 52):

---

... it is difficult to resist the conclusion that Part IV operates as an impediment to the extent of exploration expenditure on Aboriginal land in the NT, relative to non-Aboriginal land ... most likely due to a combination of the possibility of the veto, and the more protracted processes prescribed under [ALRA NT relative to native title].

Mansfield proposed some technical amendments to the ALRA NT to expedite the process, but these were never adopted.

The CLC and NLC (sub. DR79) disputed that the ALRA NT has dampened investment. They submitted that several exploration projects have been approved, but they have not advanced to the production stage primarily because of other investment factors (such as the geology of the resources). Further, delays relating to initial approval are caused by resources companies 'warehousing' land where they have made applications to prevent other companies from applying to develop the land (considered further below). They also submitted that there were currently similar numbers of exploration licences in effect on both native title and ALRA NT land.

Several issues have been raised with respect to the ALRA NT regime:

- the cost of negotiating agreements
- the conjunctive process — ALRA NT agreements cover both exploration and extraction
- the five-year moratoria — an ALRA NT veto leads to a moratoria on proponents proposing a similar project.

These issues are discussed in turn below.

*Proponents see the ALRA NT process as unduly costly*

The NT Government and industry have identified the cost of negotiating agreements as a barrier to resources development on ALRA NT land (Mansfield 2013, p. 34; Northern Territory Chamber of Commerce and Industry, sub. 35, p. 3; Ward Keller, sub. DR65, p. 2). Northern Territory Chamber of Commerce and Industry (sub. 35, p. 3) observed that it costs as much as \$40 000 per meeting to negotiate access to ALRA NT land.

In contrast, the CLC and NLC (sub. DR79) contended that these costs did not significantly differ between ALRA NT and native title negotiations. However, because resources companies can seek a determination to go ahead with a project on native title after 6 months, negotiations can be concluded much sooner than under the ALRA NT (where a 22-month negotiation period, which can be extended by both parties, applies); longer negotiations would necessarily attract higher costs.

---

### *A veto leads to a five-year moratorium*

If the traditional owners use their right of veto, then no company can propose or undertake any new resources activity of the same class on the land for five years.<sup>10</sup> This means that the veto power has an impact not just on the proposed project, but on broader investment in ALRA NT land. This statutory moratorium might appear excessive as another resources company could propose a project that better meets the expectations of the traditional owners. It also has potential to create perverse incentives to apply for permission to explore for resources on ALRA NT land to prevent competitors from applying.

However, the Commission heard conflicting evidence on whether such ‘warehousing’ of land was taking place. The CLC and NLC (sub. DR79, pp. 14) submitted that warehousing was a dominant reason for delays in finalising agreements to develop resources on ALRA NT land:

Warehousing occurs when companies seek to maximise the number of titles they hold without having to pay rent to the Northern Territory or land access fees to traditional owners, or incur exploration costs. These companies make applications for tenements on ALRA Land for which they don’t have the resources to explore. They then refuse to productively engage with, or intentionally delay the negotiating process set out in the ALRA NT through a range of strategies. This allows these companies to retain rights over large areas without incurring significant costs.

The NIAA (sub. DR68, p. 9), by contrast, referred to the 2013 Mansfield review which observed that, though the practice of ‘warehousing’ exists, it ‘appears to be far from widespread’ (Mansfield 2013, p. 101). The Commission has not been presented with concrete evidence to make a judgement about the presence of warehousing, but the current system potentially creates incentives for it to take place. However, warehousing on its own is not a profitable activity in the long term: the value of the right ultimately reflects the commercial value of the minerals being mined at some future stage.

The justifications for the comprehensive moratorium after a veto are that it prevents traditional owners from handling many applications for the same land; and that it prevents repeated applications over land with cultural significance:

Where refusal of consent is premised on cultural or ecological concerns, traditional owners are highly unlikely to consent to any development proposal regardless of the anticipated target minerals or exploration / extraction methodology. ... Allowing other companies to apply to develop land during the moratorium period would increase the administrative burden for the NT Government and land councils and risk meeting fatigue and the likelihood of rejection by traditional owners, resulting in little apparent benefit to any stakeholders. (NIAA, sub. DR68, p. 10)

The resourcing and capacity of Indigenous organisations to handle the administrative burden of resources applications is a serious issue (chapter 11). And a system that allows repeated applications over significant sites where the veto will be exercised is inefficient. However,

---

<sup>10</sup> For example, a mining proposal that is rejected leads to a moratorium of five years on other mining proposals, but would not prevent petroleum exploration, grazing or other commercial land uses (CLC and NLC, sub. DR79, p. 18).

---

as outlined in chapter 4, if there is a less restrictive way to evaluate projects on a case-by-case basis, this would be preferable to a blanket moratorium.

The CLC and NLC (sub. DR79, p. 15) proposed that the moratorium for applications could be at the discretion of traditional owners:

If traditional owners could choose whether to put an exploration licence application into moratorium or not it would streamline processes by:

- removing company ability to warehouse, when traditional owners wish to see exploration and there are better applicants willing and able to explore; and
- allowing moratorium to be in place where traditional owners will not consent to exploration, for example for cultural or alternative economic reasons, so that resources are not wasted by applicants making applications over areas that will not be consented to.

However, under s. 48(3) of the ALRA NT, the Commonwealth Minister for Indigenous Australians, on the request of a land council, and in consultation with the Northern Territory Mining Minister, can already allow other applications to be made over land subject to a moratorium if they are satisfied that:

- the refusal was for a reason or reasons other than a desire to maximise the amount of financial compensation to be received, whether at the exploration or the mining stage
- the circumstances or concern that resulted in the refusal are no longer applicable
- the public interest requires that a further application made in respect of the same land or an area within that land.

It is unclear why a land council or traditional owners would support development of an area when the government opposes it. Evidence has not been presented to suggest that this existing power to allow development of areas that would otherwise be subject to a moratorium is not functioning as intended.

#### *No veto after exploration approval*

Since 1987, the veto in the ALRA NT can only be used prior to exploration beginning. Applications for exploration must include a description of the intended process for the recovery of resources found. If exploration has been approved and a proposal to extract resources is put to traditional owners, they cannot refuse consent.

The ACF suggested that a further veto should, in fact, be permissible at the extraction stage:

Such an approach would appear beneficial for all parties by providing increased clarity and certainty for Aboriginal Traditional Owners (that saying yes to exploration did not preclude any ability to say no to future mining), for industry (as Traditional Owners would be arguably less likely to oppose exploration applications if they knew this would not constrain their options on future mining approvals) and for other stakeholders ... who would have more confidence that the process facilitated and reflected full and informed consent. (sub. 32, p. 28)

---

This suggestion was likewise endorsed by the CLC and NLC (sub. DR79, p. 16).

According to the second reading speeches when the 1987 changes were passed, the removal of a veto after the exploration stage was intended to encourage ‘conjunctive’ agreements for the life of a project, and facilitate development by providing greater certainty once an exploration proposal had been accepted by the relevant land council (Holding 1987, p. 3874). Industry supported the change at the time on the basis of ‘risk associated with spending money in exploration when the right to mine may be subsequently refused’ (McKenna 1995, p. 303).

However, given the concerns that few projects have been approved on ALRA NT land, it is unclear if it has had its intended effect. The NIAA (sub. DR68, p. 9) observed that ‘there is a long history of deliberation of the relative merits of conjunctive and disjunctive consent and agreement making under [ALRA NT]’. It cited the Mansfield review, which found that the single veto struck a balance between traditional owners’ interests and certainty.

On balance, it is unclear whether the current single conjunctive veto represents a greater barrier to investment than allowing scope for a veto at the mining stage as well as at exploration. There are arguments for and against both approaches. The Commission considers that further examination, beyond the scope of this study, is required.

**There is no single leading practice for State and Territory approaches to native title**

The NTA provides a framework for State and Territory Governments and local traditional owners to explore methods for more rapidly determining native title claims and facilitating agreement making that suits the local context, subject to the approval of the Australian Government. However, no single leading-practice approach has been identified.

The approaches taken in South Australia and Western Australia appear to be making investment in resource exploration easier in those jurisdictions, but these approaches remain contentious. The Victorian TOSA, while avoiding the time spent on determination, runs the risk of requiring duplicative compliance with both the TOSA and NTA.

Moreover, it is unlikely that any of these approaches could be adopted as leading practice on a national level. As the Australian Law Reform Commission (2015, p. 369) observed in the separate context of native title determinations, ‘given the varied experiences and contexts between the states and territories ... it would be impractical to develop best practice principles that could be applied across all jurisdictions’.



---

#### FINDING 5.6

South Australia has implemented an alternative regime for negotiation of resources projects on native title land, while Victoria and the Northern Territory have different approaches to that set out under the *Native Title Act 1993* (Cth) for negotiating agreements between resources companies and traditional owners. Each of these unique approaches have both advantages and disadvantages; a leading-practice approach has not been identified.

### Leading-practice approaches

Noting that there is unlikely to be a single best-practice model for State approaches to managing native title in the context of resources development (as described above), there are elements of the approaches taken by the Australian, State and Territory Governments that may be worth exploring for each jurisdiction.

#### Conjunctive agreements can better permit sequential or cumulative development

As noted above, future act agreements usually require a new agreement to be negotiated for each stage of a project. This is a natural consequence of many resources developments having multiple phases, with development of future phases being contingent on commercial conditions and other uncertain circumstances (Abdel Sabour and Poulin 2010). As a consequence, the scope of any given ‘future act’ on native title land can change, giving rise to a new round of negotiations.

Conjunctive agreements (either ILUAs or future act agreements) can cover multiple activities. At their most advanced, conjunctive agreements can allow new licensees to operate in the same native title area without the need to negotiate a new agreement, by providing a standard set of terms to be accepted by the licensee (as is the case in South Australia — box 5.6).

---

**Box 5.6 ILUAs for exploration and extraction of resources in South Australia****Conjunctive ILUAs for oil and gas projects**

In 2007, the South Australian Government negotiated the first conjunctive petroleum Indigenous land use agreement (ILUA) in a productive province in Australia, with the Yandruwandha/Yawarrawarrka peoples (who hold native title over land in the Cooper–Eromanga Basins, a large conventional gas resource in the north of the State). More recently in 2011, another conjunctive ILUA was established with the Wangkangurru/Yarluyandi people, also in the north of the State.

Under these agreements, any prospective licensee can agree to a set of standard terms under an ILUA acceptance contract prior to the grant of an exploration licence. This agreement then covers the life cycle of each project. The standard agreement sets out standard rates of compensation for activity (which are adjusted for inflation over time). To date, 12 licensees have signed on to the Yandruwandha/Yawarrawarrka and Wangkangurru/Yarluyandi ILUAs for oil and gas projects.

**Mineral exploration ILUAs**

For mineral exploration, the South Australian Government has negotiated ILUAs in conjunction with the South Australian Chamber of Mines and Energy and South Australian Native Title Services. Two ILUAs are in place that provide standard form agreements for exploration activity under the *Native Title Act 1993* (Cth). As with the conjunctive gas ILUAs, a company can accept the standard terms for exploration activity and operate in areas under these ILUAs.

Source: South Australian Department of Energy and Mining (pers. comm., 26 February 2020).

Conjunctive agreements should not be the only option (as is the case under Aboriginal land rights legislation in the Northern Territory, discussed above). Because of the highly prospective nature of some resources activities, the exact nature of those activities will not always be clear prior to exploration taking place. However, by providing a framework for conjunctive agreements, State and Territory Governments can allow resources companies and Aboriginal and Torres Strait Islander communities to more easily reach agreement through a standard set of terms for resources developments in a particular area.

---

**LEADING PRACTICE 5.5**

Conjunctive agreements that provide a standard set of terms for resources developments in a particular area can reduce impediments to investment on native title land. South Australia's ILUAs for gas and mineral exploration are a leading-practice example.

---

---

## Good guidance helps resources companies to navigate native title

As noted earlier, native title is a complex legal regime. Since its introduction in the early 1990s, it has been subject to significant legislative amendment and decisions from Australia's higher courts. There is an array of advice aimed at helping investors understand the native title system. For example, the Australian Trade and Investment Commission provides a brief overview about native title land, ILUAs, and the way native title operates in the Northern Territory, Queensland and Western Australia. The most comprehensive guide is the *Working with Indigenous Communities* handbook (DIIS 2016b). Among other topics, it covers how native title fits into the resources approval process, the different roles of future act agreements and ILUAs, the socio-cultural background to native title and guidance on how to approach agreement-making and community engagement in a culturally sensitive manner.

By approaching negotiations in a culturally sensitive manner, incorporating the principles set out in the handbook, resources companies can improve community confidence in resources development. Conversely, 'without effective communication and shared understanding, it is difficult for companies and Aboriginal and Torres Strait Islander communities to coexist amicably or to manage issues that arise effectively' (DIIS 2016b, p. 16). The Australian Government's *Working with Indigenous Communities* handbook provides four key principles for approaching communication with Aboriginal and Torres Strait Islander communities:

1. Culture is shaped by the way the world is viewed, and differences between mining culture and Indigenous cultures are significant.
2. Use plain English, interpreters and visual tools for communication. Jargon or scientific language may lead to confusion and misunderstanding.
3. Allocate sufficient time for decision-making according to Indigenous custom. Plan consultations well in advance and use a slow, steady and staged approach.
4. Respect the proprietary nature of Indigenous cultural information. (DIIS 2016b, p. 16)

This type of guidance provides a leading-practice model, which could be expanded to provide guidance covering the various unique elements of state regimes (particularly South Australia and Victoria, as discussed above). As each of these systems are established under legislation by those States, they should be responsible for preparing this guidance.

### LEADING PRACTICE 5.6

High-quality guidance on native title facilitates investment in the resources sector. The Australian Government's *Working with Indigenous Communities* handbook is a leading-practice example.



---

## 6 Approval processes

### Key points

- The environmental approval process weighs the environmental, economic and social impacts of projects to determine if they can proceed and if so under what conditions.
- The assessment and approvals process is complex and often lengthy. While assessment and approval processes must be commensurate with the multiple and significant risks many projects pose, they can be unduly costly and time consuming.
- There are leading practices in different aspects of the processes applying in different jurisdictions, but there is scope for improvements to reduce costs without diminishing environmental and other outcomes (or to achieve better outcomes without increasing costs).
- Major issues that participants have raised with current processes include:
  - approval delays, for the primary approval and for post-approvals
  - environmental impact assessments (EIAs) that are unduly costly and time consuming
  - duplication and inconsistency in Commonwealth and State or Territory processes
  - delays due to court action brought by opponents to projects.
- More thorough application of a risk-based approach to EIA would help streamline processes and deliver sounder environmental outcomes. Earlier scoping of key risks, including through community consultation, would give regulators and proponents a clearer and shared understanding of what information is needed to support decision making.
- The Commonwealth and States and Territories have distinct but overlapping responsibilities for the environment. This creates difficulties for proponents.
  - Greater co-operation between the Commonwealth and States and Territories would improve the environmental approval process. This could include out-posting of Commonwealth staff and training of State and Territory regulators' staff in the administration of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act).
  - Bilateral assessment agreements that place greater commitments on the States and Territories could reduce duplication and inconsistency in approval conditions, while bilateral approval agreements could simplify the approval process for proponents. The EPBC Act needs to be amended to support their negotiation (a Bill to do this is before Parliament).
- The post-approvals stage should be made more transparent and predictable, with decisions subject to timelines and reporting on compliance with those timelines.
- Duplication and overlap across agencies within jurisdictions continues to frustrate project proponents, notwithstanding that all jurisdictions have arrangements in place to facilitate coordination, such as lead agencies or major project facilitation offices.
- Delays due to reviews of environmental approval decisions in the court system can be costly. However, they are relatively infrequent and there is good reason to allow certain third parties standing to seek judicial review of environmental approvals. Legislation that is highly process-driven increases the risk of regulators making invalid administrative decisions.

This chapter focuses on the environmental approval process, which involves weighing the environmental, economic and social impacts of projects against each other to determine whether projects can proceed and, if so, under what conditions. This process is essential for ensuring that projects proceed only if they are in the overall national interest, but it can be unduly costly and time consuming.

Every jurisdiction's environmental approval process is different, but there are some common characteristics around Australia (table 6.1). This chapter focuses on the most pressing concerns with environmental approval processes raised by study participants and identifies examples of regulatory leading practice. These include issues arising from:

- application through to assessment
- approval and conditioning
- post-approvals
- review processes.

**Table 6.1 The environmental approval process**

This is a generalised description and does not completely capture what occurs in any particular jurisdiction

<i>Stage</i>	<i>Description</i>
Application	Proponents submit an application or referral to the regulator describing their project, possibly including information on its expected environmental impacts.
Decisions on whether approval is needed and if so the level of assessment	Regulators decide whether a project requires approval and if so what level of assessment is needed. The public may be invited to comment on these decisions.
Scoping the assessment	The scope of any assessment that proponents need to undertake is determined, typically in the form of a terms of reference. The scope is decided by the regulator but the proponent and the public may have input.
Assessment	The proponent prepares an environmental impact assessment in line with the terms of reference given by the regulator. This involves gathering information on the environment where the project will be located and its expected impacts.
Approval and conditioning	The decision maker, usually a politician, decides whether the project can go ahead and if so under what conditions. The decision maker may receive advice and recommendations from an independent environmental agency. The decision maker may request additional information from the proponent.
Post-approvals	The approval conditions may include that the proponent prepare a range of management plans that also need to be approved by the regulator before work can commence.
Review	This is not of itself a part of the environmental approval process. Parties directly affected by approval decisions and certain third parties have the opportunity to have approval decisions overturned or amended.

---

Practices that reduce unnecessary costs and delays, not reduce environmental standards, are identified. Indeed, by and large, proposed improvements to regulatory processes would also enhance the effectiveness of regulation.

The final part of the chapter discusses coordination among regulators within a given jurisdiction (because environmental approval is inevitably one among many approvals that projects require).

## **Environmental assessments and approvals take time**

Approval processes can be lengthy. Taking the Commonwealth regulatory system as an example, although the vast majority of applications are eventually approved<sup>11</sup>, the average time between project referral and approval for resources projects over the five years to 30 June 2019 was nearly three years (figure 6.1).

- Proponents had carriage of environmental impact assessments (EIAs) for three quarters of this time — undertaking surveys and preparing EIA documentation, responding to regulator requests for information, or simply delaying the preparation or delivery of documentation to suit their own timing preferences.
- The time taken for the Commonwealth Environment Minister to make an approval decision for resources projects averaged 253 days in the five years to 30 June 2020. This was more than four months longer than the average between commencement of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) and 2014-15.

Figure 6.1 does not include the time taken to meet any post-approval requirements, which can in some instances take just as long as the primary environmental approval (section 6.3). Nor does it include review or appeal processes (section 6.4).

There are many possible reasons for delays. At the assessment stage, the large scope of environmental assessments, lack of focus on key risks and duplication between the Commonwealth and State Governments are often cited as key contributor to delays (section 6.1). Delays are also prevalent at the approvals stage, although whether this is due to regulators, proponents, or both, is often disputed (section 6.2).

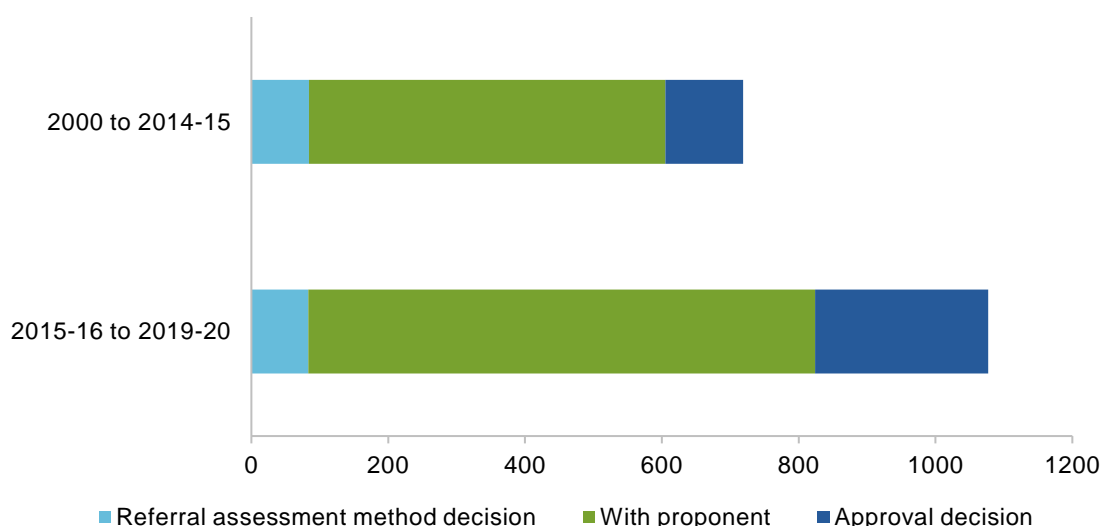
---

<sup>11</sup> For example, since the commencement of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) only four resource projects have been rejected (DAWE pers. comm., 30 October 2020).

---

## Figure 6.1 Environmental approvals can take years to secure

Average time between project referral and approval for resources projects under the EPBC Act<sup>a</sup>



<sup>a</sup> 'Resources projects' includes projects classified as 'exploration (mineral, oil and gas – marine)', 'exploration (mineral, oil and gas – non-marine)' or 'mining' in the database of EPBC Act decisions maintained by the Department of Agriculture, Water and the Environment.

Source: Unpublished data from the Department of Agriculture, Water and the Environment.

---

The direct financial costs to proponents of preparing EIAs — including the collection of environmental, social, heritage and economic information — can be in the millions of dollars. The EPBC survey project found that the average out-of-pocket cost of assessment across the middle 80 per cent of projects (by assessment cost) was less than \$60 000, but the average for the most-costly 10 per cent was over \$1.2 million (Macintosh 2009, p. 85).<sup>12</sup> For the Carmichael Coal Mine and Rail Project, the cost of printing the 24 copies of its environmental impact statement required by both State and Commonwealth Departments, with each copy being 11 volumes and 9428 pages, totalled around \$100 000 (Adani Mining, pers. comm., 6 January 2020).

Government agencies also incur costs, including through reviewing applications and assessment documentation and advising decision makers. The greater cost to proponents, and the community, however, comes from the time it takes to navigate the environmental approval process (box 6.1). Measures that reduce unnecessary delays can therefore deliver large income benefits.

---

<sup>12</sup> The lower-bound figure for the average cost of assessment for the most costly 10 per cent of projects is based on information presented by Macintosh (2009, p. 85) on the total sample and the middle 80 per cent of projects (by assessment cost). Dollar figures presented by Macintosh (2009, p. 85) have been converted to 2019 dollars using the GDP price deflator (ABS 2019, table 5).



---

### Box 6.1      **The cost of waiting is significant**

Proponents typically have ongoing costs while they await regulatory approval. For example, Arafura Resources, a prospective rare earths project in the Northern Territory, noted that its overhead costs before production commences are between \$350 000 and \$400 000 per month (Northern Territory Social Policy Scrutiny Committee 2019, pp. 53–55). The MCA (sub. 11, p. 20) submitted that the costs of ‘keeping engineering contractors, consultants, internal resources, and procurement in a ‘holding pattern’ while delays are being addressed’ can be up to \$16 million per month for a large project.

More importantly, pushing out the start date of a project delays the receipt of revenue as well as the royalties and taxes that flow to the broader community. The Commission (2009, p. 218) previously estimated the total cost of a one-year delay for a project to be between 7 and 18 per cent of its net present value, depending on the cost of capital (discount rate) and when the delay is experienced — revenue delays that occur after significant exploration costs have been incurred are more costly.

Any estimate of this type is driven by assumptions about the time profile of future revenue and costs, including assumptions about commodity prices. The costs of delay can be higher if projects miss out on a period of price upswing (which may have influenced the timing of the investment decision). On the other hand, the cost of waiting will be reduced if prices are lower than anticipated.

As TMEC (sub. 46, attachment A, p. 1) submitted, ‘undefined and protracted delays mean that critical market windows that come and go with fluctuating ore prices are lost, and companies cannot proceed with their development’. Rio Tinto (sub. 26, cover letter, p. 1) pointed out that:

Delays ... suspend the flow of benefits to Australians and can put at risk whether a project goes ahead, as economic conditions can change, especially in a cyclical industry like mining.

---

#### FINDING 6.1

Unnecessary delays in project commencements can be costly for proponents and the community, and typically dwarf other regulatory costs.

---

## 6.1      **Application through to assessment**

The application stage has reverberations throughout the rest of the environmental approval process. At this stage, proponents submit application or referral documentation; regulators then use this documentation to inform their decisions on whether and what type of environmental assessment is needed, and the scope of any such assessment. Proponents then prepare the required assessment, often supported by a range of environmental, social and economic studies. It is also at this stage that the Commonwealth Environment Minister decides whether a project requires their approval.

---

## The broad scope of environmental assessments

In preparing EIAs, proponents have to gather information on the environment in the project's location and identify the project's expected impacts on, for example, water resources, air quality, noise and vibration levels, Indigenous culture and heritage (chapter 8), and social and economic outcomes for the community. The topics that must be addressed in an EIA are determined by terms of reference or guidelines set by regulators.

A key issue raised by study participants is that EIAs are often unnecessarily broad in scope and do not focus on the most important risks (box 6.2). This is not a new concern. Twenty-five years ago, Everitt (1995) noted the well-documented problems of 'voluminous, detailed, and exhaustive documents with unnecessarily comprehensive data', including information on 'irrelevant and insignificant issues ... with consequent waste of time and money' (cited in Sadler 1996, p. 113). The MCA (sub. 11, p. 12) submitted that:

[EIA] requirements have proliferated over recent decades as governments (state and federal) are taking an increasingly risk-averse approach to EIA. Increasing EIA information requirements are resulting in wide-ranging assessments of all impacts, regardless of materiality/level of risk, and unnecessarily increasing assessment timeframes.

The weight of submissions and other evidence suggest that this is the case, but not everyone agrees. A review of offshore environmental approval processes found that while proponents complained about 'too much scrutiny and effort being put into lower level impacts and risks', the regulator complained about proponents' 'lack of proper and consistent risk and impact assessment methods' (NERA and APPEA 2018, p. 17).

Proponents may struggle to meet information requirements because they lack experience and the Commission heard in consultation that some consultants may face financial incentives to prepare lengthy reports. Proponents may have trouble following unclear guidance from regulators. Some proponents said that they are loath to query broad terms of reference or seemingly unnecessary information requests because doing so risks further delay.

A cycle of increasing regulatory compliance (scope creep) can occur when business has a vested interest in receiving an important approval from the regulator, so there is no incentive to push back on additional information and reporting requests made from these bodies, in the interests of time (as often the associated financial cost associated with any further delay in receipt of approval outweighs the benefit). (Roy Hill, sub. 7, p. 5)

Generally speaking, the more expansive the scope of an EIA, the more expensive it is to and the longer it will take to prepare.

The financial costs are typically small relative to total project costs, but they are borne at the start of a project before it is earning revenue and often before it has secured finance. For example, Arafura Resources' 4000 page EIA cost \$2.2 million to produce and as of early 2020 the company was seeking US\$726 million of funding to meet its capital expenditure requirements (AMEC, sub. 31, p. 18; Arafura Resources Limited 2019, p. 16).

---

## Box 6.2 Perspectives on EIAs

Broad terms of reference that do not focus on the issues that matter most have been identified as a problem by proponents and the consultants they hire to produce EIAs.

... the Power and Water Corporation noted that it is generally difficult to filter the high priority from the very low risk matters in Terms of Reference ... Terms of Reference appear to provide a catch-all approach, rather than clearly focusing on elements of the environment likely to be impacted. (DoE 2014c, p. 6)

The [terms of reference] in my view take little or no notice of the risk profile presented by the project. We are required to study everything irrespective of the risk rating. Many of the studies arguably didn't need to be done to the level they were as most rely on straight forward management processes during operation to manage and mitigate impacts. (Brian Fowler, quoted in AMEC, sub. 31, p. 17)

... [for] any type of project, there would be probably 40 topics that we look at and with the way the terms of reference are written all of them have pretty much equal weight. (Mr William Haylock in Commonwealth of Australia 2014, p. 16)

... due to government's seeming inability to prioritise assessments ... to those matters which [are] of the highest risk and therefore require the greatest studies and review, the community is often required to provide submissions on enormous documents which make identifying the main issues of interest almost impossible. This not only means significant time and expense for companies for little environmental or social benefit, it has created a whole industry of professional reviewing middle men when the discussion should be with the directly affected stakeholders. (QRC, sub. 27, p. 20)

The more significant cost of unnecessarily expansive EIAs is the time they take to prepare. The NSWMC (sub. 28, p. 13) submitted that the average assessment timeframe was just over 400 days for five resource projects prior to 2014, and nearly 1000 days across seven projects since 2016. (These figures relate to assessment within the New South Wales planning system and exclude Commonwealth approval processes.) Between 2015-16 and 2019-20, for resources projects being assessed under the EPBC Act, the average time that EIAs were with proponents was 741 days (figure 6.1). As discussed above, delays to project commencement can substantially decrease the value of projects to proponents (box 6.1). Delays can also occur at the approval stage, which is discussed in section 6.2.

These costs would be justified if expansive environmental assessments were delivering overall benefits to the community, but it is unclear if this is the case. The New South Wales Department of Planning and Environment (2016, p. 4) has observed that 'EIA documents are getting larger and more complex without necessarily improving public understanding or decision making'. Indeed, some claim that the size and scope of EIAs may be hindering community involvement.

Ironically, forcing proponents to shout more loudly by ever thicker assessment documentation just means that the community will cover their ears more. The likelihood of a member of the community reading an environmental impact assessment document is inversely proportional to its thickness. (TMEC, sub. 46, attachment B, p. 2)

Notwithstanding their extensive scope, EIAs are often deemed inadequate by regulators. This can 'cause significant delays, for example through the need for information requests and responses via more information and improved modelling' (EDO, sub. 40, p. 38). And for regulators, the sheer size of environmental assessments makes the review process and

---

providing advice to decision makers a challenge, especially in the face of staffing constraints (chapter 12).

FINDING 6.2

Environmental impact assessments are often unduly broad in scope and do not necessarily focus on the issues that matter most. This comes with the direct costs of undertaking studies and preparing documentation and the more significant cost of delay to project commencement. Disproportionate and unfocused environmental impact assessments are also of questionable value to decision makers and the community.

### Risk-based EIA reduces costs and delivers better environmental outcomes

Leading-practice EIA involves the application of a risk-based approach to regulation (Macintosh 2010a). The approach recognises that different regulated activities or environments present different risks. Armed with knowledge of the likelihood and size of those risks, regulators can tailor the delivery of regulation so that compliance costs are proportionate to the benefits of addressing them (chapter 3).

In the context of EIA, taking a risk-based approach means aligning the level and focus of investigations with the size and likelihood of environmental risks, taking into account what is already known about those risks and how they can be managed. There are two key ways of doing this. First, regulators can assign different projects to different ‘assessment tracks’ (for example, assessment on referral information or assessment using an environmental impact statement). This is widely done around Australia and represents current leading practice. Second, the scope of assessments can be tailored so that they focus on more likely or harmful risks. Appropriate scoping can lead to an EIA process that costs less yet counts for more in decision making (Canter and Clark 1995, p. 31).

There are examples of this second form of leading practice, or movements towards its use:

- In Queensland, regulator guidance material indicates that environmental impact statements’ terms of reference will set out the matters the proponent is to address relative to the scale of the impact and/or its likelihood of occurrence (Qld DSDTI 2020). (But this distinction is not always found in the terms of reference given to project proponents.)
- In New South Wales, draft guidelines on scoping environmental impact statements indicate that matters to be addressed would be categorised either as a ‘key issue’ (requiring detailed assessment to understand risks and identify project-specific mitigation) or an ‘other issue’ (where management approaches are well understood and specialist studies will not be needed in most cases) (NSW DPE 2017b, p. 8). The draft guidelines are an outcome of the state’s ongoing EIA improvement project, which was in part motivated by a ‘[I]ack of focus on the most important issues’ (NSW DPE 2016, p. 3).

---

These examples notwithstanding, study participants have indicated that there is room for improvement. For example, AMEC (sub. 31, p. 5) submitted that incomplete understanding and application of risk-based approaches have led to ‘confusion in the application and assessment stages’ and ‘it also impacts on condition setting and compliance’. IAGC (sub. DR56, p. 3) also cautioned that ‘risk-based approaches can result in overly cautious management practices’.

*Regulation or regulator conduct? Or both?*

Regulators may be choosing to take a ‘laundry list’ approach to environmental assessment at times, rather than make potentially controversial decisions about the relative importance of different environmental matters. One participant in a Streamline WA workshop on environmental approvals for mining projects commented that a ‘culture of risk-aversion favours a practice of disproportionate overregulation’ (Nous Group 2019, p. 15). This speaks to regulator conduct, not regulation. Similarly, TMEC (sub. 46, attachment B, p. 1) observed that:

Regulatory decision makers try to deal with controversy by requiring proponents to gather more and more information, hoping that the sheer weight of evidence will address the concerns of opponents.

Regulators’ conduct is guided by much more than the legislation they administer. For example, there is alignment between the Minister’s Statement of Expectations and regulator-prepared guidance on the content requirements for an Offshore Petroleum Proposal.

I expect [the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA)] to take a risk-based, graduated approach to engagement and enforcement, allowing for proportionate responses to risks suited to their size, nature and complexity. (NOPSEMA 2019c, p. 2)

While all of the project’s stages and activities must be included in the description, the level of detail given for each may be scaled according to the potential nature and scale of environmental impact and risk they create and the information known about those activities at this stage of planning. (NOPSEMA 2019b, p. 8)

While APPEA (sub. 44, p. 13) submitted that regulations ‘currently drive over emphasis on very low risk/low impact areas’ other participants and reviews have complimented the offshore petroleum regulator’s conduct (Finkel 2019, INPEX, sub. 34).

The realisation and success of risk-based EIA depends on a number of factors. It requires:

- regulation that does not preclude the approach
- clear understanding of the regulation’s objectives
- clear policies, processes and criteria by which regulatory decisions are made (and information on which to base them) and
- regulators with sufficient expertise.

---

Study participants' comments suggest that these preconditions are not always in place. Anglo American (sub. 42, pp. 2–3), for example, supported the use of a risk-based approach, indicating that it would involve 'having clearer definition regarding the scope and extent of information required in support of approval applications' as well as 'encouraging stricter adherence to assessment terms of reference by regulators'.

### *Dealing with uncertainty*

A practical difficulty with applying a risk-based approach to determining the scope of environmental assessment is that the size and likelihood of project impacts is unclear at the start of the assessment process (Hawke 2009a, p. 74). Therefore, proponents and regulators need to refine the focus of environmental assessment as information comes to hand.

... the ideal is that the process is iterative and reflexive, which suggests that scoping is an ongoing, consultative exercise that leads to a narrowing of issues, as unfounded concerns are taken off the table, while issues that suggest greater potential for harm are given greater attention. (Craik 2008, p. 30)

Victoria's ministerial guidelines for environmental assessment recognise that 'implementation of a risk-based approach means that a staged study design may be appropriate' (Vic DSE 2006b, p. 14).

### *Thorough scoping would help focus impact assessment on key risks*

A straightforward way to develop EIAs that are proportionate and targeted to key project risks is to invest greater effort in the scoping stage.

Discussion between proponents and relevant regulators at an early stage can promote a shared understanding of key risks that will need to be comprehensively addressed in EIAs. This can help avoid unnecessary requirements and also clarify expectations of documentation required from proponents.

A more thorough scoping stage would also allow greater opportunity for community input. Current timeframes for scoping environmental assessments are, in many cases, short and provide little opportunity for community engagement. For example, at the Commonwealth level, guidelines for preparing an environmental impact statement have to be provided to proponents within 20 business days of a decision on the assessment approach being made. There is also no requirement to seek public comment on those guidelines. In contrast, the planning phase of impact assessment in Canada, which culminates in tailored impact statement guidelines, can take up to 180 days and involves multiple stages of consultation with Indigenous groups and other interested stakeholders (Impact Agency of Canada 2019).

A thorough scoping process, including community engagement, could reduce delays and community rancour further down the track. TMEC (sub. 46, attachment B, p. 3) submitted that the controversy surrounding the proposed Gunns Pulp Mill centred on only six issues,

---

and that identifying and dealing with those issues early (potentially including early rejection of the project) could have avoided ‘the expenditure of tens of millions of dollars on environmental studies and the generation of years of collective angst and acrimony’.

LEADING PRACTICE 6.1

Leading-practice environmental impact assessment (EIA) involves application of a risk-based approach, where the level and focus of investigations is aligned with the size and likelihood of environmental risks that projects create. Early identification of risks through thorough scoping, including community consultation, is critical for developing EIA terms of reference that focus on the project’s biggest and most likely impacts and therefore which matters need to be investigated more or less thoroughly. The ongoing EIA improvement project in New South Wales shows movement in this direction.

## Regulator guidance

Proponents’ ability to prepare EIAs that meet decision makers’ needs depends on the quality of the guidance they receive from regulators. A recent audit of the environmental assessment process in Victoria found that:

Proponents we interviewed have advised us that greater clarity in determining the type, depth and method of [Environmental Effects Statement] investigations arising from interpretation of the Ministerial Guidelines would assist them during [Environmental Effects Statement] scoping and preparation. The risk of additional costs and delays for both proponents and the department could be better mitigated if greater clarity was able to be achieved. (Victorian Auditor-General 2017, p. 21)

There are jurisdictions around Australia where valuable advice is provided. In 2019, the Western Australian Environmental Protection Authority received the International Association for Impact Assessment Regional Award ‘for its sustained contributions to good practice in impact assessment in Australia, visible through its pro-active and pioneering work in developing policy and guidance material’ (International Association for Impact Assessment 2020). The QRC (sub. 27, p. 17) commented on the value of guidance:

QRC welcomes recent, and ongoing, development of operational policies or guidance that provide a greater level of detail on legislative requirements, which will provide greater clarity of regulator expectations and interpretation.

Further improvement may require increased resourcing of environmental regulators. There is broad agreement among study participants on the need to resource regulatory agencies appropriately to improve the environmental approval process and reduce delays (chapter 12).

---

#### LEADING PRACTICE 6.2

Clear guidance on regulators' expectations about the content and quality of environmental impact assessments reduces the need for additional information requests. Western Australia and Queensland are examples of leading practice in this area.

---

## The Commonwealth–State interface

States and Territories have primary responsibility for environmental management but there are certain protected matters over which the Commonwealth has jurisdiction under the EPBC Act (chapter 3). A project only 'triggers' the EPBC Act if the federal Environment Minister judges that it is likely to have a significant impact on one or more of these matters. Participants have also raised issues with the nuclear trigger and the water trigger. Where a project is captured under a bilateral assessment agreement, a single EIA is required; otherwise, proponents have to prepare different assessments for Commonwealth and State or Territory regulators. These issues are discussed in turn.

### Triggering the EPBC Act

In 2018-19, half of all projects referred under the EPBC Act did not actually require Commonwealth approval (DoEE 2019a, p. 251). Anglo American (sub. 42, p. 13) gave some insight as to why:

Although a self-assessment process may be undertaken to determine whether significant impacts are likely, as the assessment triggers change so frequently, proponents often seek a formal determination from the Minister to obtain certainty around the need for assessment.

The referral of projects that are then found not to require the Commonwealth Environment Minister's approval has been an issue since the commencement of the EPBC Act (ANAO 2003, p. 13) and it 'represents a substantial amount of compliance and assessment work by business' (Wentworth Group of Concerned Scientists 2012, p. 4). Evaluating referrals also consumes the resources of the Department of Agriculture, Water and the Environment (DAWE).

Provision of better guidance to assist proponents when they are considering whether to refer their project may go some way towards addressing this inefficiency (ANAO 2003, p. 13; Rio Tinto, sub. 26, pp. 6–7). But there are inevitable difficulties when evaluating whether impacts are 'likely' and the concept of significance 'is, to an extent, inherently uncertain and subjective' (Prutej 2007, p. 5). 'It is not unusual to have experts in the same field differ markedly on questions of significance' (Hawke 2009b, p. 259).

Another way of addressing this problem, adopted in some jurisdictions, would be to require assessment and approval based on the nature and extent of proposed activities rather than their potential impacts. In Queensland, projects can proceed without assessment and operate



---

subject to standard conditions if they meet certain eligibility criteria (referred to as ‘standard application’). For example, mining projects that do not cause more than 10 hectares of land to be significantly disturbed and are not carried out in pre-defined environmentally sensitive areas may be eligible for ‘standard application’ (Qld DEHP 2016).

The Australian Government recently announced changes to environmental assessment under the EPBC Act and interactions with State and Territory processes (box 6.3).

### **Box 6.3 Recently announced changes to environmental assessment**

The ‘Busting Congestion in the Environmental Assessment Process’ initiative was allocated \$25 million over the period 2019-20 to 2020-21 ‘to work through the backlog of environmental approval applications’ (Australian Government 2019, p. 216). An additional \$12.4 million was allocated to this initiative over the two years from 2020-21 (Australian Government 2020, p. 51). This funding contributed to significantly faster approvals — for example 98 per cent of key decisions in the June quarter 2020 were made within statutory timeframes, compared with only 19 per cent in the December quarter 2019 (DAWE 2020c).

In addition, the Australian Government announced that it would:

... partner with the Western Australian Government to develop a system that will reduce approval times, allow project proponents to submit a single application via a single online portal, track its progress and access a database of biodiversity studies relevant to their project. (Morrison 2019)

There are currently no processes in place to aggregate the environmental data that proponents collect in the assessment process (Box, Hansen and Bradsworth 2018) and the announced ‘database of biodiversity studies’ would fill this gap. The data could improve regulators’ understanding of cumulative impacts and would be valued by a range of stakeholders. Such a repository was recommended in 2014 by the House of Representatives Standing Committee on the Environment (2014, pp. 79–81), and had broad support from the resources sector, environmental groups, consultants and the then Commonwealth Department of the Environment.

### *The ‘nuclear trigger’*

There is some confusion about when the nuclear trigger should apply. Several participants suggested that the nuclear trigger captures projects that do not warrant Commonwealth approval (MCA, sub. 11, p. 12; AMEC, sub. 31, p. 6). For example:

- The Carrapateena copper–gold project activated the nuclear trigger because its tailings dam will contain radioactive minerals, even though exposures will be below regulatory limits (OZ Minerals 2017, pp. 106–107; South Australian Government, sub. 25, p. 6).
- Rare earths and mineral sands projects (for example, the Nolans Project in the Northern Territory) are activating the nuclear trigger despite the explanatory memorandum of the EPBC Act explicitly stating that these are not nuclear actions (Parliament of Australia 1998, p. 31). However, there is some disagreement as to whether these projects should be captured — the Australian Radiation Protection and Nuclear Safety Agency noted it is unclear whether the rare earths and mineral sands exemption applies to the large-scale disposal facilities for radioactive waste for these operations, which is why the

---

EPBC Act is applied (ARPANSA 2020, p. 12). The Environmental Defenders Office (sub. DR62, p. 30) also argued that the Nolans project could have triggered another limb of the nuclear trigger.

It is not clear how significant a problem this is in practice for the efficiency of the environmental approval process, because projects often trigger the EPBC Act for multiple reasons. The Carrapateena and Nolans projects would both have triggered the EPBC Act due to their potential impacts on threatened species (Arafura Resources Limited and GHD 2016, pp. 2–3; Wyndham 2017, p. 1). However, when projects are classed as nuclear actions they require a whole-of-environment assessment, which may mean that the assessment addresses matters already regulated by the States and Territories (Samuel 2019, p. 19).

The regulatory burden created by looking at nuclear actions under the EPBC Act may be unnecessary given the other regulatory arrangements that are in place. Australia’s Nuclear Science and Technology Organisation (cited in Hawke 2009a, p. 353) has previously submitted that:

... there is significant overlap between the role of [the Australian Radiation Protection and Nuclear Safety Agency] and the assessment of “nuclear actions” under the EPBC Act ... [The Australian Radiation Protection and Nuclear Safety Agency’s] expertise in radiation protection and nuclear safety establishes it as a competent regulatory body in respect of the hazards that radiation may pose to the environment, and that the dual approval system may benefit from review to the extent that the same issues are considered under both assessment processes.

The Australian Radiation Protection and Nuclear Safety Agency more recently told the second EPBC Act Review that ‘the current definition of nuclear actions under the EPBC Act can lead to substantially the same assessment activities being undertaken across multiple jurisdictions creating duplicative regulatory processes’ (ARPANSA 2020, p. 3).

The recommendations of the second independent review of the EPBC Act for a set of national environment standards and devolution to the States (discussed later) would address duplication in this area, although the Commonwealth would likely retain some role.

### *The ‘water trigger’*

Since 2013, coal seam gas projects and large coal mines expected to have a significant impact on a water resource have been classified as protected matters under the EPBC Act, and so require Commonwealth approval. There are opposing views on the need for this so-called ‘water trigger’.

- The NSWMC (sub. 28, p. 26) submitted that this is ‘the best example of duplication of function for no clear additional benefit’. Other submissions made a similar point (AMEC, sub. 31, p. 7; APPEA, sub. 44, p. 17; MCA, sub. 11, p. 16; Origin, sub. 8, p. 4; QLS, sub. 41, pp. 6–7; QRC, sub. 27, pp. 13–14).

- 
- The post-implementation *Independent Review of the Water Trigger Legislation* found that ‘the water trigger is an appropriate measure to address the regulatory gap that was identified at the time of its enactment’ (Hunter 2017, p. 6).
  - Environmental groups supported the water trigger (EDO, sub. DR62, p. 32; WWF, sub. DR93, p. 2; ACF, sub. DR94, pp. 7–9). For example, Australian Conservation Foundation said ‘the water trigger acts as a further important check-and-balance, to ensure that the cumulative impacts of water-affecting activities proposed by large resource projects are properly assessed’ (sub. DR94, p. 7).

The post-implementation review provided three key examples to demonstrate the presence of a regulatory gap (DoEE 2016a, p. 16).

- In the case of the first example, the review noted that advice from the Independent Expert Scientific Committee (IESC) ‘identified eight significant hydrological concerns’. But the eight hydrological concerns were, in fact, identified by the Environment Minister in a letter to the IESC, and the IESC’s advice detailed whether the Commonwealth’s draft approval conditions adequately addressed the concerns. In seven of eight areas of concern, the IESC noted that draft approval conditions specified the requirements outlined by the minister; in one case it noted that further clarification was needed.
- In the case of the second example, the review indicated that the Commonwealth Environment Minister’s approval ‘was limited in protecting groundwater by requiring adherence to New South Wales government approval conditions’ but did not provide evidence that the New South Wales conditions were inadequate.
- In the case of the third example (which actually included reference to multiple projects), the review noted that the Commonwealth Environment Minister ‘was only able to place conditions on the projects that directly related to the then [matters of national environmental significance]’. The IESC recommended three modifications to the New South Wales government approval conditions in relation to one project’s surface water and groundwater management plans, which it otherwise supported. In relation to other New South Wales government approval conditions, the IESC’s advice to the Commonwealth indicated that they were ‘appropriate and adequate to protect matters of national environmental significance’, and ‘environmental best practice’ and would address identified issues (IESC 2012, pp. 2–3).

The Commission does not consider that these examples are evidence of a regulatory gap and compelling case for the trigger. However, some participants argued that there is a regulatory gap: ACF (sub. DR94, p. 7) said that State regulation has been insufficient in properly assessing the water resource impacts of large mining projects, including cumulative impacts and the EDO (sub. DR62, p. 32) said the states’:

poor history when it comes to managing shared or connected water resources and the threat that coal seam gas extraction and large-scale coal mining pose ... makes a compelling case for Commonwealth involvement in large projects with impacts on groundwater at the very least.

---

The interim report of the second review of the EPBC Act recommended the water trigger be retained but limited to consideration of projects that risk irreversible depletion or contamination of cross-border water resources, and that State and Territory laws should be accredited if they meet the proposed National Environmental Standards (Samuel 2020, p. 51). This proposal would go some way towards reducing the regulatory burden while maintaining Commonwealth oversight of some significant matters, although the effectiveness of such an arrangement will depend on how it is implemented (discussed below).

#### FINDING 6.3

The referral process for the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) and the nuclear and water triggers are creating unnecessary regulatory burden.

- Over half of all projects referred under the EPBC Act do not ultimately require Commonwealth approval.
- Projects ruled out as nuclear actions in the EPBC Act explanatory memorandum are being treated as nuclear actions requiring Commonwealth environmental approval.
- The evidence that the water trigger filled a significant regulatory gap is not compelling. The recommendation of the interim report of the second review of the EPBC Act to limit application of the water trigger should help reduce duplication.

### Bilateral assessment agreements

Bilateral assessment agreements accredit certain State and Territory processes for the purposes of assessments under the EPBC Act, allowing proponents to prepare a single EIA for both Commonwealth and State and Territory regulators.

Agreements are in place between the Commonwealth and most States and Territories<sup>13</sup>, and the Commission (2013a, pp. 139–144) sees merit in including as many State and Territory assessment processes in bilateral agreements as possible. South Australia, for example, increased the coverage of its bilateral assessment agreement in 2014, and intends to seek even broader accreditation in the future (South Australian Government, sub. 25, p. 5).

The agreements in force capture most State and Territory assessment processes, where they meet the standards for accreditation laid out in the EPBC Act. Some processes are not fully captured

---

<sup>13</sup> Western Australia does not have a bilateral assessment agreement with the Commonwealth but projects may be assessed through an ‘accredited process’, a process ‘that is accredited on a one-off basis for the purposes of the [EPBC] Act’ (Macintosh 2010, p. 227). Rio Tinto (sub. 26, p. 6) see value in renegotiating a bilateral assessment agreement, and the Commonwealth Environment Minister has published a notice of intent to do so (Ley 2019). There is also an intention to renegotiate the Northern Territory’s bilateral assessment agreement; the previous agreement lapsed with the reform of the Northern Territory’s environmental legislation in 2019 (Northern Territory Department of Environment and Natural Resources, pers. comm., 6 March 2020).

---

because they were introduced following the finalisation of the relevant bilateral assessment agreement and have not yet been re-accredited (DAWE, pers. comm., 6 March 2020).

Thirty per cent of all resources projects needing assessment under the EPBC Act have been captured under bilateral assessment agreements (unpublished data from DAWE), and a number of resources industry stakeholders have indicated support for these agreements (Anglo American, sub. 42, p. 15; INPEX, sub. 34, p. 8; NSWMC, sub. 28, p. 30; Roy Hill, sub. 7, p. 5). (A further 13 per cent are captured under an ‘accredited process’ (unpublished data from DAWE).)

Where projects are assessed under a bilateral assessment agreement, State and Territory regulators should be able to ensure that assessment documentation meets Commonwealth decision makers’ needs. This does not always happen. For example, a review has previously found that the Commonwealth decision maker sought additional information on three quarters of Northern Territory projects assessed under a bilateral assessment agreement (DoE 2014c, pp. 6–7). The *Environment Protection Act 2019* (NT) is expected to address this shortcoming.

#### FINDING 6.4

Bilateral assessment agreements significantly reduce regulatory burden for projects that require Commonwealth and State or Territory environmental assessment.

### National environment standards and devolution

The interim report of second independent review of the EPBC Act recommended the Australian Government introduce a set of National Environmental Standards (box 6.4) and then accredit State and Territory systems to assess and approve projects where they can demonstrate they meet the Standards (Samuel 2020, p. 55). The Australian Government supported this recommendation (Ley 2020c).

This proposal would address several issues raised in this chapter relating to Commonwealth–State overlap, including those relating to the nuclear and water triggers, and would support the use of bilateral assessment agreements and bilateral approval agreements (section 6.2). However, the process is in its infancy. The ability of the Commonwealth to develop effective national standards that are supported by State and Territory Governments will be crucial.

---

### Box 6.4      **Proposed National Environment Standards**

The interim report of the second independent review of the EPBC Act recommended the Australian Government create a set of legally enforceable National Environmental Standards to underpin the EPBC Act. The intent of the Standards would be to focus decision makers on environmental outcomes being achieved under the EPBC Act, and clearly define the fundamental processes for sound decision making. The review recommended the Standards be set by the Commonwealth Environment Minister and should be granular and measurable (with targets that specify intended outcomes) without being overly prescriptive. The review recommended Interim Standards be introduced as a first step, to facilitate rapid reform and streamlining, which should evolve as soon as practicable into more specific, definitive and data-based Standards as information improves.

*Source:* Samuel (2020).

## 6.2      **Approval and conditioning**

Drawing on an EIA, regulators decide whether to grant a project environmental approval, and under what conditions. Study participants have raised concerns in this area, including delays, Commonwealth–State duplication and inappropriate approval conditions.

### **Delays at the approval stage**

Delays at the approval stage are a key source of frustration for project proponents. These are delays that proponents experience while waiting to receive an approval decision after they have submitted their assessment documentation, and are often technically defined as time spent waiting in excess of statutory or target timelines.

The cause of delays at the approval stage is often disputed: proponents blame regulators or politicians, who themselves point out that they often need to request more information from proponents. A 2020 audit of referrals, assessments and approvals under the EPBC Act found that reasons for exceeding statutory timeframes included ‘the department not considering that it has satisfactory information to assess the proposed action, administrative delays, disagreement between the department and the regulated entity over proposed conditions, and delays in state or territory approvals where actions are also subject to state or territory approval requirements’ (ANAO 2020, p. 51). The regulator of Australia’s offshore petroleum sector has ‘noted a large variation in quality of [environment plan] content’ (NERA and APPEA 2018, p. 18).

Delays at the approval stage may be of particular frustration for proponents but this is only one part of the environmental approval process. Delays could be caused by issues in other parts of the process. These include, for example:

- inadequate scoping of the environmental assessment

- 
- poor guidance from regulators on the type of information needed to meet the requirements of the assessment
  - changes in the importance of different aspects of the environmental assessment as more information comes to light
  - insufficient effort on the part of proponents
  - inappropriate statutory timelines
  - regulator under-resourcing or staff turnover.

Where regulators operate within statutory or target timelines they may be able to ‘stop the clock’ when asking for additional information from proponents.<sup>14</sup> The ‘clock’ typically resets when the regulator receives the information, but may also be ‘paused’ and restarted (without being reset) once the information is received. (This latter approach has been raised as a potential improvement to Victoria’s planning and building approval processes (Cronin 2019a, pp. 71–72).)

Study participants have raised concerns about the application of stop-the-clock provisions. The MCA (sub. 11, p. 19) submitted that the clock is often stopped late in the approval process. The MCA (sub. 11, p. 18) cited an example of the Commonwealth Minister extending the timeframe for an approval decision three times, ‘requiring additional information on matters already addressed and conditioned by the state in its approval of the project’. This apparently led to an eight-month delay before the Commonwealth ultimately approved the project under the same conditions as the State regulator, with an additional condition that a review be conducted in the future.

#### FINDING 6.5

Unpredictable and lengthy delays at the approval stage are a key frustration for project proponents. That frustration is compounded where delays are seen as unnecessary or their cause is unclear.

### Leading-practice ways of reducing delays at the approval stage

The Commission (2013a, pp. 204–207) has previously recommended statutory timelines, tighter specification of stop-the-clock provisions and the use of deemed decisions to reduce delays in approvals.

---

<sup>14</sup> Regulators may be able to stop the clock at various points, not just at the approval stage. Woodside Energy (sub. 18, p. 4) have suggested that use of stop-the-clock provisions ‘appears routine’ when regulators are deciding on the level of assessment that a project requires.

---

### *Statutory timelines*

Statutory timelines are not used in all jurisdictions and information on performance against timelines (statutory or otherwise) is patchy, but there are some exceptions:

- In Western Australia, the Department of Mines, Industry Regulation and Safety (DMIRS) reports on a quarterly basis its performance against target timeframes for mining proposals.<sup>15</sup> The department also maintains an electronic system for proponents to track mineral, petroleum and dangerous goods applications.
  - DMIRS reports the average number of business days it takes to finalise an exploration licence, disaggregated by time with DMIRS, time with the proponent and time with the native title process (WA DMIRS 2020a).
- In South Australia, the Department for Energy and Mining (DEM) reports annually on its performance against target timeframes. In 2017, 38 per cent of mining projects' programs for environmental protection and rehabilitation were decided within target timeframes (SA DEM 2017, pp. 58–59). The target timeframe is 92 days, and includes all time other than when proponents are responding to requests for information or have requested that an assessment is put on hold.

At the Commonwealth level, DAWE reports annually on the share of EPBC Act project decisions made within statutory timeframes. In 2018-19, 62 per cent of decisions were made within statutory timeframes and it was noted that delays were 'due to high workloads and working with project proponents to obtain additional information' (DoEE 2019a, p. 40). In the offshore space, NOPSEMA reports on the median time for assessment of environmental plans (identifying time spent with NOPSEMA and time spent with the applicant) (NOPSEMA 2019a).

It is important that timelines imposed on regulators are realistic. Data supplied by DAWE indicate that the average time taken to make approval decisions for resource projects was 253 days over the period 2015-16 to 2019-20, much greater than the statutory timeline of 20–40 days (depending on the type of assessment) (unpublished data from DAWE). Proponents are likely to be disappointed if they plan their projects around the statutory timeline. As a participant in a Streamline WA workshop on environmental approvals in mining said, 'it would be better if timeframes are longer and are being met rather than short timeframes that are not being met' (Nous Group 2019, p. 10).

---

<sup>15</sup> Mining leases are distinct from environmental approvals. In Western Australia, mining leases cannot be granted unless the EPA has decided not to assess the proposal or the proposal has been approved by the Minister for the Environment if assessment was deemed necessary by the EPA (Environmental Defender's Office Western Australia 2011). The EPA does not publish information on performance against target timelines but information is available on where projects are up to in the environmental assessment process.



---

#### LEADING PRACTICE 6.3

Timelines, statutory or otherwise, provide proponents with information about how long regulatory processes ought to take, which supports project planning. They also focus regulators' attention, and public reporting of regulator performance in meeting those timelines is a means of keeping them accountable. For example, both Western Australia and South Australia report on the share of mining proposals and other approvals finalised within target timelines.

#### *Stop-the-clock provisions*

Stop-the-clock provisions complement the use of timeframes. They are not, in themselves, a barrier to effective regulator performance, so preventing their use by regulators (as the BCA suggests; sub. 43, p. 8) would not guarantee improved performance. At the Australian Pesticides and Veterinary Medicines Authority, '[c]hanges to remove clock stoppages in 2014, aimed at giving industry more certainty around assessment times [failed] to deliver' (Reason Group 2017, p. 19).

If significant matters emerge that are worthy of decision makers' consideration but were not identified at the scoping stage or could not have been reasonably anticipated, regulators' measured performance should not suffer. However, a number of participants have suggested that this is not how the provisions are being used.

The Commission is not in a position to evaluate whether stop-the-clock provisions are being appropriately used — this speaks to a lack of transparency. Publishing reasons for stopping the clock, with specific reference to what information is being sought and how it will impact decision making, is a basic accountability measure that should be in place. This would take up time and resources, and would require appropriate funding.

---

#### LEADING PRACTICE 6.4

Leading-practice use of stop-the-clock provisions means placing limits on when they can be used — when matters emerge that were not contained in the terms of reference or could not have been reasonably anticipated — and transparency about why the clock is stopped. No examples of leading practice have been identified.

#### *Deeming provisions*

Where decisions are made by ministers, it can result in delays (figure 6.1). Deemed decisions are one way of addressing this problem (PC 2013a, p. 206). Deemed decisions involve the assessment agency's recommendation to the final decision maker becoming the approval instrument if the decision maker does not make a decision within statutory timeframes. The

---

recently legislated *Environment Protection Act 2019* (NT) includes deeming provisions, so that the draft approval and conditions prepared by the NT EPA become the approval instrument if the minister fails to make a decision within 30 business days of receiving the EPA’s assessment report and draft approval.

The EDO recommended against deemed approvals for higher-risk decisions:

There is a high risk that such a deemed approval could be triggered through inadvertent miscalculation of statutory timeframes or be used by decision-makers who would prefer not to make politically sensitive decisions themselves. (sub. DR62, p. 34)

Ministers would retain their political accountability even if they rely on deemed decisions — the public would be entitled to hold the minister accountable for the ultimate outcome. Indeed, the possibility of being held politically accountable for a deemed decision could focus ministers’ attention on complex matters, and induce them to more effectively prioritise which approvals they involve themselves in to productively manage their time.

The WWF (sub. DR93, p. 2) did not support deemed decisions because it believed delays in assessments and approvals were mainly due to capacity and resourcing constraints affecting regulators. The Commission agrees that this could be a problem, and is recommending that governments assess whether regulators are adequately funded (recommendation 12.1). Deemed decisions could increase incentives for ministers to fund regulators adequately, as ministers would still be politically accountable for the ultimate decision.

The Commission (2013a, pp. 266–267) has previously argued that because deemed decisions are not made by elected representatives there should be opportunity to subject them to limited merits review (section 6.4). The *Environment Protection Act 2019* (NT) does not allow merits review of deemed decisions.

---

#### LEADING PRACTICE 6.5

The use of deemed decisions, whereby the assessment agency’s recommendation to the final decision maker becomes the approval instrument if a decision is not made within statutory timeframes, is a leading-practice approach to reducing delays. At the same time, deemed decisions should be subject to limited merits review. No jurisdiction ticks both boxes — the *Environment Protection Act 2019* (NT) introduced deemed decisions but does not allow them to be subjected to merits review.

---

## Commonwealth–State duplication

Projects likely to have a significant impact on a matter protected under the EPBC Act generally require environmental approval by both the Commonwealth and the State or Territory in which they occur. Where projects require approval from both Commonwealth and State or Territory decision makers this may add to project approval timeframes and

---

results in two sets of potentially inconsistent approval conditions (box 6.5). Complaints with conditions are discussed further below. Rehabilitation, offsets, and compliance monitoring and enforcement — all of which may be addressed in a project’s approval conditions — are discussed in chapter 7.

It is not clear how large delays caused by the requirement for both Commonwealth and State or Territory approval are:

- AMEC (sub. 31, p. 6) submitted that triggering the EPBC Act can add a minimum of six to nine months to project timelines.
- The post-implementation review of the water trigger estimated that the average time between State or Territory and Commonwealth approval was 105 days (DoEE 2016a, p. 23).
- The Department of the Environment reported in 2014 that the median time between State or Territory and Commonwealth approval for mining and energy projects was 69 days between 2008 and 2013 (DoE 2014b, p. 8). The maximum was 720 days. These figures may exclude projects where the Commonwealth made its approval decisions first and projects that it was assumed would not be captured under a bilateral approval agreement.
- There are instances in which the Commonwealth approval was received years before the State or Territory approval, for example, the Wandoan and Alpha coal mines (Elks 2020b; McGrath 2014, pp. 168–170).

#### **Box 6.5      Inconsistency, overlap and duplication in conditions**

Inconsistency, overlap and duplication in conditions is a concern for industry.

81 per cent of [survey] respondents whose actions were subject to conditions under the EPBC Act and state/territory planning and environment permits, reported some or substantial overlap in the conditions. (Macintosh 2009, p. 7)

The imposition of approval conditions under the EPBC Act also increases compliance costs across Australia, particularly when those such approval conditions duplicate or impose additional requirements that are similar to State or Territory requirements. (NSWMC, sub. 28, p. 37)

... during the federal government’s eight-month delay in consideration of approval, recommendations for project conditions were made that duplicated and even contradicted WA approval conditions aimed at addressing the same issues. This occurred despite these concerns being raised by the WA Government and the proponent. (MCA, sub. 11, p. 18)

Bilateral approval agreements are one way of reducing Commonwealth–State duplication. These agreements would allow State and Territory decision makers to approve or reject projects under the EPBC Act, standing in for the Commonwealth Environment Minister. They would not, or should not, change the nature of the approval decision made under the EPBC Act — they would transfer the work of evaluating project impacts on matters protected under the Act to the States and Territories.

The EPBC Act has always permitted bilateral approval agreements but only one has ever been negotiated, an agreement (since expired) covering actions under the management plan

---

for the Sydney Opera House. The experiences of successive Australian Governments have revealed the difficulties associated with negotiating satisfactory agreements:

- When the Australian Government investigated the negotiation of bilateral approval agreements in 2012, ‘significant challenges that emerged meant that providing both certainty and consistency for business and maintaining high environmental standards could not be achieved’ (Urquhart and Pratt 2014, p. 1).
- A subsequent government sought and failed to make technical amendments to the EPBC Act to ensure that bilateral approval agreements would ‘operate effectively and efficiently and to provide certainty to proponents’ (Parliament of the Commonwealth of Australia 2014, p. 2).

Some participants supported a continued role for the Commonwealth, and were concerned that State and Territory regulators would not adequately protect the environment (ACF, sub. DR94, pp. 10–12; AEPLG, sub. DR63, p. 3; EDO, sub. DR62, p. 36; WWF, sub. DR93, p. 3). The WWF (sub. DR93, p. 3) said:

Protecting Matters of National Environmental Significance requires a national perspective across state and territory boundaries; hence WWF considers that the Commonwealth should retain the ultimate power of review and approval. This will ensure an additional and necessary check on matters of truly ‘national environmental significance’, guarantee consistency across jurisdictions and protect against undue influence in local-level decision making.

The Commission (2013a, pp. 189–197) maintains in-principle support for bilateral approval agreements, noting that the EPBC Act requires amendment to put them into practice. The Commission does not view bilateral approval agreements as a means to reduce environmental (or other) standards, but as a means to reduce regulatory duplication while retaining appropriate standards. Nonetheless, the interim report of the second independent review of the EPBC Act argued that past attempts at establishing bilateral approval agreements foundered because they were not based on robust national standards.

There was considerable community and stakeholder concern that environmental outcomes were not clearly defined and the states and territories would not be able to uphold the national interest in protecting the environment. A lack of clear environmental (as opposed to process) standards fuelled political differences at the time. (Samuel 2020, p. 53)

The review’s recommendation for the Commonwealth to set National Environmental Standards was aimed at addressing this issue (box 6.5).

In September 2020, the House of Representatives passed the Environment Protection and Biodiversity Conservation Amendment (Streamlining Environmental Approvals) Bill 2020, which would facilitate ‘the legally robust devolution of environmental approvals to the States and Territories’ and would make technical amendments to the EPBC Act ‘to support the efficient, effective and enduring operation of bilateral agreements’ (Ley 2020b, p. 1). The Government introduced the Bill into the Senate in October 2020.

---

#### RECOMMENDATION 6.1

The *Environment Protection and Biodiversity Conservation Act 1999* (Cth) should be amended, in line with the Environment Protection and Biodiversity Conservation Amendment (Streamlining Environmental Approvals) Bill 2020 (Cth), to enable negotiation of bilateral approval agreements.

The negotiation of any future bilateral approval agreements should take into consideration concerns raised with previously developed draft agreements. For example, the BCA (2014, p. 1) noted that Queensland’s draft agreement only covered projects requiring the preparation of a full environmental impact statement — so smaller or less risky projects would not be captured under the agreement. In the other direction, TMEC (2014, p. 2) suggested that:

The [Tasmanian draft agreement] as written is suitable for routine, non-controversial projects but it fails to address the problems that major projects, such as mines, face in Tasmania. ... If the one-stop shop approvals shop is to be true to its intent, the Bilateral Agreement must do more than smooth the administration of simple approvals — it must tackle the hard approvals too, like mines, the very ones for which an improved approval process is really needed.

#### Reducing Commonwealth–State duplication

There are ways to reduce Commonwealth–State duplication with current legislative settings (with or without bilateral approval agreements). One possibility would be for the Commonwealth to rely to a greater extent on State or Territory approval conditions. Suggestions to this effect have been made in relation to groundwater conditions in particular (APPEA, sub. 44, p. 17; Origin, sub. 8, p. 4).

The Commonwealth has recognised the desirability of greater reliance on State or Territory approval conditions. It seeks to apply a condition-setting policy that has as its first-best option an approval condition that simply requires compliance with State or Territory approval conditions (DoE 2016b, pp. 5–6, 2016c, p. 4). This is not always feasible though. To be able to rely more directly on State and Territory conditions, the Commonwealth may require additional commitments from the States in bilateral assessment agreements. The *Assessment Bilateral Agreement Draft Conditions Policy* noted that those commitments would include that States and Territories:

- ensure [their] decisions to approve actions and attach conditions (if any) address the likely significant impacts on matters of national environmental significance
- provide a recommendation report to the Australian Government on whether the action should be approved under the EPBC Act, what conditions should be attached for matters of national environmental significance, reasons for the recommended decision and conditions, and a statement that the recommendation complies with relevant legislative and policy requirements
- continue to monitor compliance with conditions, including those relating to managing impacts on matters of national environmental significance, and

- 
- report to the Australian Government on compliance with the state conditions, and any variations or breaches to state conditions. (DoE 2015, p. 6)

Commitments such as these would reduce inconsistencies and overlap in project approval conditions between the Commonwealth and the States or Territories.

#### RECOMMENDATION 6.2

When bilateral assessment agreements are renegotiated, State and Territory governments should consider making additional commitments to address inconsistencies and overlap in project approval conditions. These commitments could be modelled on those described in the *EPBC Act 1999 Assessment Bilateral Agreement Draft Conditions Policy*.

The Commission has heard from study participants that they have had positive experiences where Commonwealth and State or Territory regulators co-operate, but this co-operation seems to evaporate if their project becomes politically sensitive. The QRC (sub. 27, p. 14) submitted that ‘in the absence of an approval bilateral, [we] would suggest that the State Government cultivate a more collaborative and communicative relationship with the Federal Government’. Similarly, Rio Tinto (sub. 26, pp. 5–6) submitted that:

In the absence of an approvals bilateral agreement, there is also scope to reduce regulatory burden by improving existing processes under current legislation ... As such it is important there is greater collaboration between the Commonwealth and the State to ensure the State assessment process meets Commonwealth requirements to avoid unnecessary delays to project approval.

Co-operation between Commonwealth and State or Territory regulators could be improved through out-posting of staff and EPBC Act assessment and approval training.

- In the past, Commonwealth staff were out-posted to work with regulators in Queensland, the ACT, Western Australia and New South Wales (DoE 2016c, p. 4). Following implementation of the Australian Government’s one-stop-shop policy in 2013, Commonwealth officers were embedded in the relevant New South Wales and ACT government regulators. These roles have now ceased (DAWE, pers. comm., 6 March 2020).
- DAWE has made training in assessment under the EPBC Act available to New South Wales and Queensland regulators. To date, only officers from New South Wales have taken up this opportunity (DAWE, pers. comm., 5 March 2020). (Regulator capability is discussed further in chapter 12.)

In June 2020, the Commonwealth, State and Territory Governments announced they would be working together to reduce the assessment and decision timeframes for 15 major infrastructure and resources projects (DAWE 2020b; Ley 2020a). The Commonwealth said it would work with States and Territories to establish joint assessment teams to reduce duplication in assessment processes (DAWE 2020b).

---

#### LEADING PRACTICE 6.6

Co-operation between the Commonwealth and the States and Territories in environmental assessment and approval processes can be supported by:

- the Commonwealth out-posting staff with State and Territory regulators, prioritising jurisdictions where more projects require approval by both levels of government
- State and Territory regulators taking up opportunities to have their staff trained in the application of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth).

New South Wales is an example of leading practice with respect to both initiatives.

---

### Approval conditions not fit for purpose

In addition to the issue of overlapping conditions, discussed above, a number of participants have raised concerns about how appropriate approval conditions are, and over-reliance on prescriptive conditions.

There is a trend for more conditions to be imposed on all projects due to a one-size-fits approach, rather an impact-based analysis. (BCA, sub. 43, p. 5)

Project approval conditions on minerals projects have become increasingly numerous and prescriptive. ... This is of particular concern where such conditions are not risk-based, resulting in significant compliance effort for little environmental gain. (MCA, sub. 11, p. 13)

Failure to tailor conditions to projects may leave proponents facing requirements that are not fit for purpose and that may even be impossible to comply with. In one example provided to the Commission, a project's approval conditions required the proponent to survey rock art sites that they did not have access to.<sup>16</sup>

Proponents have a strong incentive to negotiate conditions that suit them, but doing so takes time and risks delay. 'Prolonged consultation with proponents to ensure conditions were achievable' (ANAO 2003, p. 64) has previously been identified as a reason that timeframes under the EPBC Act are not met. The Commission has heard that some companies are loath to seek variations for fear of delay, and Origin (sub. 8, p. 3) submitted that:

In addition to excessive delays in decisions, many of the EPBC approval conditions require a variation process to make them fit for purpose. The variation of these conditions has no statutory timeframes, making assessment timeframes very uncertain.

The Commission has heard that seeking variations to approval conditions once they have been agreed to or approvals for project extensions is a time-consuming process with uncertain outcomes. The NSWMC (sub. 28, p. 14) submitted that 'there has also been a

---

<sup>16</sup> The example is not used to suggest the ongoing monitoring of impacts on the rock art is not appropriate. This is an example of a condition that would, potentially, be impossible to comply with.

---

significant increase in assessment times for modification applications for resources projects in NSW, including minor administrative modifications’. Anglo American (sub. 42, p. 7) expressed similar concerns in relation to the EPBC Act.

The use of overly prescriptive rather than outcomes-based conditions means that new, more efficient, ways of achieving environmental outcomes be eschewed in the name of compliance. And a review of interactions between the agriculture sector and the EPBC Act found that the Environment Minister’s ability to vary approval conditions ‘is largely restricted to changes that expand protection of [matters of national environmental significance], rather than pragmatic changes that seek to maintain current levels of protection by alternate means’ (Craik 2018, p. 56).

This may be putting a brake on productivity growth. As the NSWMC (sub. 28, p. 20) has submitted, mining is ‘subject to changes as knowledge and technology improves’ and ‘it is important that mining has access to an efficient process for modifying development consents’.

Approval conditions may also be written in a way that creates difficulties for regulators who have responsibilities for monitoring and enforcement. The EDO (sub. 40, p. 38) described unenforceable or unclear conditions as ‘a chronic issue in resource approvals’, and the Australian National Audit Office (ANAO) found that nearly 80 per cent of approvals it examined relating to the EPBC Act were not compliant with procedural guidance or contained clerical or administrative errors, ‘reducing the department’s ability to monitor the condition or achieve the intended environmental outcome’ (ANAO 2020, p. 58). The ANAO also found that that DAWE did not consistently record the desired environmental outcomes and how conditions would meet them (ANAO 2020, p. 61).

### Leading-practice condition setting

The Commission (2013a, p. 213) has previously recommended that:

... regulators adopt a ‘leading practice’ framework for setting conditions. Key principles include: limiting conditions to the impacts of the development being consented, outcome-based requirements where possible and greater alignment between project-specific conditions and broader policy frameworks.

An outcomes-based or performance-based approach to regulation (chapter 3) reduces the potential for conditions to stifle innovation. The approach requires companies to achieve particular performance standards or measurable outcomes (set or agreed to by the regulator) but does not dictate how the company should achieve these outcomes.

If outcomes are well-defined and measurable they also provide a yardstick against which regulators can assess projects’ environmental performance. A number of regulators recognise the value of outcomes-based conditions.

- One of the acceptance criteria that NOPSEMA applies to proponents’ environment plans is whether the plan ‘provides for appropriate environmental performance outcomes,



---

environmental performance standards and measurement criteria’ (Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009 (Cth), r. 10A(d)).

- The Commonwealth’s *Outcomes-based conditions policy* (DoE 2016d) outlines the benefits of an outcomes-based approach and when it should be used. The policy acknowledges that some proponents ‘may be unable to commit to the level of management or monitoring required for certain outcomes and may therefore prefer more prescriptive conditions’ (DoE 2016d, p. 9). The Commission has heard from regulators that project proponents, at times, resist the imposition of outcomes-based conditions because the cost of meeting a given standard may be unknown at the start of the project.
  - However, while the approach is sound, the Commonwealth has not been consistently adhering to its policy. As mentioned earlier, the ANAO found that most approvals did not comply with procedures (or contained errors). The ANAO also found that 23 of the 26 approvals it examined (issued from September 2015 to October 2018) did not have the required document specifying the desired environmental outcome and a description of how the proposed conditions met those outcomes (ANAO 2020, p. 61).
- Draft guidelines in New South Wales identify three types of conditions which could be applied to projects, depending on the situation, including performance-based conditions. The performance-based conditions identify criteria that must be complied with to achieve an appropriate environmental outcome but do not specify how the outcome is to be achieved (NSW DPE 2017a, p. 8).
- Norway’s offshore petroleum regulation takes a performance-based approach ‘where expertise to design and choose technologies and methods to achieve stated goals’ is ‘primarily located within industry ... The premise of this approach is that industry actors are in a better position to react to changes in technology development and knowledge about risk than government agencies’ (Knol-Kauffman, Solas and Arbo 2020, pp. 16–17).

#### LEADING PRACTICE 6.7

Outcomes-based approval conditions enable companies to choose least-cost ways of achieving defined environmental outcomes. The National Offshore Petroleum Safety and Environmental Management Authority has a leading-practice approach to outcomes-based condition setting.

While blanket application of conditions designed for a particular project is likely to deliver sub-optimal outcomes, there may be efficiencies from the use of standard conditions to manage standard risks. The Commissioner for Better Regulation in Victoria emphasised a ‘standard risks, standard controls’ approach when looking at the regulation of mines and quarries (Cronin 2017, pp. 26–28). Different projects can create different risks, but:

... where the nature of the action and its impact are standard, there should be codified or ‘model’ conditions, with the ability to apply to vary these conditions to suit site-specific circumstances or achieve improved and innovative outcomes, with documentation only focusing on the variation. (Anglo American, sub. 42, p. 13)

---

This approach is taken up in a number of jurisdictions.

- As part of Queensland’s Greentape Reduction project, ‘a review of existing approvals ... indicated that there are a range of requirements that are applied across most approvals’ (Qld DERM 2011, p. 10) and this contributed to the development of the *Model Mining Conditions* (Qld DES 2017). This has been highlighted as an example of an effective regulatory approach ‘that could readily be adapted at the Commonwealth level’ (Anglo American, sub. 42, p. 13). This was being pursued in 2016 but model conditions have not been publicly released as of November 2020 (Woodward 2016, p. 54).
- In South Australia, low-risk quarries that have ‘defined impacts that are consistent with the industry and therefore well understood’ commit to a ‘pre-determined set of environmental outcomes and measurement criteria’ (SA DSD 2015a, p. 8). The assessment and approval of such projects, through the use of the ‘defined impact mining proposal template’, is itself a leading-practice approach to managing the scope of EIAs (section 6.1).
  - The South Australian Productivity Commission found that applications using this template were on average 110 days faster than those not using the template (SAPC 2020, p. 58).

---

LEADING PRACTICE 6.8

The use of standard conditions for standard risks can deliver efficiencies to approval processes. Queensland’s *Model Mining Conditions* are leading practice.

---

### 6.3 Post-approvals

A project’s environmental approval is typically conditional on the subsequent completion of a range of management plans, often referred to as post-approvals. These need to be prepared by the proponent and approved by the regulator, usually before project operations commence, and can include, for example, water, biodiversity and offset management plans. This approach is contrary to one of the ‘key attributes of best practice regulatory approval processes’ identified by the QLS (sub. 41, pp. 4–5), namely that ‘there is finality in decision making, in that approval decisions avoid or minimise conditions that in effect build in a further round of decision making’.

Participants have indicated that use of the post-approval stage is expanding and that the process is unpredictable, lacking in accountability and causes delays (box 6.6). The interim report of the second review of the EPBC Act found that:

There is a growing trend of post-approval arrangements, where specific environmental impacts and treatments are considered when proponent management plans are assessed. This happens without the opportunity for public comment. (Samuel 2020, p. 64)

---

Over-reliance on management plans is a problem for environmental regulators (and by extension the community) because they ‘focus both industry and Departmental resources on processes rather than outcomes’ (Woodward 2016, p. 53). The Commission supports the Woodward review’s recommendation that:

Conditions should only require management plans where it is not practical to specify outcomes-based conditions that are measurable and enforceable, or where more detail is required to demonstrate that the desired outcome will be achieved. (Woodward 2016, p. 54)

The reasons for the expanded use of the post-approval stage are not entirely clear. On the one hand, regulators could face incentives to move approval requirements into the post-approval phase to meet approval timeframes. On the other hand, the Commission has heard that proponents often lobby for earlier approval to aid their capital-raising activities, knowing that outstanding matters will need to be addressed in the post-approvals stage. AMEC (sub. 31, att., p. 1) said that companies ‘wait until after the Environmental Approval to [seek] funding’ and make a final investment decision. The Woodward review suggested that:

Management plans are often used because of time pressures, insufficient information, as a means of supporting adaptive management and due to a sense that management plans increase the Department’s oversight of projects. (Woodward 2016, p. 53)

The NSWMC (sub. DR83, p. 8) argued that post-approvals can be used as a ‘practical means for the regulator and proponent to sensibly resolve operational details associated with certain aspects of the project once the high level environmental parameters have been agreed to’. They also point out that management plans can evolve and be easily adapted over the life of the project.

#### **Box 6.6 Dissatisfaction with post-approval processes**

It has become increasingly common ... for approvals to be granted subject to conditions requiring later lodgement and acceptance of various types of plans or reports, which are required before operations (or construction) can commence. However, for many of these ‘nested’ approvals, there are two significant risks:

- The matter that has been deferred for future consideration may be fundamental both to the approval and to the proponent’s investment decision, in which case, it is a matter that should have been decided upfront. ...
- There is no assessment framework for the plan or report, such as regulatory timeframes, criteria or appeal against refusal. There may be multiple information requests, with no way of closing out the process, preventing the operation (or construction) from starting. (QRC, sub. 27, p. 13)

Furthermore, most project approvals contain a significant number of conditions attached to project approvals and management plans ... Satisfaction of these conditions often takes months, and in many cases significantly delays the commencement of the development for which approval has been granted (often after a lengthy application and assessment process taking several years). (NSWMC, sub. 28, p. 34)

In addition to the increased time and resources required to resolve post determination issues, the increased reliance on post approval requirements is causing significant uncertainty for operations, particularly where ‘incremental approvals’ are required for projects to continue operating. (Peabody Australia Coal Pty Ltd, sub. 33, p. 5)

The timing of [Offset Management Plan] approvals are becoming one of the biggest risks of delays to the commencement of mining projects. (Anglo American, sub. 42, p. 10)

---

#### FINDING 6.6

Project approvals are often conditional on the preparation of management plans that also need to be approved by regulators ('post-approvals'). The process and timelines for securing post-approvals are often unpredictable, and over-reliance on management plans is not the most effective approach to achieving environmental outcomes.

If post-approvals must be used, there are ways of improving the process. The process could be made more predictable through the use of timeframes around regulator decisions and public reporting on performance against those timeframes. Whether timeframes are specified in legislation, regulations or policy, or agreed between regulators and proponents, is for each jurisdiction to determine. However, timeframes should be adhered to, and public reporting on regulator performance is one way of addressing this.

The NSW Government has announced post-approval timeframes that the Department of Planning, Industry and Environment will report against quarterly. There will be three tiers — for minor matters the target is 14 days; for regular matters the target is 30 days and for complex matters the target is 60 days (NSW DPIE 2020b). The NSWMC (sub. DR83, p. 9) said it thought that 'whilst it is still relatively early to gauge improvements in performance, it has provided the NSW Government, for the first time, with the ability to understand the scale/numbers of post-approval requirements, which will ultimately influence the approach to resourcing the process, as well as focusing attention on what post-approval requirements are relevant or not'.

---

#### LEADING PRACTICE 6.9

Regulator decisions in the post-approval stage should be subject to timelines — statutory or otherwise — and regulator performance against those timelines should be publicly reported. The New South Wales Department of Planning, Industry and Environment intends to report on performance against timelines for post-approvals.

Predictability could also be improved by regulators providing clear guidance on their expectations of what management plans must contain — this would improve the chances of proponents producing documents that meet regulators' needs. Both general material and project-specific guidance should be made publicly available. This would act as a check on regulators shifting the goalposts and seeking unnecessary additional information, and help future proponents better anticipate regulator needs. Many regulators already provide post-approvals guidance — for example, the *Instructions on how to prepare Environmental Protection Act 1986 Part IV Environmental Management Plans* produced by the WA EPA (2017) and the *Environmental Management Plan Guidelines* at the Commonwealth level (DoE 2014a) — but they should ensure that information remains up to date and is useful to proponents.

---

At the Commonwealth level, there is a business improvement project underway to address problems in the post-approval stage. The project will ‘monitor timeframes for approving management plans and variations to conditions, and ... provide clear guidance for approval holders in relation to requirements for approved management plans’ (DoEE 2016b, p. 14).

---

LEADING PRACTICE 6.10

Clear guidance from regulators on the type and quality of information that post-approval documentation needs to include can help make the process more efficient. An example of such guidance is the *Instructions on how to prepare Environmental Protection Act 1986 Part IV Environmental Management Plans* produced by the Western Australian Environmental Protection Authority.

---

## 6.4 Review mechanisms

Review mechanisms are an important check on the legality and quality of regulator decision making — effectively, avoiding ‘false positive’ decisions (where projects that should be rejected under the legislation are approved) and ‘false negative’ decisions (where projects that should be approved under the legislation are rejected). They also play a role in clarifying ambiguous areas of law<sup>17</sup> and are an important avenue for community participation. Reviews can, however, delay projects and discourage investment. Benefits and costs of review mechanisms need to be balanced. Recent examples of ‘lawfare’ have caused some stakeholders to question the current balance.

### The appropriate role of judicial and merits reviews

There are two types of review mechanism, each with different roles.

- Judicial review, undertaken in courts, focuses on whether the original decision was made lawfully (that is, followed proper procedures). Judicial review is ordinarily available as a right to anyone affected by a government decision, but has limited scope (the legality of the decision).
- Merits review, undertaken by government departments or tribunals, allows the reviewer to reach a ‘correct and preferable’ decision based on the facts of the case, without being constrained by the initial decision.

Not all decisions are suitable for merits review. In particular, there are risks associated with offering merits review for decisions of a high political content, and decisions allocating a

---

<sup>17</sup> For example, the Nathan Dam case (*Queensland Conservation Council Inc v Minister for the Environment and Heritage* [2003] FCA 1463, [40]) clarified that both direct and indirect impacts must be considered under the EPBC Act.

---

finite resource between competing users (Administrative Review Council 1999). Decisions that involve the weighing of values by the decision maker should be placed in the hands of politicians who are elected to represent the values of their constituents. Allowing merits review of ministerial decisions would allow the decisions of an elected official to be challenged by an unelected body, which could undermine parliamentary accountability (PC 2013a, p. 263). The EDO (sub. DR62, p. 42) disagreed, arguing that political or parliamentary accountability would ‘not alleviate the impacts of a poorly made decision’, which could have long-lasting effects or allow irreversible environmental harm.

The Commission considers allowing judicial review of decisions made by ministers to ensure sound process strikes the appropriate balance. However, where approval decisions are made by public servants or other officials who do not face the same political accountability as ministers, merits review should be available (PC 2013a, p. 268). The Northern Territory’s recent reforms to its environmental protection legislation incorporate this principle — certain decisions made by the CEO of the EPA can be subject to merits (and judicial) review (*Environment Protection Act 2019* (NT), ss. 276–7).

This is not the case in all jurisdictions. The Queensland Land Court is ostensibly given the jurisdiction to conduct a full merits review of environmental approvals for major projects granted by the Coordinator-General. It faces a critical constraint on its ability to do this, however, because it cannot impose any condition inconsistent with those set out by the Coordinator-General (*Environmental Protection Act 1994* (Qld), ss. 190, 205). This does not entirely preclude the addition of new conditions. However, any new conditions must not ‘contradict or lack harmony’ with the Coordinator-General’s conditions.<sup>18</sup>

This issue was raised by the EDO (sub. 40, Annexure 3, p. 19):

... the Land Court undertakes a full merits review with expert assistance to [analyse] the application material before it — often leading to better understanding of the likely impacts — after the Coordinator-General provides these conditions. It also restrains specialist experts in the Department of Environment and Science in providing conditions. ... [which] significantly limits the Court in providing positive solutions through amended conditions as a result of the outcomes of an objection hearing.

On multiple occasions, Land Court members have commented that the requirement for consistency with the Coordinator-General’s conditions has constrained them in their decision-making.<sup>19</sup> This includes scenarios in which new information arises that suggests the Coordinator-General’s conditions are not appropriate:

Given the time between when the [Coordinator-General] may condition a project and when the Land Court may hear and determine any objections relevant to that project; relevant laws, policies and guidelines may change. This then creates a difficult situation where the new law/policy etc.

---

<sup>18</sup> *New Acland Coal Pty Ltd v Ashman & Ors and Chief Executive, Department of Environment and Heritage Protection (No. 4)* [2017] QLC 24 (*New Acland Coal*).

<sup>19</sup> These cases are summarised in *New Acland Coal* [2017] QLC 24, [177]-[182].

---

may require a change to the outdated [Coordinator-General] conditions but the Court can not recommend a change if it is inconsistent.<sup>20</sup>

The Commission (2013a, pp. 265–268) has previously recommended that merits review avenues should be limited for decisions not made by ministers — but this limitation was in relation to the material that can be brought before the new decision maker, not on the findings or outcomes of the review. There is no clear justification for a limitation on the types of conditions that can be imposed by the Queensland Land Court. New information about the impacts of a project could reasonably provide a basis for new conditions on a project that are quite different to those suggested by the Coordinator-General.

---

LEADING PRACTICE 6.11

Where approval decisions are made by unelected officials it is a leading-practice accountability measure that they can be subjected to merits review that allows for conditions and approval decisions to change to reflect substantive new information. The *Environment Protection Act 2019* (NT) puts this principle into practice.

---

## ‘Lawfare’

A small number of resources project approvals have been challenged in the court system in recent years. These include approvals for the Shree Minerals iron ore mine in Tasmania and the Adani coal mine in Queensland.<sup>21</sup> These and other cases brought by environmental or community groups opposing resources projects have been characterised as ‘lawfare’ by some commentators. Cases relating to decisions under the EPBC Act have received perhaps the greatest attention, and prompted the Australian Government to seek to modify legislation in response, but examples of ‘lawfare’ exist at the State and Territory level too (for example, cases relating to the New Acland coal mine in Queensland).

Concern with the impact of ‘lawfare’ on investment motivated the Australian Government’s unsuccessful attempt to remove the ‘extended standing’ provisions of the EPBC Act in 2015 (Power and Tomaras 2015). These provisions allow individuals and groups that have recently engaged in conservation activity to seek judicial review of decisions under the Act.

The Commission (2013a, p. 35) has previously recommended, in the context of major project approvals, that standing be extended to ‘those who have taken a substantial interest in the assessment process’ because the effects of projects can be felt beyond proponents and others directly impacted by approval decisions. The extended standing provisions in the EPBC Act

---

<sup>20</sup> *New Acland Coal* [2017] QLC 24, [190].

<sup>21</sup> *Tarkine National Coalition Incorporated v Minister for Sustainability, Environment, Water, Population and Communities* [2013] FCA 694 and *Mackay Conservation Group v Commonwealth of Australia* [2015] FCA NSD 33/2015.



---

align with this position, as do the standing provisions in the Northern Territory (*Environment Protection Act 2019* (NT), s. 276).

The AEPLG (sub. 29, p. 5) submitted that ‘the evidence suggests that the existence of third party appeal rights does not “open the floodgates” to litigation’. This is backed up by the data — environmental citizen suits are few in number and have not caused significant delays (Macintosh, Roberts and Constable 2017). The Law Council of Australia (2020, p. 36) has observed that the case law supports the finding that standing is not interpreted broadly by the courts as it is aimed at protecting the public interest rather than private concerns. Furthermore, courts have the power to strike down vexatious litigation — that is, legislation brought on trivial matters or for ulterior purposes (PC 2013a, p. 277).

Recent cases of ‘lawfare’ brought in relation to decisions made under the EPBC Act indicate that the Act has procedural pitfalls. An overly prescriptive Act, with many *procedural* requirements rather than a focus on *outcomes*, creates opportunities to make objections that delay projects, without any consequential benefit for biodiversity or conservation. The first independent review of the Act found that it was ‘too repetitive, unnecessarily complex and, in some areas, overly prescriptive’ (Hawke 2009b, p. ii).

Furthermore, the second review of the EPBC Act pointed out that the processes of the EPBC Act limit avenues for community participation in decision making, so the community seeks influence through whatever means possible, including through judicial or merits review (Samuel 2020, pp. 63–64). Addressing excessive process requirements, improving public confidence in the EPBC Act and improving transparency could reduce the drivers for legal challenge (Samuel 2020, p. 67).

#### FINDING 6.7

Court cases brought by third-party opponents to resources projects may cause delay, but this does not imply that third parties should be excluded from seeking judicial review. Process-driven legislation creates opportunities for regulators to make invalid administrative decisions that open the door for judicial review even where a project meets appropriate regulatory standards.

## 6.5 Broader approval processes

### Overlap and duplication within jurisdictions

Resources projects are often complex and involve activities that are regulated by multiple pieces of legislation administered by a number of regulators within jurisdictions (chapter 3). Project proponents require a range of assessments and approvals in areas such as the environment, planning and water. These can create difficulties. AMEC (sub. 31, p. 15) recounted an example where:



---

... the Company has spent an enormous amount of time constantly following up with the different NSW Government departments for progress updates and simple clarifications.

The existence of multiple regulators can also give rise to overlaps in requirements, where the boundaries of their responsibilities are unclear or where regulators overstep their remit (QRC, sub. 27, p. 16, Woodside Energy Ltd, sub. 18, p. 4). Effective coordination between regulators and regulatory processes is critical to guiding proponents through the approvals system, reducing uncertainty, facilitating timely processing and minimising overlaps and inconsistencies.

While regulatory coordination has improved over the last decade, proponents still have difficulties navigating the regulatory landscape. The MCA (sub. 11, p. 17) submitted that ‘managing the myriad approvals and licensing processes can and does lead to additional confusion, costs and delays’. Lack of coordination can cause costly delays and liaising with multiple agencies can also give rise to significant compliance costs.

#### FINDING 6.8

Resources projects typically require a range of assessments and approvals by multiple regulators within a jurisdiction. While regulatory coordination has improved over the past decade, proponents still report difficulties navigating the regulatory landscape. Lack of coordination can cause costly delays and liaising with multiple agencies can also give rise to significant compliance costs.

### Leading-practice approaches to coordination

The Commission (2013a, p. 23) has previously recommended the use of lead agencies or major project coordination offices to improve coordination. Under a lead agency approach, a single agency coordinates project processes across government agencies and provides guidance to proponents. They may have some responsibilities for assessment and approval but generally do not have responsibility for *all* approvals — the Commission (2013a, p. 24) previously commented that this would likely be infeasible and risk regulatory capture. A major projects coordination office performs similar functions to a lead agency but does not have assessment or approval responsibilities.

The Commonwealth and most States and Territories have some variation of a lead agency model and all jurisdictions other than the ACT provide coordination for major projects (which are often subject to a more complex array of approvals) (appendix B). A number of study participants have spoken positively about the approaches that Western Australia and South Australia take to coordination, described in box 6.7.

---

**Box 6.7      Coordination approaches in Western Australia and South Australia****Western Australia**

Western Australia provides a lead agency approach with the Department of Jobs, Tourism, Science and Innovation designated as the lead agency for major projects and the Department of Mines Industry Regulation and Safety for other resource projects. Projects receive a level of service dependent on their size, complexity, or environmental, economic and social impacts.

The lead agency provides:

- a single entry point for project proponents
- coordination of the approvals process across government for all proposals. It facilitates parallel processing and negotiates timelines between agencies for provision of approvals and advice
- case management officers or teams for larger or more complex projects. Other projects (which represent the majority) receive advice and support from a project officer and referral to relevant agencies
- online application and approvals tracking services.

Co-operative mechanisms include:

- memorandums of understanding
- officer working groups, which include case management officers from different agencies who meet regularly to resolve issues surrounding approvals. These groups are formed on a case-by-case basis
- inter-agency taskforces or committees, which are chaired by the lead agency and comprise of senior or directorial officers from different agencies. Taskforces or committees monitor the progress of approvals, resolve issues and provide advice to relevant Ministers (WA DMIRS nd; WA DPC nd).

**South Australia**

The lead agency approach in South Australia, provided by Department of Energy and Mining (DEM), shares similar characteristics with that in Western Australia. It also provides a single entry point, coordination of approvals and case management for major mining projects.

The coordination approach is facilitated by Memorandums of Understanding and Administrative Arrangements between DEM and its co-regulators. Regulators work in parallel, rather than in series, and multi-agency taskforces are assembled for complex projects. DEM uses funds from costs recovered from companies to pay the salaries of staff in other regulatory agencies, which supports more efficient approvals processing (pers. comm., 5 March 2020). This arrangement is likely to also support inter-agency communication.

Most jurisdictions appoint case managers for major projects, which provide proponents with a single point of contact. Participants have spoken positively about existing case management systems, such as that of the Northern Territory Government (INPEX, sub. 34, p. 16).

As part of a coordination system, agencies may have memorandums of understanding and administrative arrangements with each other. These define the role of each party and set out procedures and responsibilities for approvals, including under what conditions proposals are

---

referred between agencies. These arrangements can minimise confusion of regulatory boundaries and promote co-operation between agencies. In South Australia, for example, the DEM has arrangements with other agencies covering water, native vegetation, Aboriginal Heritage and environment protection. Victoria's *Mineral Resources Strategy 2018–2023* indicates a commitment to closer coordination and information sharing between regulators (Victorian Government 2018, p. 25).

Parallel processing should be used where possible to minimise delays — such as concurrently processing environmental and development approvals. In Western Australia, the lead agency may facilitate parallel processing from the outset (WA DPC nd, p. 19).

Where different agencies require the same information from proponents, they should share information. In Tasmania, the EPA and Mineral Resources Tasmania each have roles in the assessment of 'Level 2' mining and extractive industries projects. To support parallel processing and continuity of assessment they share publicly available proponent-approved documentation (Tasmanian Department of State Growth, pers. comm., 4 March 2020).

The coordinating agency should not override the decision-making capacity of other regulators who may have greater expertise or further information. Participants have raised concerns about this with regards to the regulatory framework in Queensland and New South Wales, where:

... coordination is done by the planning department and for some categories of major projects there are constraints on what conditions can be proposed by expert agencies – i.e., they must be consistent with the approval. This is not an effective concurrence mechanism for agencies with relevant expertise. (EDO, sub. 40, pp. 34–35)

State Agreements (chapter 4) have been seen as another way for governments to facilitate major project approvals. In Western Australia, the State Agreement proposals mechanism provides coordination and a single point of contact within the State (where these were otherwise lacking in the past). The last State Agreement was enacted in 2013. One assessment of these agreements concluded that:

... they should only be used as a facilitative means of last resort. A significant element of their facilitative value is based on their ability to operate outside the general legislation. In the long run, government action may be better directed towards improving the existing legislative framework. An efficient system should not require exceptions to be made to it, especially where establishing these exceptions is a 'lengthy and expensive process'. (Hillman 2006, p. 329)

Well-coordinated approaches within jurisdictions negate the value of State Agreements as a mechanism for facilitating major project approvals.

---

#### LEADING PRACTICE 6.12

Effective coordination among agencies within a jurisdiction reduces uncertainty, facilitates timely processing and minimises overlaps and inconsistencies. This can occur through:

- a lead agency or major project coordination office that provides guidance to proponents and coordinates processes across agencies (without overriding the decision-making capacity of other regulators). The coordination models in Western Australia and South Australia, and the case management system in Northern Territory have been highlighted as leading practice by study participants
- co-operative arrangements between agencies. These include the use of memorandums of understanding, inter-agency working groups or taskforces such as those in Western Australia. South Australia's approach of using costs recovered from resources companies to pay staff in multiple regulatory agencies also supports faster approvals and better inter-agency communication.

## Strategic assessment

Project-by-project environmental approval processes are the focus of this chapter but other approaches are possible. Strategic assessments involve assessment of 'the potential impacts of plans, policies and programs across an entire region, catchment area, activity or industry' (PC 2013a, p. 318). They are done in advance of the decision to undertake a particular project, where a plan, policy or program 'has been conceived and is being developed' (Hawke 2009b, p. 79). In this way, they have the potential to improve decision making with respect to cumulative impacts and reduce regulatory burden by making future project approvals within the scope of the assessment less costly and time-consuming.

APPEA (sub. 44, p. 19) submitted that strategic assessments:

... could address all the low risks and impacts across the sector so the focus of project approvals moving forward could be on the site-specific issue to be considered for an activity.

Strategic assessments may also be able to provide clarity across a broader region to assist in determining what types of activities are acceptable and in what areas, which could streamline the Environment Plan assessment process. It would also be useful in highlighting where certainty in information was low and where potentially future baseline environmental studies for example, should focus.

The Commission (2013a, p. 339) continues to support strategic assessments where they can reduce regulatory burden while maintaining or improving environmental outcomes. They may have greater applicability in urban development areas, where the range and scale of future activities is relatively predictable — including housing, hospitals, schools, quarries to supply construction materials, transportation corridors and other supporting infrastructure.

Opportunities for strategic assessments covering resources development may be limited. In regional and remote areas, 'the location, size and nature of future resource projects may be

---

difficult to predict' (PC 2013a, p. 324), which can tend to reduce the value of strategic assessment. The only strategic assessment that has been completed for the purposes of Commonwealth environmental assessment of resources activities is the *BHP Billiton Iron Ore Pilbara Strategic Assessment* (BHP Billiton 2017). BHP funded this strategic assessment because it expects to be operating a range of iron ore projects in the Pilbara over the long term. Such an undertaking may not be feasible or worthwhile for smaller companies.

The interim report of the second review of the EPBC Act noted some problems in the Act with the relationship between approvals and strategic assessments (Samuel 2020, p. 44). For example:

- while strategic assessments give approval for unidentified persons to undertake actions, this means that often there is no identified approval holder, making it difficult to vary conditions where the consent of the approval holder is required
- where a strategic assessment relies on a statutory regime and the regime is amended, there may be a risk that future actions that are consistent with the amended regime would be different to those outlined in the strategic assessment.

It is unclear whether these problems have been a significant barrier to the Commonwealth supporting strategic assessments. In any case, the Commission supports the conclusion of the second EPBC Act review that the Government should amend the Act to address these problems.

FINDING 6.9

Strategic assessments are costly but may reduce regulatory burden in the long run where they reduce the cost or number of future project approvals.



---

## 7 Managing environmental and safety outcomes

### Key points

- The average environmental footprint of resources activities has decreased over time, but limited transparency makes it difficult to say the extent to which this is due to regulation.
- Several high-profile environmental incidents may be indicative of non-compliance with conditions or ineffective regulations, and recent audits have revealed major weaknesses in some regulators' use of information.
  - Regulators' experience of monitoring compliance with conditions should help to inform the condition-setting process.
  - Greater transparency from regulators can improve accountability and build trust. Important forms of communication include regular public reporting on compliance and enforcement activities, publishing information on contraventions and how they have been dealt with, and consultations on localised issues.
- Environmental offsets offer a way for economically valuable projects to go ahead without hurting biodiversity at a wider scale. But deficiencies in their implementation add to costs and lower the likelihood that their objectives are achieved.
  - Some offset projects have not been implemented as planned, and there is little information to assess whether offsets are achieving their objectives. Public registers that include information on offset evaluation would promote transparency and compliance.
  - Schemes that allow companies to pay into a centrally-administered offsets fund can deliver environmental objectives while reducing costs for companies. The effectiveness of a fund is dependent on it having an effective strategy underpinning its use, strong governance, and ensuring that fund payments cover the full costs of using it to deliver outcomes.
- Many studies have noted that little rehabilitation of resources sites has taken place in Australia.
  - Surety arrangements for rehabilitation have been inadequate, but are improving. Where they are used, rehabilitation bonds should cover the full cost of the potential rehabilitation liability. Pooled approaches need to manage the risks of moral hazard and of funds being insufficient to cover a site's rehabilitation liability.
  - Some residual risks can remain following the rehabilitation of a site, and it is appropriate that companies compensate governments for them. But companies should be allowed to surrender sites without facing ongoing liability for genuinely unforeseen problems.
- The major resources states have recently reformed or are in the process of reforming their workplace health and safety frameworks for resources sites, with an overall shift towards more consistent and outcomes-based approaches. Good outcomes require ongoing regulator monitoring of companies' safety processes and practices, and in some instances, improved regulator capability may be needed to enforce safety regulations effectively.

---

The focus of previous chapters has been on the regulatory systems shaping resources exploration and project development in Australia. This chapter focuses on the effectiveness and efficiency of environmental and safety regulation once projects are operational.

Resources activities are often one of several pressures contributing to the cumulative environmental impacts of human activities — such as land clearing and associated biodiversity loss, and air pollution near some regional centres. They can also involve more sector-specific environmental risks, such as water acidification or heavy metal contamination, or the creation of an unstable landscape in the wake of a mine. A further distinction is in the *variance* of these impacts. Some, such as land clearing, can be known with some certainty given a project’s design, while others may arise from accidents and hinge on the quality of the project’s management.

Two broad factors have helped to reduce the average environmental footprint of resources activities over recent decades. First, progress in environmental science and technology has improved the understanding of the various ways resources activities can damage the environment, and how this can be prevented. For instance, an Australian Government handbook on the prevention of acid and metalliferous drainage — identified in the 1990s as one of the main environmental issues facing the mining industry (Harries 1997, p. 1) — notes that ‘much, if not most’ of the knowledge needed to prevent the problem now exists (Australian Government 2016c, p. 187). Second, community expectations for environmental standards have evolved. Both of these factors have motivated more stringent regulatory objectives and requirements, and the latter has also driven increased industry attention on environmental issues through a focus on maintaining a social licence to operate (Bice 2014, p. 64; Metcalfe and Bui 2017, p. 39).

However, reporting on environmental outcomes, and how specific regulations have influenced them, is often limited.

- Reporting shortfalls on broader national and regional environmental outcomes have been highlighted by the interim report of the Independent Review of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act). It noted that there are gaps in the national State of the Environment reports, including the absence of consistent datasets across reports (Samuel 2020, p. 80). For example, many threatened species are not monitored and information derived from monitoring is often reported with delay or not at all (Wintle et al. 2020, pp. 21–22).
- There is also limited information available on the impacts of specific regulations and practices. The aforementioned acid and metalliferous drainage handbook highlights a lack of follow-through in reporting on how regulations have affected environmental outcomes, stressing that industry and regulators must produce ‘more comprehensive operational and post-closure monitoring records’, and noting that there are ‘very few publicly available examples’ that demonstrate successful management of the risk (Australian Government 2016c, p. 188). And the interim report of the EPBC Act review stated that information gaps have added to the difficulty in assessing the effectiveness of government environmental policies, such as resources sector regulation (Samuel 2020, p. 80).



---

#### FINDING 7.1

The average environmental footprint of resources activities has reduced over time, but publicly available information about environmental outcomes and how regulations have influenced them, is limited.

Section 7.1 considers current environmental monitoring and enforcement regimes, while sections 7.2 and 7.3 discuss the specific topics of environmental offsets and rehabilitation, which have been highlighted as areas with particular opportunities for regulatory improvement. Section 7.4 examines workplace health and safety regulation and outcomes.

## 7.1 Compliance monitoring and enforcement

Regulators must be able to monitor whether companies are complying with their environmental obligations, and, if necessary, take action to address any breaches — ideally *before* irreversible damage is done. In other words, regulators need to have eyes and teeth. Extending the metaphor, they also need a mouth to provide guidance. Companies with a clear understanding of what they are required to do are likely to be better placed to comply. On the other hand, a poorly-designed and-administered compliance program can impose unnecessary costs.

Many of the conditions in project approvals require companies to report to regulators on their environmental management processes and performance. Compliance monitoring programs back up this self-reporting with ‘boots on the ground’ inspections or audits of project sites. Regulators may be looking for breaches relating to outcomes (such as the amount of wastewater being discharged from a mine) or to processes (such as whether a company is managing the discharges in accordance with a regulator-approved plan). Enforcement actions can range from a verbal warning to a criminal prosecution.

In addition, effective compliance monitoring and enforcement can facilitate broader improvements to the environmental approvals process. This is because the regulatory bodies responsible for monitoring and enforcement have a unique line of sight in observing how approval conditions have affected environmental outcomes. The Commission has previously noted the potential benefits of a ‘feedback loop’ between the compliance monitoring and condition-setting processes, whereby any redundant or ineffective approval conditions (chapter 6) are systematically communicated to the bodies responsible for setting conditions. One way of doing this would be for regulators to produce an annual major projects compliance statement, which could report on regulators’ activities and identify redundant or ineffective approval conditions (PC 2013a, pp. 304–306).

---

#### LEADING PRACTICE 7.1

Regulators' experiences of monitoring compliance with approval conditions provide useful information about the efficacy of approval conditions in protecting the environment. Leading practice involves regulators employing a 'feedback loop' between the compliance monitoring and condition-setting processes, where any findings of redundant or ineffective approval conditions are communicated to the bodies responsible for setting those conditions. An example has not been identified.

## Compliance systems at a glance

Responsibilities for monitoring and enforcing environmental regulations in States and Territories are spread across a range of government departments and bodies. In some jurisdictions, environment departments oversee most or all environmental regulations (such as in Queensland), while in others resources departments have more of a role (such as in South Australia). In others again a statutory body takes the lead (such as in Tasmania) or has specific functions that complement those of a department (such as in Victoria).

Two Commonwealth regulators also play important roles. The Department of Agriculture, Water and the Environment (DAWE) monitors and enforces matters protected under the EPBC Act (chapter 3). Offshore petroleum activities in Commonwealth waters are regulated by the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA), a statutory agency.

### The enforcement toolkit

For the most part, the Commission has not seen evidence to suggest that regulators have been hampered by a lack of enforcement options.

Enforcement powers among regulators are largely similar. The Queensland Department of Environment and Science, for example, uses:

- warning letters
- infringement notices (small fines used for minor contraventions)
- administrative actions
- civil court orders
- enforceable undertakings (which legally require an operator to take or cease certain actions)
- suspensions or cancellations of licences, permits or authorities
- prosecutions (Qld DES 2019a).

Likewise, the various compliance frameworks and strategy documents published by Australian resources regulators do not reveal any glaring inter-jurisdictional differences in

---

how regulators claim to be *using* their enforcement powers. Most regulators refer to some form of the ‘responsive regulatory pyramid’ developed by Ayres and Braithwaite (1992), where more supportive actions are used in the first instance, with a willingness to escalate to a stronger enforcement response as needed.

## **Is monitoring and enforcement effective and efficient?**

Evidence on the effectiveness and efficiency of monitoring and enforcement activity throughout Australia is limited — in large part reflecting the lack of in-depth information published by regulators and departments (discussed further below). Audits of regulators’ monitoring and enforcement activities provide a detailed view of their processes and capabilities, but these are not done regularly, particularly in smaller jurisdictions. Of the audits performed in the last decade, all have found significant regulatory weaknesses (albeit sometimes with improvements upon a follow up review, as discussed below).

Some participants to this study have suggested that regulators across the board are not fulfilling their compliance roles adequately. The AEPLG (sub. 29, p. 5) stated that:

... there is anecdotally very little monitoring undertaken by regulatory authorities and similarly very little compliance action taken in respect of any breaches discovered.

The EDO (sub. 40, p. 32) had a similar view, observing that a ‘lack of resourcing for the regulator such that assessment and compliance processes are jeopardised’ is ‘common to most jurisdictions’. And the Queensland Law Society (sub. 41, p. 8) raised non-compliance with mining tenement boundaries as a specific concern, noting the potential adverse impacts on native title holders as well as the environment.

Similarly, in assessing DAWE’s compliance activities, the interim report of the EPBC Act review found ‘limited evidence of proactive compliance effort’ and ‘little active monitoring’ of whether conditions of approval are being met (Samuel 2020, p. 93).

Findings from investigations into significant incidents in recent years point to some deficiencies in regulators’ monitoring and enforcement activities.

- The Hazelwood Mine Fire Inquiry described the fire as a ‘foreseeable risk that slipped through the cracks between oversight agencies’ (Teague, Catford and Petering 2014, p. 150).
- Linc Energy was found by a Queensland judge to have offended ‘persistent[ly] and in clear breach’ of its obligations at its underground coal gasification plant over the course of seven years up to 2013, having allowed toxic gases to escape and contaminate surrounding air, soil and water (Sibson 2018). The company succeeded in hiding one of the pollution sources from the regulator during a site visit (Weekes 2018).

There have also been incidents in the resources sector over the past several years that may indicate a level of non-compliance — mine fires, tailings dam failures and a major oil spill have all occurred since 2009, along with numerous smaller infringements. The degree to

---

which these incidents were due to inadequate monitoring and enforcement, rather than ineffective regulatory settings themselves, is unclear. That said, some of these incidents were repeat offences or failures, which potentially indicates that regulators have not escalated scrutiny and enforcement in accordance with non-compliance risk. For example:

- the McArthur River mine in the Northern Territory has had a range of environmental problems over several years (Arnost 2013; Bardon 2016; Davidson 2017)
- a 1400 cubic metre leak of radioactive slurry at the Kakadu-based Ranger uranium mine in 2013 followed tailings dam leaks into surrounding creeks in 2009 and 2010 (ABC News 2016; Murdoch 2010).

Conversely, the NSWMC (sub. 28, p. 37) claimed that regulators in New South Wales take an overly harsh compliance approach, ‘often presuming an offence has occurred without affording the proponent or operator an opportunity to explain the circumstances’, and maintaining ‘strict adherence to a stick rather than carrot approach in circumstances where not warranted’. Similarly, 38 per cent of stakeholders disagreed that the then Department of the Environment and Energy’s (now DAWE) compliance and enforcement actions were proportional to the level of risk when surveyed in 2017-18 (DoEE 2019d, p. 35).

A general caveat is that compliance arrangements have undergone substantial changes in more recent years, with governments and regulators having sought to improve their monitoring and enforcement approaches. New regulators (such as NOPSEMA and the NSW Resources Regulator) have been established, and a range of inquiries and reviews have prompted reforms to regulators’ practices or to regulations themselves.<sup>22</sup> Hence, regulatory deficiencies that played a part in some of the above incidents may have since been addressed, noting that the most recently performed audits have identified further room for improvement (discussed below). Ongoing improvements to monitoring and enforcement practices will depend, in part, on adequate resourcing of regulators, as discussed in chapter 12.

### Do regulators have the information and knowledge to identify risk?

Regulators have to understand the likelihood and seriousness of potential environmental risks and adverse outcomes to prioritise their monitoring efforts and choose how best to respond to different breaches (chapter 3). Numerous audits into regulators in the last decade have revealed deficiencies in the gathering and use of information, many of them significant enough to make a meaningful treatment of risk all but impossible.

Recently completed audits of DAWE’s administration of the EPBC Act, and of Victoria’s regulation of mine rehabilitation, give an indication of how fundamental these deficiencies can be. The DAWE audit noted that the department ‘stores regulatory information in multiple systems maintained by different business areas’ and ‘has not established a procedure to

---

<sup>22</sup> For example, the Independent Inquiry into the Environment Protection Authority Victoria (2016), the Audit Office of New South Wales’ Mining Rehabilitation Security Deposits Report (2017), and the Scientific Inquiry into Hydraulic Fracturing in the Northern Territory (2018) have led to significant reforms.

---

extract all relevant compliance information’ from them (ANAO 2020, p. 22), while Victoria’s Earth Resources regulator was found to have no integrated information system (VAGO 2020, p. 10). Similar issues have been noted in New South Wales and Queensland (regarding rehabilitation monitoring and coal seam gas, respectively) (AONSW 2017; QAO 2020).

Weaknesses in information systems can limit the ability of regulators to target their enforcement activities, or even assess compliance at all. For example, analysis of a sample of assessments revealed that DAWE was unable to find spatial data on offsets in almost 20 per cent of cases (ANAO 2020, p. 67), and the Victorian Auditor-General stated that the Earth Resources regulator could not easily provide ‘an auditable trail of rehabilitation compliance’ (VAGO 2020, p. 68).

Another common theme identified in regulator performance audits is a lack of information sharing between relevant agencies. For example, DAWE has not established information sharing arrangements with States and Territories, despite committing to do so in its bilateral agreements. Without such arrangements, the information received from co-regulators may be inconsistent and reactive, and ultimately ‘incomplete and limited in value for strategic planning’ (ANAO 2020, p. 22). And in Queensland, the use of information systems that cannot exchange and interpret shared data was found to have contributed to a lack of coordination between two departments involved in regulating coal seam gas projects (QAO 2020, p. 1).

Chapter 12 discusses the use of data and information by resources regulators more broadly.

## Learning and problem solving

Leading-practice regulators continuously improve through learning and adapting to changing circumstances, such as new technologies, advances in scientific knowledge and international regulatory developments. Policy departments may also have a role in research and information gathering to improve regulators’ knowledge.

The NSW Resources Regulator offers a leading practice example of applying a problem-solving mindset to compliance. Its biannual *Compliance Priorities* documents describe targeted programs it will carry out over a six-month period, often in response to issues identified through regulatory activity. This may include instances where non-compliance has resulted in incidents, or responses to emerging technologies. For example, the January–June 2020 edition describes the regulator’s plan to improve industry’s understanding of tailings dam management, after a project revealed uncertainties and knowledge gaps (NSW RR 2020a, p. 4).

In addition to ensuring that industry is complying with environmental regulations, regulators can undertake research to uncover new leading practices or sources of problems. Between 2011 and 2015, the NSW Environment Protection Authority (EPA) conducted a series of activities designed to improve the understanding and control of dust emissions from coal

---

trains in the Hunter Valley. This included a literature review of coal train loading practices at mines, and a statistical analysis of emissions along the rail line to determine their main source. The analysis suggested that emissions mostly came from dust being stirred up off the tracks or wagon parts, rather than emanating directly from the surface of loaded train wagons or from diesel exhaust fumes as had also been hypothesised — knowledge that could help the EPA devise a more effective set of requirements for the loading process (NSW EPA 2019b; Ryan and Malecki 2015).

Two other examples from the NSW EPA over 2018-19 exemplify a ‘continuous improvement’ approach to regulatory processes and use of technology.

- The EPA’s Gas Regulation branch found that remote sensor technology could be used for the monitoring of about 20 per cent of active licence conditions in the Narrabri Santos Gas Project, and to perform compliance tasks more effectively (NSW EPA 2019d, p. 47).
- As part of an internal review, the EPA found that half of companies eligible for reduced licence fees in exchange for having good environmental management systems had been reporting incorrect information about their systems, and that system certifications were of poor quality. These findings have been incorporated into revised annual reporting questions and guidelines for management systems (NSW EPA 2019d, p. 49).

The adoption of a problem-solving mindset to compliance and enforcement activities can also help to improve broader outcomes for governments. For example, in 2018-19, the Western Australian Department of Mines, Industry Regulation and Safety (WA DMIRS) identified an area of mineral sands tailings as being safe to use as road fill, saving the State Government from needing to purchase other materials and reducing the environmental impact of a new road building project (WA DMIRS 2019a, p. 23).

#### LEADING PRACTICE 7.2

Effective regulators continually look for ways to improve their methods, and for actions they could take beyond their routine monitoring and enforcement activities that could address specific problems. The New South Wales Environment Protection Authority’s involvement with a study examining emissions from coal trains, and the New South Wales Resources Regulator’s targeted programs described in its *Compliance Priorities* documents, provide examples of these practices.

## Regulators could be more transparent

While regulators in all jurisdictions produce reports summarising their compliance activities, the format and content is not always accessible for a lay audience. It can be difficult for the public to get a picture of the most consequential activities undertaken by a regulator and their rationale for doing so, and to assess the overall state of play regarding compliance monitoring and enforcement. As a result, communities may have a limited understanding of

---

how regulators are discharging their compliance and enforcement responsibilities, which risks damaging confidence in the regulatory system.

The Australian National Audit Office (2017b, p. 31) gave a blunt assessment of the then Department of the Environment and Energy's EPBC Act compliance monitoring.

Performance information reported externally by Environment does not currently provide stakeholders with sufficient insights into the extent to which compliance monitoring activities have been effective in protecting the environment from significant impacts.

There is little indication that reporting has been brought up to standard since. The department publishes an annual list of audits into individual companies, noting any instances of non-compliance with approval conditions, as well as a register of infringement notices (although it has only issued 25 of these in total since the notices were introduced in 2010 (DAWE nd)). However, there is no document summarising the department's thinking about its compliance activities, such as the lessons it has learned. The interim report of the EPBC Act review (Samuel 2020, p. 81) described DAWE's reporting as focused on 'meet[ing] the bare minimum requirements, rather than monitoring and evaluation driving adaptive improvements over time.'

There have also been more specific cases of limited transparency in resources regulators' monitoring and enforcement activities.

- In September 2018, the gas company INPEX was found by the then Department of the Environment and Energy to have released chemicals into the air in breach of its approved management plan, which 'may have placed the immediate environment including Darwin Harbour at risk of heightened PFAS [the chemicals] levels' (DoEE 2019c, p. 2). However, the only reference to this on the department's website is a single sentence stating that the company was issued with 'an infringement notice of \$12 600 for contravening condition 8 of EPBC 2009/4208' (DAWE nd). The findings of the investigation were only released following a freedom of information request by the Australian Conservation Foundation (Bardon 2019).
- NOPSEMA's *Annual Offshore Performance Report* for 2016 noted a 10 500 litre oil spill (NOPSEMA 2017, p. 31), but the regulator did not publicise its location or the name of the company responsible, claiming it had 'an implied duty of confidence' to companies that reported leaks (Slezak and Robertson 2017).<sup>23</sup>

Environmental offsets are one activity where transparency around compliance and outcomes has been particularly deficient (section 7.2).

---

<sup>23</sup> In this instance, the company (Woodside) came forward voluntarily following media reporting of the leak.

---

#### FINDING 7.2

In most jurisdictions public reporting about the effectiveness of compliance monitoring and enforcement activity is limited, putting public confidence in the regulation of projects at risk.

That said, some leading-practice examples of transparency in regulators' compliance activities can also be found.

- The NSW Resources Regulator publishes comprehensive information on its major activities, such as updates on the rehabilitation of individual resources sites and summaries of the outcomes of its compliance priority programs and other investigations — as well as building community confidence, the NSWMC (sub. DR83, p. 9) noted that the lessons documented in some of these reports can be of benefit to industry. And NOPSEMA publishes *The Regulator*, a quarterly online magazine intended to inform stakeholders of its activities and priorities, legislative reform and emerging industry issues.
- The NSW Resources Regulator also provides detailed information on contraventions of regulations, including the full text of its enforceable undertakings, and descriptions and outcomes of all its prosecutions.
- The NSW EPA undertakes consultations with community-based committees located in the state's coal-mining regions four times a year, to discuss measures to monitor and improve air quality (box 7.1). This provides a regular dialogue through which the regulator can explain its monitoring activities and receive feedback.
- WA DMIRS provides summary information from site operators' annual environmental reports, including details such as the site's operational status, amount of assurance held, and the area used for different activities.

Chapter 12 considers how greater information sharing and regulator engagement with communities can promote transparency and improve confidence in the regulatory system more broadly.



---

### Box 7.1 Air quality committees in New South Wales

Consultative committees made up of community, industry and local and State government representatives provide advice to the NSW Environment Protection Authority (EPA) on air quality monitoring and management in the Upper Hunter and the Namoi, and on environmental management more broadly in Newcastle.

Minutes from the committee meetings and presentations made at them are published on the EPA's website. Examples of meeting items include:

- presentations from the EPA, such as one analysing trends in complaints made about dust from coal mines
- seasonal air quality summary reports from the NSW Department of Planning, Industry and Environment (DPIE)
- a local council's overview of a consultation session for a review of national air quality standards for sulphur dioxide and nitrogen dioxide, with a discussion of the council's position
- a request from an industry representative for the group to assist in facilitating greater access to real-time DPIE data, to help projects to improve their predictions of dust and blast impacts.

Sources: NSW EPA (2019a, 2019c).

---

#### LEADING PRACTICE 7.3

Public communication from regulators on their compliance and enforcement activities, dialogue with community groups on local issues and access to information about regulated sites can help to improve community confidence in the sector's regulation. Leading-practice examples include:

- the NSW Resources Regulator's updates on rehabilitation progress and summaries of the outcomes of its compliance priority programs, and the National Offshore Petroleum Safety and Environmental Management Authority's *The Regulator* magazine
- the NSW Resources Regulator's publishing of its enforceable undertakings and documenting of prosecutions
- the NSW Environment Protection Authority's consultations with regional air quality committees
- the Western Australian Department of Mines, Industry Regulation and Safety's posting of information from operators' annual environmental reports.

## 7.2 Environmental offsets

One common approval condition for resources projects is that the proponent take action to *offset* some or all of their project's adverse biodiversity impacts. The motivation behind offsets is to provide an alternative avenue for environmentally-damaging but economically-valuable developments to go ahead without causing a 'net loss' of overall

---

environmental quality. Such an alternative could be required if, for example, it is impossible or extremely costly to directly avoid or mitigate the environmental damage.

However, achieving the ‘no net loss’ goal is not always straightforward (box 7.2). There is no guarantee that a suitable offset will be easy to find, though in practice there is a reliance on offsets as a standard condition in project approvals (Samuel 2020, p. 86). In addition, what counts as an offset can vary. The most common type is an action that protects or improves the environmental quality of an area of land, but less direct activities such as research projects are also sometimes allowed. Most policies also require or prefer that offsets deliver benefits that are ‘like-for-like’ with the effects of a project. For example, a project that clears an area of koala habitat may be required to protect or establish an area of koala habitat elsewhere.

Resources projects make up a relatively small share of the total number of projects requiring offsets (transport infrastructure projects, for example, account for a greater proportion), but can account for a large share of offset expenditure.<sup>24</sup> For example, a development at the Hail Creek coal mine in Queensland in 2018 involved a \$24 million offset payment (Queensland Government 2020c), a figure several times greater than the sum of all other offset payments made in the state between July 2014 (when the current scheme commenced) and July 2018 (Queensland Government 2019a, p. 10).

**Box 7.2      Offsets are a mechanism for reflecting environmental damage in project costs**

As outlined in chapter 3, it is appropriate that the external costs of resources projects (such as habitat and biodiversity loss due to land clearing) are fully factored into investment decisions.

Valuing habitat and biodiversity is fraught as there is no observable market price. Offsets essentially seek to impose a ‘price’ by requiring that there is no overall net loss of affected vegetation or animal habitat.

But what constitutes ‘no net loss’ can be hard to agree on, as an offset may not replicate the ecosystem adversely affected by a resources development. Hence offsets policies often use rules of thumb to determine the level and nature of offset required to replace affected vegetation. These rules of thumb can mean that offset costs exceed or fall below the (unobserved) value of the environmental damage.

Policies that allow more degrees of freedom in meeting offset obligations, such as financial contributions to a centrally-administered fund for offset activities, can reduce some of the costs to companies, including by providing greater certainty. Financial contributions can also give governments more freedom and control to deliver priority environmental services at scale. The challenge is to determine the appropriate level of contribution — as discussed later in this section.

---

<sup>24</sup> Based on listings from the public registers of the Queensland, Western Australia and South Australia offsets schemes.

---

## Offsets can be unduly costly for resources companies ...

That offsets can be costly for companies is not a problem in and of itself. Indeed, that is how the externality is internalised. However, some aspects of offsets policies or their implementation may be creating unnecessary costs and project delays.

### The administration of offsets policy under the EPBC Act is a source of frustration

Study participants noted poor processes and a lack of transparency in DAWE's administration of the EPBC Act's offsets policy. Both the NSWMC (sub. 28, p. 35) and the QRC (sub. 27, p. 18) pointed to changing interpretations of offsets policy with little transparency. For example:

A simple offset land swap was proposed with the Commonwealth assessment officer requesting onerous reassessment that was inconsistent with the original approved assessment. The officer indicated that an 'evolution of the interpretation of the offsets policy' was the driver for the additional information required. This was not clear, predictable, open or transparent. (NSWMC, sub. 28, p. 35)

In addition, Anglo American (sub. 42, p. 10) noted the lack of statutory timeframes for Offset Management Plan approvals and emphasised that 'the timing of [Offset Management Plan] approvals are becoming one of the biggest risks of delays to the commencement of mining projects'.

### Offsets are an area of Commonwealth–State duplication

Offsets are a major source of the duplication of Commonwealth–State approval conditions (chapter 6) (Anglo American, sub. 42, p. 3; NSWMC, sub. 28, p. 35; Rio Tinto, sub. 26, p. 6).

Some states' offsets policies have provisions that attempt to streamline processes in these instances, but the ability to reduce duplication can be limited by differences in the types of biodiversity values that various policies aim to protect, and in the rules for what is an allowable offset. For example, the WA Environmental Offsets Guidelines (Western Australian Government 2014, p. 6) note that:

... the [matters of national environmental significance] that are considered by the Commonwealth Government (for example threatened species and ecological communities) are only a subset of the matters that the State considers (e.g. biodiversity, wetlands). As such, the State may require offsets to other environmental values which are not relevant to the EPBC Act.

The QRC (sub. 27, p. 14) argued that although Queensland's *Environmental Offsets Act 2014* minimised duplication by not requiring an offset for 'the same matter' as required under the EPBC Act, 'greater clarity is needed as to what is considered "substantially the same matter"'.

On the face of it, it seems unlikely that there would be any significant *philosophical* differences between the Commonwealth and State policies that would warrant them running

---

parallel schemes. There has already been some harmonisation, with proponents in New South Wales now able to satisfy offset conditions required under the EPBC Act through that state's scheme, following an amendment to the scheme and to the NSW Assessment Bilateral Agreement (NSW DPIE 2020a). Chapter 6 discusses possible pathways towards harmonising Commonwealth and State approval conditions more broadly.

### **... and it can be difficult to translate theory into practice**

#### The additionality principle can be hard to implement

An activity that genuinely offsets a project's adverse biodiversity impacts must be *additional* to what would otherwise have occurred in its absence (the baseline). For instance, the protection of an existing site would represent a truly additional action only if the site's environmental value would otherwise have been lost or degraded.

Determining the baseline is not straightforward and jurisdictions have taken different approaches. Some assume a constant baseline rate of loss of vegetation or environmental quality across all offset proposal sites, while others (including offsets policy under the EPBC Act) apply a tailored assessment of the risk of loss at each specific site. It can be challenging to estimate an accurate baseline under either of these approaches.

- One study estimated that assumed baseline rates of loss were several times higher than recently observed rates of deforestation in some states that use a constant baseline assumption to assess offset proposals, such as Victoria, South Australia and Western Australia (Maron et al. 2015).
- The recent audit of DAWE's administration of the EPBC Act highlighted a site-specific example where one approved offset proposal was assessed as having a 100 per cent risk of loss (indicating the site's biodiversity would certainly have been lost without the offset), while another approved proposal located at the same property had a 0 per cent risk of loss (ANAO 2020, pp. 65–66). And the QRC (sub. DR81, pp. 17–18) claimed that some site-specific information is being 'either disregarded or not well considered' in these assessments.

Some offset activities or policy rules appear to have violated the additionality principle more blatantly. Despite acknowledging the need for additionality, a previous New South Wales offsets policy explicitly allowed for the same land management actions to generate credits both for biodiversity offsetting and for a separate carbon offsetting scheme (NSW OEH 2014). In another case, the then Department of the Environment (now DAWE) deemed the ACT Government's rezoning of an area of land as a nature reserve to be a 'de facto' offset for a residential development (DoE 2014d, p. 19). The rezoning occurred 12 years in advance of the development and before any offsets policy was in place, and was not described as being linked to offsetting when it was announced (DoE 2014d, p. 19; Gibbons and Zeil 2014).

---

## Offset projects have been delayed

In some cases, offset projects have not been finalised until years after a company has commenced the mining activities necessitating them.

The Ulan coal mine, approved under the EPBC Act in 2010, was still in the process of securing one of the offsets attached to the approval in February 2020 (when the mine's most recent annual compliance report was published), with other offsets only being secured in late 2019 (Glencore 2020). Similarly, offsets for the Maules Creek coal mine had not yet been secured by the NSW Biodiversity Conservation Trust in 2020, five years after the associated land clearing had commenced at the mine (NSW Legislative Council Planning and Environment Committee 2020, p. 173; Slezak 2018).

More broadly, the audit of DAWE's administration of the EPBC Act found a trend towards timeframe extensions for offset assessments, which departmental staff attributed to the increasing unavailability of suitable projects (ANAO 2020, p. 67). Variations to proponents' offset conditions, and the acceptance of more indirect offsets than allowed under the policy, were also observed. Similarly, a DAWE staff member had previously described a pattern where:

... the assessment officers are saying yes you can impact that if you offset this somehow, approved, handed over to the post approvals officers ... [the proponent] may then turn around and say actually there's no offsets. (Evans 2017, p. 167)

The timing of an offset may be particularly important when considering its degree of benefit to a threatened species (Evans et al. 2013). To take the extreme example, a species cannot benefit from a project that only begins after it has become extinct. It is therefore important that delays between the approval and implementation of an offset proposal are minimised. Nor should offset conditions be watered down to reverse-engineer an outcome in response to a proponent having found the initial conditions too challenging.

To reduce the risk of delays, it is reasonable that companies be required to have identified a suitable site for an offset proposal prior to it being approved. A fundamental scarcity of suitable offsets should signal that the no net loss requirement will be more difficult to achieve, and may require other options such as avoiding or mitigating the development's impact on the environment. However, market-based mechanisms (discussed below) may offer a way to unlock a greater supply of offsets.

## Not all offset projects achieve their objectives

The implementation of an offset project does not guarantee its success. One \$200 000 project aimed at replicating nesting sites for three threatened bird and possum species was found to have made almost no impact on those animals (Lindenmayer et al. 2017). An analysis of offsets in Western Australia found that 30 per cent produced no outcome (May, Hobbs and Valentine 2017, p. 6), some due to non-compliance with approval conditions, while others failed despite fulfilling them. The same study found that almost a quarter of offsets currently

---

being implemented had unknown reporting requirements, meaning their future outcomes may be difficult or impossible to determine (May, Hobbs and Valentine 2017, p. 4).

There is a view among some experts that, while the principles behind the methods used to assess the environmental impacts of a land-clearing activity or offset are sound, the application of these principles by regulators is not consistent, nor always of a high standard (Maron, pers. comm., 22 February 2020). For example, the DAWE audit described an instance where the department agreed to accept a modified offset to maintain consistency with a past approval decision, despite assessing that it was inconsistent with policy (ANAO 2020, p. 66).

### Greater transparency is needed

There is little transparency around the status and outcomes of offsets, and the decisions regulators make when applying offsets policies to project approvals. Often the only public information about offsets projects' status comes from (costly) freedom of information requests.

Statements by two conservation groups during a NSW Legislative Council Inquiry into koala populations and habitat give a picture of the difficulty such organisations have had in understanding how the state's offset policy is being applied.

- A representative for the Wando Conservation and Cultural Centre expressed confusion over continued extensions granted to the Maules Creek mine to secure long-term conservation agreements for its offsets.

That is the question we ask year after year and extension after extension. Why are they getting extensions? The documents that we have received are the culmination of literally years of community groups writing to the department through the community consultative committee and through GIPAA [Government Information (Public Access) Act, analogous to Freedom of Information in other jurisdictions] requests. (NSW Legislative Council Planning and Environment Committee 2019, p. 6)

- When a representative from the NSW Wildlife Information, Rescue and Education Service was asked if she was able to release rescued koalas in offset areas, she explained that she could not because no one had given her access to information on where those areas were located (NSW Legislative Council Planning and Environment Committee 2019, p. 8).

The ACF (sub. 32, p. 12) also noted that:

There is also a significant absence of evidence that demonstrates, at a policy level, that biodiversity offsets are fulfilling their stated objectives of no-net loss and/or improvement and maintenance of the populations of threatened species.

While it can often take some time before the outcomes of an offset project can be evaluated, the onus should still be on governments to publicly communicate what they do and do not know. Transparency around how policies are carried out is important for supporting community and

---

industry confidence in the regulatory system (chapter 3). At the moment, however, it is difficult for an outside observer to feel assured, based on the limited publicly-available information provided by regulators, that offset conditions in project approvals are being delivered, and that the stated objectives of offsets policies are being achieved.

### *A role for registers*

One tool for governments to improve the transparency of their offsets schemes is to maintain a public register of planned and existing offsets. These are already in place in Queensland and Western Australia, and in a more limited fashion<sup>25</sup> in New South Wales and South Australia.

The 2012 *EPBC Act Environmental Offsets Policy* stated that a register would be made available on the then Department of the Environment's website (DSEWPaC 2012, p. 24). The department acknowledged the register's absence in 2014 and stated that it was still being considered (SECRC 2014, p. 83), but never went on to establish it.

Registers should include up-to-date information about both the projects with offset conditions placed on them and the offsets themselves, including their biodiversity values, location, date of approval, completion status and follow-up evaluations of benefits. Where companies fulfil their offset obligations by paying into a fund (discussed below), the register should include the size of the payment. Western Australia's offsets register includes most of these elements, but does not include information from evaluations.

---

#### LEADING PRACTICE 7.4

Public registers of activities with offset obligations and the projects developed to fulfil them provide valuable transparency about the application of offsets policies. Information on offset projects should include their biodiversity values, location, date of approval, completion status and follow-up evaluations of benefits. Where companies fulfil their offset obligations by paying into a fund, the register should include the size of the payment. Western Australia's offsets register includes some, but not all, of these elements.

---

<sup>25</sup> The NSW Biodiversity Offsets Scheme transactions register provides information about the region, vegetation type and scale of credit exchanges representing the acquisition of the rights to an offset from a landholder (discussed below), but does not identify the land-clearing activities the offset is required for. South Australia's credit register includes the offset project's credit holder and its scale, but does not provide any further detail about the offset or identify the land-clearing activities the offset is required for.

---

## Making offsets go further

One point of difference between offsets schemes in different jurisdictions is the process for selecting an offset activity. In some cases, the onus is on companies to propose an acceptable offset; in others, companies also have the option of paying into a centrally administered fund to be used for offset purchases. The latter approach effectively turns offsets into a hypothecated tax intended to be equivalent to the cost of maintaining no net loss of environmental quality.

Queensland was the first jurisdiction to establish an offsets fund in 2014. Funds have since been established in New South Wales, South Australia and Western Australia for projects in the Pilbara region (where it is the only option for proponents).

Under certain conditions, offsets funds can improve environmental outcomes. In particular, the body administering the fund may be better placed to determine which offset projects are likely to deliver the largest community gains, as they can develop broader strategies to find offsets with the best prospects of achieving good outcomes (discussed below). There are also aggregation benefits: with a fund, money that would otherwise have gone towards smaller offset projects can be pooled for larger ones. This opens up opportunities for more promising types of offsets that are only possible at a larger scale. For example, Western Australia's Pilbara Environmental Offsets Fund will be used to deliver 'larger and more strategic landscape-scale projects than would occur if individual offset projects were delivered independently' (WA DWER 2019, p. 1).

Offsets funds can also potentially reduce costs for companies. The option of paying into a fund saves companies from facing another discrete regulatory process in the form of preparing their own offset strategy, or the inefficiency of shopping for suitable offsets in a thin market. The QRC (sub. 27, p. 15) noted the advantage of 'greater flexibility' when comparing the payment option in Queensland's offsets scheme to the EPBC Act's offsets policy. Similarly, the NSWMC (sub. 28, p. 53) has promoted offsets funds as 'a win-win for business and the environment'.

Market-based mechanisms are another approach to implement offsets. These mechanisms would allow landowners to invest in projects with environmental benefits that generate offset 'credits', which could be purchased by resources companies to fulfil their offset obligations. As an example, New South Wales has a market for offsets — in lieu of using the offsets fund, resources project proponents can purchase offset credits generated by landholders to meet their offset requirements. The EPBC Act review suggested that biodiversity offset markets could improve the coordination of investments in environmental restoration in a way that maximises their biodiversity benefits (Samuel 2020, p. 90). However, it also noted that offsets policy reform is required to create the right conditions for such a market to develop:

If offsets were to be supported with greater certainty under the EPBC Act, then this could be the catalyst for a market response. ... The right policy and legal settings would provide certainty for [expert land managers and specialist project managers] to invest in landscapes, confident that proponents will be in the market to purchase offsets based on these investments down the track. (Samuel 2020, p. 14)



---

## What makes for a good offsets fund?

A fund's strategy and governance structure are key factors that determine its effectiveness in delivering better environmental outcomes.

First, the effectiveness of a fund will reflect the work that goes into identifying offset opportunities and executing strategies to turn these opportunities into quality projects. There may be fewer of these opportunities in some jurisdictions, particularly those with lower volumes of offsets. This was a concern among some study participants who warned that funds do not automatically represent a better option than traditional offsets (EDO, sub. DR62, pp. 50–51; Sonter, Simmonds and Maron, sub. DR64, p. 6; WWF Australia, sub. DR93, p. 4). As noted above, suitable sites for offset projects should be identified with minimal delays, and this applies equally to funds and traditional offsets. While some time may be needed to aggregate or determine the best application of fund payments, payments should not sit idle in funds indefinitely. Good governance arrangements (below) would assist in promoting timely decisions around the use of fund payments.

The implementation of offset strategies should be informed by the best available data and science to allow funds to achieve their greatest benefits. This allows the body administering the fund to focus their attention and resources on certain areas identified as having the largest potential for good biodiversity outcomes, and work with local landholders who might have a role to play in achieving them. For example, Queensland's Brigalow Belt offsets tender project involved mapping properties in the region for their biodiversity values and making contact with target landholders before setting up a tender (Queensland Government 2019b).

Further to this, an offsets fund must operate alongside other government activities and strategies (such as threatened species recovery plans) aimed at improving environmental and biodiversity outcomes, and should complement these where possible.

Second, the fund's governance arrangements can influence the outcomes of, and transparency around, its decisions. There is merit in splitting some of the different elements of a fund's responsibilities and operations.

- Government environment departments, subject to ministerial oversight, should set the principles behind the fund's use and the offsets scheme more broadly — this involves making value judgements, which elected officials should be able to influence.
- The management of the fund, including developing strategies for offset projects as well as the selection and procurement of these projects, is best handled by a separate statutory body such as the NSW Biodiversity Conservation Trust. This would help to ensure that offsets schemes do not become deprioritised or lost within large departments, and that payments are deployed in reasonable time. For example, the NSW Biodiversity Conservation Trust provides ongoing guidance to landholders it has made conservation agreements with, helping to grow a supply of offsets (NSW Biodiversity Conservation Trust 2018). However, the benefits of this institutional separation may not be worth the costs for jurisdictions with lower volumes of offsets.

- 
- Evaluations of how successful offset projects and policies have been in achieving their objectives should be carried out by an independent body, so as to avoid conflicts of interest.

---

#### LEADING PRACTICE 7.5

Schemes that allow companies to meet their offset obligations by paying into a fund can create opportunities for better environmental outcomes and reduce costs for companies. New South Wales, Queensland, South Australia and Western Australia all offer examples of this.

While the principles behind the use of such funds, including on what basis prospective offset projects should be evaluated, should be set subject to ministerial oversight, the fund's administration and selection of offset projects is best left to a separate body, such as the NSW Biodiversity Conservation Trust.

---

---

#### LEADING PRACTICE 7.6

Science-based implementation strategies for the use of offsets funds are key to achieving their intended purpose. These should complement other government activities or strategies aimed at improving the same types of outcomes, and be publicly available. An example has not been identified.

---

### *Pricing offsets fund payments*

A key challenge with offsets funds is determining the appropriate size of the payment into the fund required to offset a given environmental impact. Participants to this study commented on the difficulties of pricing these fund payments and the consequences of getting it wrong.

Sonter, Simmonds and Maron (sub. DR64, pp. 6–7) argued that there is a risk of payments being set too low, due to the variety of costs involved in setting up, administering and using a fund to deliver environmental outcomes, and the uncertainty around the true cost of attaining a given environmental benefit. As noted above, the effectiveness of a fund depends on its managing body having the capacity to identify suitable offset projects, and this is not costless. There may also be administration costs, such as those incurred if a project involves the sale of land. The use of an offsets fund should not transfer these costs from the company to the government — these costs should be incorporated into the calculation of fund payments. This principle is reflected in the setting of payments into the NSW Biodiversity Conservation Trust's fund, which includes an administration fee to cover indirect costs such as staffing, resourcing and other fees (NSW Biodiversity Conservation Trust, pers. comm., 29 October 2020), although it is too early to determine how well this administration fee captures these costs in practice.

---

However, despite their general support for offsets funds, the NSWMC (sub. DR83, p. 12) and QRC (sub. DR81, p. 21) stated that the mechanism used to calculate fund payments in New South Wales produces unrealistically-high prices that exceed the cost of securing offsets through other means, making the option unattractive to companies. The QRC attributed this, in part, to a ‘limited data set’ being used to price fund payments.

It is possible that fund payments have been set too high — perhaps, for example, due to overly-conservative projections around the cost of financing projects from the fund. This may explain the disparity in New South Wales, where the fund is used to purchase credits from the same market proponents otherwise usually need to use themselves.

It is also possible that offset projects are not generating environmental outcomes that deliver the no net loss requirement. This would effectively mean the costs of offset projects are artificially low. And as the extent of the cost shortfall could differ between traditional and fund-financed offsets, this could be another factor in any disparity between the costs of the two approaches in other jurisdictions. Given the lack of monitoring and evaluation of offset outcomes, it is difficult to determine whether this is the case.

Regardless of whether offset projects are delivered through the traditional approach or a fund, the need to monitor and assess project outcomes remains. Information gathered through this process will help to improve the alignment of traditional offset requirements, and fund payments, with what is required to achieve no net loss.

---

**LEADING PRACTICE 7.7**

When a resources company elects to fulfil its offset obligations by paying into a fund, the fund payment should cover the full expected cost of attaining the required environmental outcome through the fund, including an amount that contributes proportionately to the fund’s establishment and administration costs. The NSW Biodiversity Conservation Trust’s fund incorporates this principle.

---

### **7.3 Resources site rehabilitation and decommissioning**

Resources site rehabilitation refers to the activities needed to enable a site to be productive after mining is complete. The Australian Government (2016b, p. 3) states that rehabilitation should have three broad objectives:

- long-term stability and sustainability of landforms, soils and hydrology
- partial or full repair of ecosystems
- prevention of pollution to the surrounding environment.

In some cases, the end goal for rehabilitating land used in resources sites is restoration to its original state. For instance, the Ranger uranium mine — which sits inside the Kakadu

---

National Park — is a site with rehabilitation requirements encompassing restoration (DAWE nd).<sup>26</sup> However, restoration may not always be feasible, or may be excessively costly, in which case rehabilitation can involve repurposing the land for different uses. For example, the large voids created in open cut mines can be turned into artificial ‘pit lakes’ with possible recreational value, as has been proposed for coal mines in New South Wales’ Upper Hunter region (Upper Hunter Mining Dialogue 2019).

In all states and territories, rehabilitation objectives must be set during the initial approval process, and some form of financial assurance has to be provided by the company to support planned rehabilitation (appendix B). Assurance arrangements are intended to guard against the risk of companies reneging on, or being unable to fulfil, their rehabilitation requirements. As such, they should ideally cover the costs that governments would incur in having to rehabilitate a resources site themselves, should it be abandoned by a company prior to the fulfilment of all rehabilitation obligations.

State and territory resources regulators are generally responsible for overseeing the rehabilitation process. In some cases, governments have established specialised bodies to provide further oversight and technical advice, such as the Australian Government’s Supervising Scientist at the Ranger Mine in Kakadu National Park, and the Mine Land Rehabilitation Authority in Victoria (which supports the rehabilitation of Latrobe Valley coal mines and other high-risk mines in the state). Such arrangements are intended to provide additional oversight where there is a particularly high level of sensitivity around environmental outcomes, or where a large number of complexities and a significant need for coordination have been identified.

Oil and gas extraction facilities also have decommissioning and rehabilitation requirements. Under the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (Cth), companies must remove all structures that are not to be used for operations authorised by their title. The Department of Industry, Science, Energy and Resources (DISER) is currently undertaking a review of the policy and legislative framework for offshore oil and gas decommissioning, in the expectation that decommissioning activity will increase in the future as the sector matures (DISER 2018).

This section considers whether rehabilitation and decommissioning policy has been effective, and presents leading-practice approaches to this element of resources regulation.

## **Rehabilitation is not straightforward, and little has taken place**

Rehabilitating a mine is no simple task. Mines can leave enormous physical disturbances which require significant volumes of water or physical material to fill, and can also create structural risks such as unstable pit walls or disruptions to groundwater systems. Accumulated tailings (leftover materials separated from the mined resource) also need to be

---

<sup>26</sup> The site’s rehabilitation objectives require it to ‘reach a state that is similar to the adjacent area, such that it could be incorporated into Kakadu National Park should that be decided in the future’ (DAWE nd).

---

stored so as not to contaminate the surrounding environment. Dealing with these issues comprehensively is a long and difficult process, even prior to considering further restoration or other land-use objectives.

Policy frameworks for the rehabilitation and decommissioning of resources projects only became a focus for jurisdictions in recent decades. This has led to a large legacy problem of abandoned mines, ranging from small-scale, gold rush era operations to modern, open cut mines. A new database constructed from state records (Werner et al. 2020) found almost 60 000 abandoned mine sites in Australia, although the vast majority of these are likely to be in the older, small-scale category (Qld DNRME 2018a, p. 5; VAGO 2020, p. 61).

The limited policy focus until recent decades has also contributed to a lack of rehabilitation and decommissioning of resources projects more broadly, with several reviews and studies noting that little activity has occurred in Australia, and that government records are limited.

- ‘There are few examples of large mines in NSW which have been successfully rehabilitated and closed to modern environmental standards’ (AONSW 2017, p. 6).
- Land certified as rehabilitated in Queensland (within operational mine sites) made up only 0.25 per cent of the disturbed mining area as of 2017 (QTC 2017, p. 2), and no large-scale mines had been relinquished in full as of 2016 (Campbell et al. 2017, p. 17).
- The aforementioned database (Werner et al. 2020, p. 10) found that only Queensland and Western Australia had maintained records of rehabilitated mines.
- While some small oil and gas projects have been decommissioned, as of 2018 the Commonwealth regulatory framework had not been tested on larger projects (DIIS 2018, p. 6).

The lack of rehabilitation and decommissioning may also reflect other factors, including the longevity of resources sites and deficiencies in current rehabilitation and decommissioning policies.

For example, there are concerns that rehabilitation conditions in some jurisdictions are not being set or enforced well enough to deal with the range of inherent risks. A review of conditions in Western Australia found that the vast majority were too generic to guide a mine’s closure or clearly articulate the proponent’s intended outcomes, and that few (if any) projects reported on progress towards their completion criteria (Kragt et al. 2019, pp. 11–14). Similarly, an audit of rehabilitation in Victoria found that neither operators nor the regulator clearly understood the outcomes (and likely associated costs) set out in some rehabilitation plans (VAGO 2020, p. 48), and that rehabilitation bonds were being returned to operators without the regulator being able to say whether all requirements had been met (VAGO 2020, pp. 41–42).

Given the complexity of rehabilitation and decommissioning activities, there can be significant uncertainty around the long-term prospects of resources sites, which is difficult to address in rehabilitation plans prepared at a project’s outset. Ongoing regulatory scrutiny can assist in maintaining rehabilitation objectives and conditions that are fit for purpose. For

---

instance, an assessment of the initial closure plan for the Ranger Mine, undertaken by the Supervising Scientist, concluded that a ‘significant amount of work’ was required to demonstrate that rehabilitation objectives could be achieved, and made a number of recommendations to support this (DoEE Supervising Scientist 2018, pp. viii–iv). Progress against the recommendations was examined in another assessment of the revised plan the following year (DoEE Supervising Scientist 2019).

While there are few well-documented case studies of good rehabilitation outcomes in Australia, some examples of positive end uses are beginning to emerge. These include sightseeing attractions (Butterworth and Margolis 2019), recreational lakes (Western Australian Government 2020b) and grazing paddocks (Upper Hunter Mining Dialogue nd). A guide to rehabilitation practices by the Australian Government (2016b) documents a range of specific implementation lessons learned from past attempts at rehabilitation<sup>27</sup>, indicating that practices may be improving.

#### FINDING 7.3

There are few examples of large resource extraction sites being rehabilitated or decommissioned in Australia — in part because rehabilitation and decommissioning only became a policy focus for governments in recent decades. As a result, there are many legacy abandoned mines. Some examples of positive end uses and good rehabilitation outcomes have emerged over recent years.

### Many mines have been placed into care and maintenance

Where mining operations have been suspended, but not permanently shut down, they are described as being in ‘care and maintenance’. Participants in this study, and previous reports, have raised concerns about companies placing mines into care and maintenance to avoid having to rehabilitate a site (CFMEU, sub. 16, p. 4; Mineral Policy Institute, sub. DR72, p. 18; EDO 2017, p. 6).

There are legitimate reasons why mines are placed into care and maintenance. The key driver is often low commodity prices that affect the financial viability of a site. In these cases, the company may choose to manage the site under care and maintenance until economic conditions improve (MCA 2017, p. 23; Tasmanian Government 2017, p. 5).

Mines in care and maintenance must continue to comply with their environmental and other obligations. For example, they must continue to maintain the site safely, and hold financial assurances where required (discussed below). The liability for rehabilitation remains with the company. However:

---

<sup>27</sup> For example, the handbook cautions against the use of a particular model for predicting erosion rates when planning landform profiles (Australian Government 2016b, p. 21).

---

Sites in C&M present a higher risk to the State with less operator personnel on site to maintain vital infrastructure and monitor performance. Progressive rehabilitation activities may cease ... Entering into C&M may be a precursor to the operator's default. Often such sites slowly decline and only have their profile raised when environmental harm spreads to adjoining properties. (QTC 2017, p. 37)

The Commission does not see a strong case for limiting the ability of a company to place a mine into care and maintenance. Nonetheless, given the potential for greater risks to the state government while a mine is under care and maintenance, it seems reasonable that there would be a commensurately greater level of scrutiny placed on these mines. Several states have additional requirements on mines entering care and maintenance — for example:

- Western Australia requires resources companies to prepare a care and maintenance plan that outlines how environmental risks will be managed.
- Recent legislative amendments in Queensland require that the manager of the financial assurance scheme be notified when a mine enters care and maintenance. This may affect the operator's financial assurance requirements for the site.

However, the Senate committee inquiry into mine site rehabilitation (SECRC 2019, p. 51) noted that 'most states and territories do not appear to hold detailed records of the number of sites in care and maintenance and the length of time these sites have been in that state'. Similarly, Campbell et al. (2017, p. 1) noted the data limitations in this area. And the Victorian Auditor-General has reported that the Earth Resources regulator is limited in its ability to monitor and regulate inactive mines, which include licences that are expired, suspended, surrendered or not renewed but not yet rehabilitated. It stated that the regulator:

... does not have processes to alert it that a mine or quarry operation is likely to become inactive ... [The regulator] also does not have processes to effectively guide staff on how to regulate inactive mines and quarries. This results in sites remaining 'inactive' for an indeterminate amount of time with little or no rehabilitation taking place. (VAGO 2020, p. 58)

The Commission considers that leading practice requires that the regulator be notified when a mine is entering care and maintenance, to allow it to manage any heightened environmental and financial risks. The preparation of care and maintenance plans, and revisions to the amount of financial assurance held, may be needed to manage these risks.

#### LEADING PRACTICE 7.8

Resources sites that are placed into care and maintenance can create particular risks for the environment, and the operator may be at greater risk of default. These risks can be managed by a requirement to notify the regulator when a site is placed into care and maintenance, which can lead to further conditions. The preparation of care and maintenance plans that identify and address how environmental risks will be managed (such as those required in Western Australia) and the option to modify a site's financial assurance requirements (as available to the regulator in Queensland) are leading-practice examples.

---

## Financial surety arrangements have been inadequate

All state and territory governments have financial surety arrangements in place that aim to cover mine rehabilitation costs in the event that companies do not fulfil their obligations. These arrangements fall into two categories.

- Most governments require rehabilitation bonds, often in the form of bank guarantees (or cash bonds or insurance bonds in some cases). Bank guarantees are an agreement between the financial institution and the relevant regulator that the bank will cover the company's rehabilitation liability up to an agreed amount, if the company is unable to fulfil its rehabilitation obligations. To obtain such a guarantee, the company pays the bank an ongoing fee, and may be required to provide cash collateral.
- Both Queensland and Western Australia use a rehabilitation pool for some mines. Companies make an annual contribution to the pool based on their rehabilitation liability (and, in the case of Queensland, their financial risk). The government can use the funds in the pool to cover the cost of rehabilitation in the event that a company is unable to fulfil its obligations. The interest earned on the funds in the pool can also be used to rehabilitate abandoned mines.

In 2018, the COAG Energy Council endorsed a set of principles to underpin reform of financial surety arrangements across Australia (box 7.3).

### Box 7.3 National principles for managing rehabilitation financial risks

In August 2018, the COAG Energy Council agreed to the following principles to manage rehabilitation financial risks.

- Responsibility for rehabilitation lies with the tenement holder.
- Rehabilitation and closure plans should be established before project commencement.
- Governments should hold financial securities for rehabilitation that reflect the level of disturbance and risk of the operation.
- Risk-based mechanisms should be in place to ensure cost estimates for rehabilitation remain current throughout the life of the project.
- Monitoring processes should be applied to identify early any risk that the company may not be able to fulfil its rehabilitation requirements.
- Mechanisms are developed to monitor and apply financial obligations for closure.
- Financial assurance policies should encourage progressive rehabilitation and improved closure planning.

Source: COAG Energy Council (2018a).

## Some sites are not covered by financial surety arrangements

While most resources sites are covered by some form of financial surety for their rehabilitation and decommissioning obligations, there are exceptions. Most notably, the regulatory



---

framework for Australia’s offshore oil and gas resources does not include an explicit requirement for financial surety for decommissioning. Titleholders are required to maintain financial surety to meet the costs of complying with requirements under the Offshore Petroleum and Greenhouse Gas Storage Act, but the surety is intended to cover only ‘extraordinary’ costs such as those incurred in an oil spill, and there is no provision that allows governments to access these funds if necessary. DISER identified this as a gap ahead of its review of the offshore oil and gas decommissioning framework (DIIS 2018, pp. 40–41).

The lack of financial surety under current regulations could result in the Australian Government footing the bill if a company is unable to meet its obligations — decommissioning liabilities in the oil and gas sector have been estimated at more than US\$21 billion over the next 50 years (Deloitte 2017, p. 5).

Similarly, onshore oil and gas projects in Western Australia are not covered by the state’s Mining Rehabilitation Fund, nor are mining projects covered by State Agreements. However, the Government is considering reforms that will require onshore oil and gas operators to provide assurance for operational environmental risks, decommissioning and long-term maintenance obligations (Western Australian Government 2020c).

There are also concerns that even where financial surety arrangements exist, regulators may not be adequately enforcing the requirements across all sites that should be covered. For example, the Victorian Auditor-General reported that in 2019, there were 578 mines and quarries in Victoria with no rehabilitation bond. It found that 38 of these sites should have had bonds in place as specified by the *Mineral Resources (Sustainable Development) Act 1990* (Vic). The other 540 sites may or may not have required bonds (for example, because they had not yet started ground operations), but the regulator was unable to provide documentation to support such claims (VAGO 2020, p. 38).

Not having financial assurance mechanisms in place exposes governments to high levels of financial risk. While financial assurance mechanisms result in costs to companies, they also provide incentives for companies to fulfil their rehabilitation and decommissioning obligations. Specifically, the fulfilment of the obligations triggers a commensurate release from the assurance requirements — companies providing bonds will get their cash sum back or no longer have to pay bank guarantee fees, and those charged annual levies will be released from those payments. It is leading practice that some form of financial assurance be provided for all projects, based on the risks that the project represents to governments.

---

**LEADING PRACTICE 7.9**

Having financial assurance arrangements in place to cover rehabilitation or decommissioning, based on the risk the project poses to the taxpayer, provides incentives for companies to undertake those processes and minimises the risk that responsibility will be shifted to governments. These arrangements are present for most (but not all) types of site.

---

## Rehabilitation bonds are being reformed to better reflect risk

Where used, rehabilitation bonds should cover the full cost of rehabilitating a mine. This ensures that taxpayers are not left with the bill if a mining company does not fulfil its rehabilitation responsibility. It also provides incentives for mining companies to rehabilitate — Roche and Judd (2016, p. 29) argued that where the costs of closure are greater than the loss of bonds, there is little financial incentive for a company to rehabilitate and close the mine (although reputational risk and social licence factors may be a driver — chapter 10).

However, most major resources jurisdictions have previously set bond levels far below the potential rehabilitation liability.

- In New South Wales, a 2017 Auditor-General report found that bonds were unlikely to cover the full cost of rehabilitation — due to inaccuracies in the calculator used to estimate rehabilitation liabilities and lack of regular updating of bond estimates (AONSW 2017, p. 2).
- In Victoria, an inquiry into the Hazelwood mine fire in 2016 found that the estimated liability for Hazelwood would be between \$264 million and \$357 million, but its bond was set at \$15 million (Teague and Catford 2016, pp. 105, 119). The discrepancy between the bond and estimated liability was similar for the other Latrobe Valley mines. The rehabilitation bond for Hazelwood was increased to \$289 million in 2017 (Vic DEDJTR 2018, p. 2). More generally across the state overall, the Victorian Auditor-General (VAGO 2020, p. 2) has recently reported that ‘bonds for many Victorian mines and quarries do not cover actual rehabilitation costs’.
- In Queensland, a 2017 review into the financial assurance framework found that the bond discounts that were available to companies with a good environmental performance reduced bond levels by \$1.2 billion, but was not based on the financial risk to the state (QTC 2017, p. 1).
- In Western Australia, the government stated that rehabilitation bonds covered about 25 per cent of potential liabilities in 2008 (WA DMP 2014).

Several issues have been identified as contributing to these shortfalls. It should be acknowledged that estimating the level of rehabilitation required at the outset of a project is difficult, and there will always be a degree of uncertainty around the estimates. For example, a mine may be closed unexpectedly — perhaps due to significant adverse commodity price changes — and the associated rehabilitation costs may greatly exceed the amount estimated for its planned life cycle (AONSW 2017). In other cases, the proposed rehabilitation approach may be found to be unsuitable upon the completion of the project, and alternative approaches may be more costly. The review of Queensland’s framework also described a case where unforeseen environmental harm was caused by the use of a new technology (QTC 2017, pp. 29–30). More generally, an environmental consultant has noted that there is ‘little certified rehabilitation that can be used to assess the accuracy of any calculator’ (QTC 2017, p. 31).

---

Regulator conduct in implementing and monitoring rehabilitation bonds has also been highlighted as a factor contributing to inadequate bond levels. Regular review of bond levels is required to capture changes in project circumstances and risks, along with factoring in improved understanding on rehabilitation activities and costs, and there should be flexibility to move away from standard calculator methods when non-standard activities are involved. However, in Victoria, the regulator was found not to have been reviewing and updating individual bond amounts as required under state policy (VAGO 2020, pp. 42–45). A more widespread problem has been the use of outdated price schedules in calculating the cost of specific rehabilitation tasks (AONSW 2017; QTC 2017; VAGO 2020).

Jurisdictions have sought to improve their financial assurance mechanisms to address some of these shortcomings. Recent reforms in several states have resulted in increases in rehabilitation bonds, or moves away from bonds to a pooled risk system. All jurisdictions that use rehabilitation bonds have a policy that they should cover the full rehabilitation liability, and the calculators used by regulators in New South Wales and Victoria have been or are in the process of being revised (AONSW 2017; VAGO 2020). Proposed reforms in New South Wales would also require companies to report their rehabilitation cost estimates annually, backed by spatial data (NSW RR 2020b). However, it is too early to determine whether these reforms have wholly addressed the issues that had previously led to a significant underestimation of bond levels.

#### LEADING PRACTICE 7.10

Rehabilitation bonds that cover the full cost of providing rehabilitation offer the highest level of financial assurance for governments, and provide companies with full incentives to complete rehabilitation in a timely way. Jurisdictions are heading in this direction, but a leading-practice example has not been identified.

### Pooled approaches bring particular risks

Both Western Australia and Queensland have moved towards a rehabilitation pool instead of rehabilitation bonds in some cases. However, there are differences in the scope and nature of the respective schemes.

- The Western Australian scheme captures all mines not covered under State Agreements (although the Minister retains discretion to require another form of surety). In Queensland, higher-risk companies are excluded and must instead use bonds, and companies with estimated rehabilitation costs over a threshold of approximately 5 per cent of the State's total must cover the excess through a bond (Queensland Treasury 2019, pp. 8–11).
- In Western Australia, all participating resources companies are required to pay 1 per cent of their rehabilitation liabilities into the fund each year (WA DMIRS 2017, p. 5). In Queensland, the level of payment varies depending on the company's risk of default —

---

0.5 per cent for very low-risk companies, 1 per cent for low-risk companies and 2.75 per cent for moderate-risk companies (Queensland Treasury 2019, p. 11).

Pooled funds are akin to insurance pools, and offer many of the same benefits. By pooling together and diversifying risks from a range of sites, they have the potential to lower costs for some resources companies while offering the same protection for governments.

Industry participants to this study (AMEC, sub. DR90; CME WA, sub. DR74; Fortescue Metals Group, sub. DR92; NSWMC, sub. DR83; SACOME, sub. DR75) overwhelmingly favoured the use of pools, with the upfront costs, fees and reduced borrowing capacity associated with using bonds for assurance being a major concern. Similarly, the Queensland Treasury Corporation (2017, p. 43) described the costs of bank guarantees (assuming the guarantees adequately approximate the rehabilitation cost) as ‘onerous for mid-sized operators’.

Beyond the financial costs to companies, rehabilitation pools can also incentivise progressive rehabilitation (discussed below) if the annual payments into the pool prompt more frequent reassessments of rehabilitation liabilities. Additionally, pooled funds provide a stream of interest revenue for governments (which have been used to rehabilitate abandoned mines), and can be accessed more quickly than security deposits.

But like standard insurance funds, pooled rehabilitation funds also have risks. First, they can create moral hazard for operators — companies may face weaker incentives to fulfil their rehabilitation requirements because any non-compliance will be met by funds in the pool. As such, pooled approaches should be paired with other compliance and enforcement arrangements, to ensure that the incentives to undertake rehabilitation will not be diminished.

Pooled funds also require the government to assess the risk that an operator will fail to meet its rehabilitation responsibilities, and adjust the amount the operator needs to pay into the fund accordingly. Without this adjustment, low-risk operators will essentially be subsidising the risks faced by higher-risk operators.

The advantages of pooled funds are weakened if higher-risk companies or companies with large liabilities dominate the risks covered by the fund. In these cases, the pool might be insufficient to cover rehabilitation costs if multiple companies fail in a short time period or a company with a large liability fails to meet its obligations. The Queensland Treasury Corporation (2017, p. 46) strongly recommended against the inclusion of these types of companies in the State’s pool for this reason.

These issues are particularly relevant in the short term after a pool’s inception, as its funds are built up from zero. For instance, as of June 2019, the Western Australian Mining Rehabilitation Fund totalled \$150 million (WA DMIRS 2019c, p. 1) — unlikely to be sufficient if a major mine handed its rehabilitation liabilities to the government. These short-term risks have been specifically demonstrated by an incident in Western Australia, which saw the operator of the Ellendale diamond mine go into liquidation just two years after entering the pool. The operator had been refunded its bond from the previous assurance

---

scheme, and its pool contributions to date were significantly lower than both the bond amount and the estimated rehabilitation cost (Marsden Jacob Associates 2018, p. 19).

Overall, pooled funds have some beneficial aspects, but also carry significant risks. It is hard to assess fully how the pooled approach has fared in practice at this stage, because of the recency of Queensland and Western Australia's pooled schemes, uncertainty in companies' risk of default and lack of data on the extent of rehabilitation.

#### FINDING 7.4

Rehabilitation pools can weaken incentives for companies to rehabilitate their sites and there are risks that the pool will be insufficient to cover the cost of rehabilitation if a company with a large liability does not fulfil its rehabilitation requirements. Pools must be paired with effective compliance and enforcement arrangements.

State and Territory Governments that use pooled arrangements for rehabilitation surety should ensure that levies reflect the risk of the company passing their liabilities to the government. The pool's exposure to larger liabilities or higher-risk companies should be limited. Queensland's rehabilitation pool is a good example of this model.

#### Incentives to rehabilitate progressively are leading practice

Most participants to this, and other, studies have acknowledged that there are benefits to rehabilitating sites progressively, rather than leaving all rehabilitation to the end of the project. For example, the Senate inquiry into rehabilitation heard that progressive rehabilitation can lead to a better understanding of rehabilitation requirements, ensure that funds are made available, reduce the total costs of rehabilitation, improve health and safety outcomes and provide community confidence in the operator's commitment to rehabilitate (SECRC 2019, pp. 41–42). It can return land to a productive use post-mining earlier than would have otherwise been the case.

However, it is difficult to assess the extent to which progressive rehabilitation has taken place, as there is little publicly available information. No jurisdiction publishes complete, consistent and up-to-date data on the volume of progressive rehabilitation. However, some individual studies, along with government data covering a subset of mines in Western Australia, have reported varying amounts of progressive rehabilitation.

- The Queensland Treasury Corporation (2017, p. 2) stated that around 18 000 hectares, representing 8 per cent of land disturbed by mining activities, was classified by the industry as progressively rehabilitated in 2017. It also noted that 'the gap between the area of land disturbed and rehabilitated has grown over recent years' (QTC 2017, p. 34). The QRC (sub. DR81, p. 23) reported that since 2017, its member companies have had over 3000 hectares of predominantly mining land certified by the Queensland Government as progressively rehabilitated.

- 
- In New South Wales, the Audit Office of NSW (2017, p. 27) found ‘evidence during [their] site visits and in annual reports that ongoing rehabilitation is occurring at most of the sites ... reviewed’.
  - The Chair of the Senate inquiry into rehabilitation commented that ‘some parts of the mining industry are making good progress in ensuring that rehabilitation works occur progressively over the mine life’ (SECRC 2019, p. 150).
  - In Western Australia, 22 per cent of disturbed land in sites not covered by State Agreements was reported to the regulator as being under rehabilitation (WA DMIRS 2019c, p. 5).

Concerns have previously been raised that incentives for progressive rehabilitation are inadequate. In Victoria, the Hazelwood Mine Fire Inquiry (2016, p. 142) noted that deficiencies in rehabilitation bonds at the time had reduced the incentives for progressive rehabilitation — as noted above, if bonds are set below the cost of rehabilitation, there may be little financial incentive for a company to undertake rehabilitation at any stage. And in Queensland, an operator stated that it had difficulty ensuring that progressive rehabilitation would reduce its estimated rehabilitation liability and corresponding financial surety requirement (QTC 2017, p. 18).

Progressive rehabilitation can be encouraged by including requirements in approval plans. In addition, the financial surety system can provide incentives to rehabilitate, by having regulators update a company’s rehabilitation liability and adjust the required amount of surety (or levy) as companies undertake progressive rehabilitation. While these practices had previously been missing in some jurisdictions, recent reforms have aimed to make progressive rehabilitation standard practice. For example, following the Hazelwood Mine Fire Inquiry, Victoria’s rehabilitation policy for its Latrobe Valley mines was updated to state that:

Regular review of bond amounts using a consistent and transparent tool (the RLA Framework) provides the best incentive for operators to undertake progressive rehabilitation and thereby reduce the bond. The completion of progressive rehabilitation that contributes to the final landform will be directly reflected in a reduction in liability assessments, translating to a reduction in the bond amount. (Vic DEDJTR 2017, p. 3)

In addition, recent reforms in Queensland, and proposed changes in New South Wales, require companies to submit plans for progressive rehabilitation before commencing mining, and in New South Wales, annual rehabilitation reports (including spatial data) would also be required (NSW RR 2020b; Qld DES 2019c). The QRC (sub. DR81, pp. 22–23) highlighted Queensland’s framework for formally certifying progressively rehabilitated land as another potential incentive mechanism. Certification, which companies can apply for voluntarily, may factor into rehabilitation liability calculations (Qld DES 2019b, p. 10), and provides certainty to companies that the land will not ‘be subject to future changes in requirements or expectations’ (QRC, sub. DR81, p. 22).

---

#### LEADING PRACTICE 7.11

Progressive rehabilitation can lead to a better understanding of rehabilitation requirements, ensure that funds are made available, reduce the total costs of rehabilitation, improve health and safety outcomes and provide community confidence in the operator's commitment to rehabilitate.

Progressive rehabilitation can be encouraged by including requirements in approval plans, and by financial surety requirements being reduced commensurate with ongoing rehabilitation work. Victoria's rehabilitation policy for Latrobe Valley mines represents a good example of the latter mechanism.

### Selling sites with rehabilitation and decommissioning liabilities outstanding

The EDO (sub. DR62, pp. 52–53) and Mineral Policy Institute (sub. DR72, pp. 23–24) expressed concern at the practice of resources sites that are nearing the end of their lives, but that have significant rehabilitation liabilities outstanding, being sold (sometimes for nominal sums) to smaller companies, who may be less capable of fulfilling their responsibilities. The Northern Endeavour project is an example of the risks associated with such a scenario, with the project's operator having gone into administration within four years of purchasing the asset (Walker 2020, pp. 4–6). This has reportedly left the government with a repair and rehabilitation bill of between \$120 and \$200 million (Macdonald-Smith 2020). A review of the incident found that the purchasing company was 'significantly undercapitalised' and reliant on the site's day-to-day production for cash flows, suggesting a relatively high risk of default ahead of the site being decommissioned (Walker 2020, p. 6).

To mitigate these risks, the possibility that such sales may occur should be factored into the design of financial assurance frameworks. For example, in jurisdictions that use pooled schemes, contributions to the pool should reflect the risk of a company passing on its rehabilitation liabilities to the government — as the sale of a mine may change that risk, it should trigger a review of the size of the required payment. If a proposed sale is found to materially increase the risk of the site's liability being passed to the government, assurance requirements may be adjusted — for instance, by stipulating that the buyer must put up a rehabilitation bond instead of participating in the pooled scheme. The process should also account for related corporate practices with similar risk implications, such sales of subsidiary companies that hold a mining licence and associated obligations (Queensland Government 2018a, pp. 10–12).

These sales can also be considered in tenement licensing decisions (chapter 4). For example, recent reforms in Queensland require the Minister for Resources to consider a proposed buyer's financial ability to fulfil the site's rehabilitation obligation, as part of assessing an application for the transfer of a resource authority (Queensland Government 2020b, p. 47). Approval of the transfer could be granted conditional on the proposed buyer meeting the financial assurance requirements. This would allow legitimate end-of-life mine sales to

---

proceed while mitigating potential risks where there are concerns about the purchaser’s capacity to complete rehabilitation.

Finally, the review of the Northern Endeavour incident recommended that the Australian Government consider the use of ‘trailing liabilities’, where the seller of an offshore asset could be continually liable for its decommissioning even after its sale. The review stated that this mechanism would be ‘a final backstop’ to mitigate risks to government (Walker 2020, p. 7) — the current titleholder would still have primary ownership of the decommissioning liability. This issue is currently being considered in DISER’s review of the offshore oil and gas decommissioning framework (DIIS 2018).

#### LEADING PRACTICE 7.12

Smaller companies that acquire a resource extraction site that is nearing the end of its life may struggle to meet their rehabilitation obligations. Leading practice requires that governments account for this risk in financial assurance frameworks. Governments can also consider the financial strength of companies in tenement licensing approvals, as has been implemented in Queensland’s recent reforms.

### **Residual risks after surrender must be managed appropriately**

Following the surrender of a mine site, some environmental risks, and monitoring and maintenance needs can remain, requiring management by the government or subsequent landholders. It is appropriate that resources companies are required to compensate governments for these residual risks and costs, as they are negative externalities caused by mining activities.

However, industry participants to this study raised concerns about current residual risk frameworks. In particular, participants stated that mining companies can be responsible for a mining lease many years after it has ceased to be in force. The NSWMC (sub. DR83, p. 12) noted that industry can be exposed to ‘liability for poor land management practices of future land holders’, while the QRC (sub. DR81, p. 26) stated that ‘without a clear expression of future liability release, it will remain a fundamental deterrent for resources companies to ever lodge surrender applications’.

Governments must be willing to accept the liability for some level of residual risk and allow companies to surrender their liabilities. Companies that have satisfied their rehabilitation requirements and compensated governments for any remaining risks or management needs in good faith should not be liable for genuinely unforeseen problems that occur in the years following surrender. A useful approach may be a residual risk payment — for example, in Queensland, resources companies relinquishing land must complete an environmental risk assessment, and provide payment to cover remaining residual risks that have ‘a reasonable expectation of being likely to occur at least once within hundreds or possibly thousands of



---

years' (Qld DES 2020, p. 4). A pool for these payments has just been introduced as part of recent reforms to the state's residual risk framework.

Payments of this type should be determined at the point of surrender, using a formal risk assessment and calculation process. They should cover the long-term expected costs of monitoring and managing any residual risks, calculated using a documented process with scope to appropriately consider any factors unique to the individual site and incorporate the operator's knowledge. For example, Queensland's reforms specify the use of a standardised payment calculator (with accompanying risk assessment) as the default method, with an expert panel brought in for more complex sites. These reforms have been deemed 'a positive step' (Anglo American, sub. 42, p. 14). Meanwhile, the Mine Land Rehabilitation Authority in Victoria supports the monitoring and management of higher risk mine sites after their closure, and has the power to acquire the land if needed to protect the public, infrastructure or environment (Pallas 2019).

#### LEADING PRACTICE 7.13

Residual risk payments allow governments to be compensated for foreseeable residual risks after the surrender of a mine site, while allowing companies to surrender their liability for the site. These payments should be proportionate to the remaining level of risk and determined at the point of surrender. Risks should be assessed, and payments calculated, through a formalised process. As a focus on residual risk issues is relatively new, no jurisdiction has been identified as having a leading-practice approach, although recent reforms in Queensland look to be moving in this direction.

## Reopening and rehabilitating abandoned mines

As noted earlier, there are many legacy abandoned mines in Australia. These are mines where a mining lease no longer exists, and responsibility for rehabilitation falls to the government. While many of these mines are small and pose low risks, there are exceptions. For example, of Queensland's 15 000 abandoned mines, about 120 are larger, modern abandoned mines (Qld DNRME 2018a, p. 6).

Abandoned mines can result in a range of issues, including:

- environmental risks, such as increased salinity and acidity of groundwater, flooding of pit voids, and a failure to return the land to a productive landscape
- safety risks
- societal issues associated with disrupted communities (SECRC 2019, pp. 6–7).

Most jurisdictions (with the exceptions of South Australia and Victoria) have formal abandoned mines policies, which prioritise mines to be monitored and rehabilitated. However, variation in the quality and completeness of State and Territory datasets has made it difficult

---

to gauge the extent of the problem, and identify priority sites for rehabilitation, at a national level. Werner et al. (2020) noted that their newly constructed national mine site database, which includes a standardised environmental risk metric, may assist with these efforts.

Jurisdictions are attempting to generate a funding source for their abandoned mines policies — for example, Western Australia and Queensland can use the interest generated from their rehabilitation pools to manage abandoned mines, and the Northern Territory has placed a levy on the industry to fund the rehabilitation of abandoned mines. Nonetheless, the level of funding for these programs is low relative to the task — the Northern Territory has estimated that the cost to rehabilitate all of its abandoned mines would be about \$1 billion, while the levy generates about \$14 million per year (SECRC 2019, p. 63).

In some cases, abandoned mines could contain resources that have become economically viable — for example, due to improvements in technology. A new operator re-opening the mine could help address the rehabilitation burden. However, there are some barriers to this operating in practice.

- New leases and approvals would be required to extract resources, including those from tailings.
- Resources companies are reluctant to take on the entire historic rehabilitation liability.

In 2018, the then Queensland Department of Natural Resources, Mines and Energy (2018a, p. 11) released a discussion paper on abandoned mines which noted that:

In all instances of repurposing, there are likely to be benefits to streamlining the current legislation without undermining the intent of the relevant Acts ... to help facilitate the uptake of repurposing options that mitigate the State's contingent liability.

The Queensland Government proposed introducing an abandoned mine tenure type, which would streamline licensing processes, although this has not yet occurred.

The Senate inquiry on rehabilitation pointed to the Savage River Rehabilitation Project in Tasmania as an example of a successful government–industry partnership to rehabilitate an abandoned mine. The Savage River mine was abandoned in 1996 and had caused significant environmental harm to the river. In 1997, a new owner was indemnified against past environmental damages, but the agreement provided a source of funding to rehabilitate the river. Independent water quality reviews have noted that the program has been successful in improving water quality (Tas EPA nd).

---

#### LEADING PRACTICE 7.14

There is merit in governments working with industry to reopen and rehabilitate legacy abandoned mines, such as through streamlined approval processes (without compromising the intent of regulation) and indemnities against past damages. The Savage River Rehabilitation Project in Tasmania is an example of a successful government–industry partnership.

## 7.4 Worker safety

Given the inherent risks associated with working on resources sites, the industry is subject to regulations to safeguard workers. Health and safety regulations in the resources sector are generally administered by States and Territories, and encompass standard workplace health and safety laws, as well as additional legislation covering mining and onshore oil and gas operations in some jurisdictions. These include the *Work Health and Safety (Mines and Petroleum Sites) Act 2013* (NSW), the *Petroleum and Gas (Production and Safety) Act 2004* (Qld) and the *Mines Safety and Inspection Act 1994* (WA).

Governance arrangements vary across jurisdictions. Monitoring and enforcing companies' compliance is generally within the broader remit of the resources regulator (such as the NSW Resources Regulator) or the workplace health and safety regulator (such as SafeWork SA and WorkSafe Tasmania). Specific advice on resources-related health and safety issues can be provided by other bodies, such as the Mine Safety Advisory Council in New South Wales, which comprises representatives from resources companies, unions and government and underpins 'an outcomes based, collaborative regulatory approach' (NSWMC, sub. DR83, p. 13). A similar tripartite approach is used in Queensland, where Mining Safety and Health Advisory Committees comprising industry, union and government representatives provide technical expertise and advice on developing and implementing safety legislation (Qld DNRME, sub. DR95, p. 8).

Regulation of health and safety in the offshore oil and gas sector is overseen by NOPSEMA under the *Offshore Petroleum and Greenhouse Gas Storage (Safety) Regulations 2009* (Cth).

### Recent reforms of safety legislation and governance frameworks

Over the past decade, there has been a push to modernise and harmonise workplace health and safety legislation across Australian jurisdictions, as inconsistencies were resulting in unnecessary complexity and costs for businesses. Model regulations were first agreed between the Australian, State and Territory Governments in 2011, and have since been developed and adopted by most jurisdictions (with amendments in some cases) (Safe Work Australia 2020b).

---

However, reforms to safety regulations in the resources sector have lagged. Many jurisdictions did not agree to the mining section of the model workplace health and safety regulations. This was due to a belief that:

The major mining states of Queensland, New South Wales and Western Australia require more extensive and flexible laws than the other states and territories. This is to address the broader range of mining operations in these three states which range from small gemstone mines to large, complex mining operations including underground coal mines. (Qld DNRM 2013, p. 1)

New South Wales, Queensland and Western Australia negotiated ‘non-core’ regulations for the mining sector based on the National Mine Safety Framework, which were designed to supplement the core workplace health and safety regulations. The jurisdictions agreed that these non-core provisions should include coverage of principal mining hazards, operational control measures, underground mines, mine survey plans and records, and emergency management plans (Queensland Government 2012, pp. 15–17).

All three jurisdictions signed an intergovernmental agreement committing to the adoption of the non-core mining regulations, with progress on implementation left to each individual State Government (WA DMIRS 2018, p. 6). New South Wales reformed its mining safety legislation in 2014, while Queensland made reforms in 2018 that aimed to:

... achieve greater mining safety and health consistency with the other major mining state of New South Wales in key areas, rather than uniformity of wording and structure of the Acts and Regulations. This is partly due to the different legislative models to be used by each state. (Queensland Government 2018b, p. 23)

The Queensland Government has also recently reformed its governance arrangements — Resources Safety and Health Queensland was established as an independent statutory body in July 2020, to administer safety regulation in the State’s mining, quarrying, petroleum, gas and explosives sectors (Queensland Government 2019c).

Reforms to Western Australia’s workplace health and safety legislation are currently underway, with the Work Health and Safety Bill 2019 passed by the WA Parliament in November 2020. The new *Work Health and Safety Act 2020* (WA) will replace several existing pieces of safety legislation, including elements of the *Mines Safety and Inspection Act 1994* (WA) (WA DMIRS 2020b).

The current safety regime in the offshore oil and gas sector predates the efforts to harmonise workplace health and safety legislation in mining and more broadly. The current regulations are due to sunset in 2024, and are being reviewed by DISER. While this review has considered the model safety regulations on some topics (such as health and safety representatives, and penalty levels), it also states that industry-specific health and safety legislation is required to:

... provid[e] a more tailored form of regulation to address its high hazard work environment, characterised by accident events that are low frequency, yet potentially high consequence.

COAG has continued to endorse an industry-specific regulatory framework for the offshore petroleum sector ... (DIIS 2019b, p. 12)

---

## Has safety regulation been effective?

Safety regulatory reforms appear to be heading in the right direction ...

As the major resources states are at varying stages of reforming resources-related health and safety legislation, it is difficult to draw definitive conclusions on the effectiveness of recent reforms, or to identify leading-practice examples in current regulatory settings.

Nonetheless, the modernisation and harmonisation reform trajectory has generally led to improvements in the mine safety regulatory framework. There is more consistency between jurisdictions, and a greater focus on general duties of care, risk-based management to achieve acceptable risk levels and outcomes-based performance standards (Gunningham 2015, p. 12).

There have been several reviews of New South Wales' mining safety legislation since its reforms. An early assessment conducted by Noetic (2018, p. 30) found that the regulations are performing well, stating that:

... the regulator is well on its way to becoming a safety regulator comparable with good practice high hazard regulators in other parts of the world.

The assessment found that the regulator had embedded a risk-based approach to safety regulation, with good engagement and transparency and effective data use to underpin the approach. It identified some areas for improvement (such as greater alignment between inspection and incident data collection and the regulator's approach to risk assessment), but stated that the regulator was aware of, and was addressing, these concerns. More recently, an independent statutory review found that 'mining health and safety laws in NSW remain among the best in the world' (Bills 2020, p. 5). The review recommended greater consistency with the National Mine Safety Framework, more collaboration between major mining jurisdictions, some legislative amendments and additional regulatory guidance material. The NSWMC (sub. DR83, p. 13) is also positive about the jurisdiction's safety regulatory framework, stating that 'existing laws strike a good balance and do not require material change'.

Legislative changes in both Queensland and Western Australia are also intended to support a risk-based approach to safety regulation (Qld DNRM 2013; WA DMIRS 2018). However, given the most recent round of safety regulatory reforms have only just been implemented (in Queensland) or are still underway (in Western Australia), more time and evidence is required to determine the extent to which regulators in these jurisdictions are applying such an approach.

In the offshore oil and gas sector, the existing industry-specific safety legislation already enables the regulator (NOPSEMA) to apply an outcomes-focused and risk-based approach to enforcing safety standards. For example, safety inspections are conducted using:

... a risk-based methodology that considers the following factors: relevant risk factors, previous performance and compliance history, ... industry incident trends [and] responses to recommendations from previous inspections. (NOPSEMA 2020c, pp. 1–2)

---

However, APPEA (sub. 44, pp. 13–14) commented on the overall complexity of safety regulations applying to oil and gas companies:

Safety legislation and regulations are fragmented within and amongst jurisdictions with most having overlapping regimes in Health and Safety, Energy/Resources. ... In some instances, design of regulations has resulted in overly cumbersome and complex outcomes. For example, the Maritime Transport and Offshore Facilities Security Act and Regulations are 400 pages in total. Work Health and Safety Act and Regulations are commonly over 1,000 pages in total in jurisdictions.

The existence of lengthy legislation is not necessarily a problem in itself — safety regulation is important and likely to always have a degree of complexity. Nonetheless, although substantial progress has been made in modernising and harmonising safety regimes over the past decade, there may be opportunities to further streamline the current regulatory settings where they are unnecessarily complex. This highlights the importance of regularly reviewing safety legislation so that it remains fit for purpose and not unnecessarily burdensome.

... but there have recently been concerns about mine safety outcomes

Across Australia’s mining industry as a whole, fatality rates generally trended downwards in the 2000s, notwithstanding some year-to-year fluctuations (figure 7.1). The fatality rate has remained relatively stable throughout the 2010s at 3–4 fatalities per 100 000 workers.<sup>28</sup> The recently observed increase in the fatality rate in 2018 represented a reversal of small declines in 2016 and 2017. The preliminary estimate for 2020 indicates some reduction in the number of fatalities in the mining industry (Safe Work Australia 2020a).

The rates of serious injuries in the mining industry have increased in some jurisdictions over recent years, although from relatively low bases.

- In Queensland, the serious accident frequency rate (for accidents resulting in a person’s death or admission to hospital for injury treatment) steadily rose from 0.6 serious accidents per million hours worked in 2014–15, to 1.0 in 2018–19 (Brady 2019, p. 52).
- In Western Australia, while the rate of serious injuries (resulting in a person being disabled for two weeks or more) for the overall mining industry has remained relatively stable, for coal mines the frequency rate increased from 6.8 serious injuries per million hours worked in 2014–15, to 11.2 in 2018–19 (WA DMIRS 2020c, p. 8).
- In New South Wales, the rolling five-year average serious injury frequency rate for the coal mining sector increased from 0.68 serious injuries per million hours worked in 2014–15, to 1.34 in 2018–19 (NSW RR 2020c, p. 38). Over this period, the rolling five-year average serious injury frequency rate also rose in the metalliferous sector (from approximately 0.49 to 1.37) and the extractives sector (from 1.04 to 1.92) (NSW

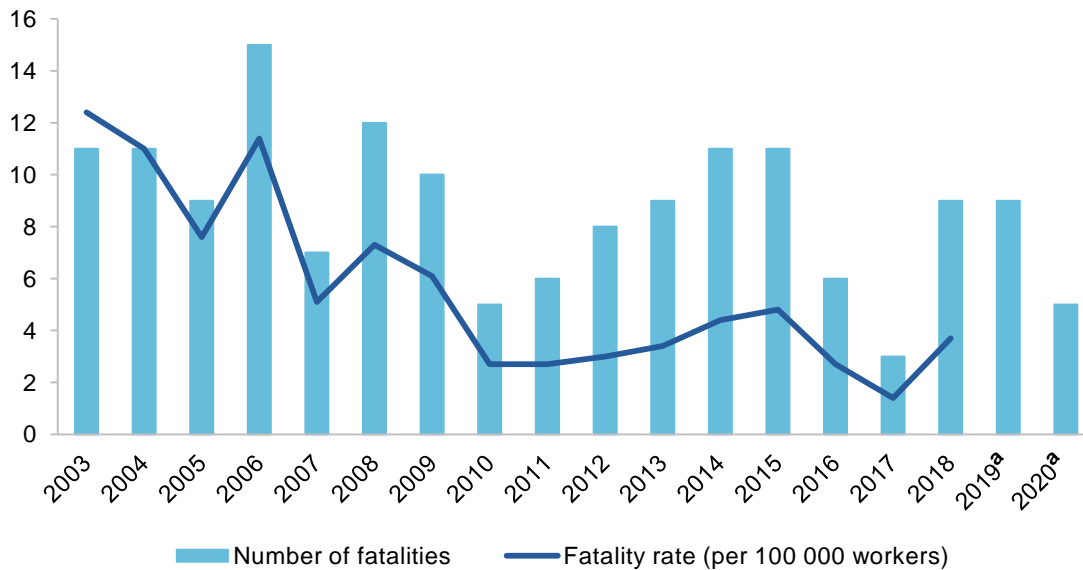
---

<sup>28</sup> This is higher than the Australian average across all industries of 1–2 fatalities per 100 000 workers. However, this is not unexpected, given the relatively high-risk nature of mining.

RR 2020c, pp. 49, 61). These increases are partly attributable to the broadened definition of serious injury in New South Wales in 2015.

**Figure 7.1 Improvements in mining health and safety have led to lower fatality rates over time**

Worker fatalities and the fatality rate in the mining industry



<sup>a</sup> Preliminary estimates of the number of worker fatalities in the year to 19 November for 2019 and 2020. As finalised work-related fatalities are not yet available for these years, there is no reported fatality rate.

Data source: Safe Work Australia (2019, 2020a)

There has recently been a greater focus on resources health and safety outcomes, particularly in Queensland, where there have been numerous high-profile mine safety incidents since 2018 (Walsh 2020). This triggered a safety ‘reset’ in 2019 — whereby safety information packs were distributed to mine sites and all mine workers were required to discuss site-specific safety risks with their employer — and several reviews of mine safety incidents and legislation in Queensland (Qld DNRME, sub. DR95, pp. 8–9). And following the underground gas explosion that occurred at Anglo American’s Grosvenor coal mine in May 2020, the Queensland Government launched an independent mine safety board of inquiry to investigate the incident and other methane-related safety issues (Queensland Government 2020a).

### Cultural factors are a key determinant of mine safety performance

The extent to which recent incidents reflect problems with the regulatory framework is unclear, particularly since health and safety legislation has been an area of active reform (as discussed above). Participants to this study did not indicate that poor safety outcomes are the result of ineffective legislation or regulatory settings.

---

Australian research has found that company and site-specific cultural factors are key determinants of mine safety performance (Gunningham and Sinclair 2014). Similarly, a survey of Queensland mine workers undertaken as part of the safety reset initiative found that the most prevalent areas for perceived improvement related to company culture and processes, and included:

- greater understanding and resolution of safety issues by senior leadership
- addressing safety concerns arising from the casualisation of the mining workforce
- increasing the quality and frequency of training
- clearer and more standardised safety procedures (Ronan Analytics 2019, pp. 6–7).

CFMEU Mining and Energy (sub. DR77, p. 5) suggested that casual workers and contractors could be more likely to experience safety incidents because:

... a less-experienced workforce that is less familiar with the mine site ... and indirect employment makes it more difficult to ensure that all required [occupational health and safety] training has occurred, and that safe work practices are being followed.

Countering this, mining companies have previously stated that casual workers, contractors and permanent employees all operate under consistent safety standards, with no difference in the safety performance of different types of workers (Elks 2020a; Smyth and Hume 2020). A Queensland review found that the fatal accident frequency rate for contractors has been both higher and lower than that of permanent employees at various points over the past decade, with the employee rate spiking significantly above the contractor rate in 2018-19 (Brady 2019, pp. 51–52). It also reported that the serious accident frequency rate for both employees and contractors has increased in recent years, and ‘while the contractor rate is higher, the rates are reasonably comparable ... this data does not support the view that employees work in a considerably safer manner than contractors’ (Brady 2019, pp. 52–53).

### Regulator capability underpins effective enforcement of safety regulations

While the safety regulatory framework was not in itself raised as a major issue, study participants noted that good outcomes also rely on regulators’ capabilities in understanding and assessing safety standards and procedures. For example, the NSWMC (sub. DR83, p. 16) commended the fact that ‘applicants for Health and Safety inspector roles in the NSW Resources Regulator need to have a statutory qualification of Mine Manager’, as this industry experience enhances the regulator’s technical expertise and improves their understanding of real-world safety issues.

But some safety regulators can face capability challenges, ‘suffer[ing] from high staff turnover and difficulty in retaining skilled staff that can find better pay within the industry’ (CFMEU Mining and Energy, sub. DR77, p. 4). In Queensland, the mine safety board of inquiry heard that the regulator is understaffed in its inspector roles, due to a competitive labour market for senior mine safety professionals (Elks 2020c).



---

Ultimately, even if company-related factors such as safety culture, procedures and workforce practices have the greatest impacts on safety outcomes, it is the regulator’s responsibility to monitor companies and ensure that their processes and practices are consistent with regulatory requirements. This may require enhanced capabilities to enable regulators to adequately enforce safety regulations — the importance of capability in ensuring good regulator performance is discussed in chapter 12.

Improved capabilities could also enable the implementation of a more sophisticated regulatory approach. For example, APPEA (sub. DR91, p. 18) suggested that ‘health and safety approaches in each jurisdiction could be improved by implementing leading rather than lagging indicators [and] consideration of human factors and human reliability’. And the Queensland board of inquiry is currently considering how the safety regulator can make better use of data to track trends in incidents, and how information can be shared with companies and unions to help prevent further incidents (Martin and Clough 2020, p. 11).

FINDING 7.5

Reforms to mining workplace health and safety frameworks in the major resources states have led to more consistent and outcomes-based approaches. Company culture is a key determinant of safety performance, but good outcomes also require ongoing regulator monitoring of safety processes and practices. In some instances, improved regulator capability may be needed to enforce safety regulations effectively.



---

## 8 Indigenous heritage

### Key points

- Aboriginal and Torres Strait Islander peoples have significant connections with their land, culture and their communities.
- Heritage issues are of heightened interest after the destruction of rock shelters in the Juukan Gorge by Rio Tinto, an incident that not only highlighted shortcomings in Western Australia's heritage protection regime but in regimes across the country.
- Heritage regulation processes differ across jurisdictions but, in general, resources project proponents need to identify whether the location of a proposed activity has heritage significance and, if so, the appropriate options for managing that heritage.
  - In most jurisdictions, heritage places and objects are subject to 'blanket protection', meaning that it is illegal to interfere with them without approval (whether or not they are known in advance of a project's development). Project proponents must obtain permission to impact heritage by either obtaining a Ministerial approval or seeking an agreement with traditional owners.
- Major shortcomings of current approaches include:
  - regulatory arrangements that require only minimal engagement with traditional owners. Heritage approval or agreement can be treated as an afterthought, limiting traditional owners influence on operational decisions affecting their heritage
  - a lack of legal recognition and enforcement of heritage agreements (even when companies engage appropriately)
  - ineffective dispute resolution and appeals mechanisms, including at the national level.
- Heritage registers that map and list information about known heritage sites can reduce the time and cost involved in surveying areas repeatedly, although measures that ensure that sensitive information is provided only to approved parties is important. However, surveys and registers complement but cannot replace engagement with traditional owners.
- Leading-practice regimes require engagement on heritage issues at the earliest stages of, and throughout the life of, a project. Such regimes embed processes to obtain agreement on heritage issues in the project assessment process, rather than heritage being a 'final box to check' when other approvals have been obtained.
- Traditional owners should be at the centre of decision making on heritage. This means, in the first instance, that project proponents seek agreement from traditional owners on how heritage impacts will be managed.
- Leading-practice regimes provide an accessible process through which both traditional owners and project proponents can seek dispute resolution where they cannot reach agreement, or appeal a heritage decision.
- The Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cth) was initially implemented to operate where State and Territory regimes prove ineffective, and this role remains important. But even as a backstop the current Act does not appear effective. The national legislation warrants review.

---

As well as meeting environmental requirements, resources projects must comply with heritage laws across jurisdictions. Given the location of most resources projects, Indigenous heritage issues are most relevant.

The Aboriginal and Torres Strait Islander peoples of Australia are among the oldest continuing cultures on earth, with Aboriginal people having been in Australia for 65 000 years (Clarkson et al. 2017). Although Aboriginal and Torres Strait Islander people have a connection to country across Australia, many parts of Australia have particular cultural significance for their traditional owners, as sacred sites. These have been described as ‘expressions of [their] relationships with country, people, beliefs, knowledge, law, language, symbols, ways of living, sea, land and objects all of which arise from Indigenous spirituality’ (Great Barrier Reef Marine Park Authority 2019, p. 12). Further, hundreds of sites around Australia hold archaeological and ethnographic value and provide broader historical evidence as to the earliest state of humanity on our continent.

Recognising this value, governments have established regulatory processes to manage and conserve Indigenous heritage while allowing development (including mineral, and petroleum development) to take place. The Australian, State and Territory governments each have laws covering the protection of Indigenous and other heritage during resources (and other) developments. The processes in each jurisdiction differ but, in general, resources project proponents need to identify whether the location of a proposed activity has heritage significance and, if so, the appropriate options for managing that heritage. Even where regulation does not strictly require the protection of these sites, many resources companies establish internal practices and standards to avoid the ‘social bottom line’ impact of damage to Indigenous heritage.

## 8.1 How is Indigenous heritage regulated?

Regulation of Indigenous heritage is primarily a State and Territory responsibility. Each jurisdiction has its own legislation that defines certain tangible and intangible Indigenous heritage as protected, and then sets out processes required to undertake resources activity near this heritage (figure 8.1). In most jurisdictions, heritage places and objects are subject to ‘blanket protection’, meaning that it is illegal to interfere with them without approval (whether or not they are known in advance of a project’s development). In New South Wales and Tasmania, places are only protected if they are declared by the relevant minister to be significant to traditional owners.

Generally, project proponents must comply with one or more of the following processes.

- **Duty of care:** When a development is at an early stage and is not likely to damage heritage, it can generally proceed without a specific agreement or approval. However, there is an obligation to cease work if any Indigenous cultural heritage is found in the process.
- **Agreements:** Some States require project proponents to engage with the traditional owners of heritage, with the aim of coming to an agreement. They set out the types of

---

matters that must be included in a heritage agreement (such as descriptions of the location and features of particular heritage sites and objects, as well as consultation processes), and also set out procedures for dispute resolution (which can include mediation, formal resolution by a court, or referral of a decision to the Minister).

- Some of these processes integrate with native title agreement making (chapters 5 and 11), meaning that one agreement can cover all issues relating to resources development on Indigenous land. For example, section 86 of the *Aboriginal Cultural Heritage Act 2003* (Qld) allows a native title agreement to take precedence over the cultural heritage management plans required under that legislation.
- **Ministerial approval:** Other jurisdictions place the ultimate decision with a minister or government official. This may be the first point at which a decision is made, or it may come as a resolution method if an agreement cannot be reached. For example, under s. 18(3) of the current Western Australian *Aboriginal Heritage Act 1972*, only the Minister for Aboriginal Affairs can approve damage to a heritage site that would otherwise be protected. In States where the Minister approves heritage impacts, there are no avenues for merits review of decisions for traditional owners — judicial review is an option but this does not allow the decision to be altered unless it was legally erroneous.

The Commonwealth also has a secondary responsibility, principally under the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (Cth) (ATSIHP Act). This legislation is intended to operate as a ‘backstop’ for State and Territory heritage protections. It allows traditional owners to make an application to the Minister for Aboriginal Australians to protect a site at risk of damage under State and Territory law. In addition, the *Environmental Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) covers matters of national heritage significance.<sup>29</sup>

---

<sup>29</sup> Other Commonwealth laws regulating aspects of Indigenous heritage include the *Protection of Movable Cultural Heritage Act 1986*, *Aboriginal Land Rights (Northern Territory) Act 1976* and *Native Title Act 1993*.

---

## Figure 8.1 How does heritage regulation work?

Summary of heritage regulation

### Protected places and objects



- In general, there is a **duty to avoid harm** to Aboriginal and Torres Strait Islander places and objects with cultural or heritage significance
- In NSW and Tas, **places are only protected under heritage legislation if they are declared** by the Minister

### Approvals and agreements



- Project proponent is required to either:
  - **apply a duty of care** while undertaking low impact activity
  - **negotiate an agreement** with traditional owners
  - **obtain a ministerial or bureaucratic approval** (generally after consultation with traditional owners)
- Most states and territories require an **assessment** of:
  - whether the act is likely to cause harm to heritage
  - the extent to which that harm to heritage can be avoided, or if it cannot be avoided, minimised
  - the significance of the place and/or objects
- **Approval** to allow heritage impacts (subject to agreement with traditional owners or otherwise) is **given by**:
  - heritage agency (NSW, Qld, some NT land)
  - Minister (SA, WA, Tas)
  - traditional owners (Vic)
  - land council (NT ALRA land, or where required by native title agreement)

### Dispute resolution and appeal rights



- If agreement cannot be reached, **disputes may be resolved** by:
  - courts or tribunals (NSW, Vic, Qld)
  - Aboriginal Areas Protection Authority and Minister (NT)
- In SA, WA and Tas, there is **no legislative right of review for traditional owners**. Judicial review may be sought in certain circumstances, but not on the merits of the decision alone.

Sources: *National Parks and Wildlife Act 1974* (NSW); *Aboriginal Heritage Act 2006* (Vic); *Aboriginal Cultural Heritage Act 2003* (Qld); *Torres Strait Islander Cultural Heritage Act 2003* (Qld); *Aboriginal Heritage Act 1988* (SA); *Aboriginal Heritage Act 1972* (WA); *Aboriginal Heritage Act 1975* (Tas), *Northern Territory Aboriginal Sacred Sites Act 1989* (NT); *Aboriginal Land Rights (Northern Territory) Act 1976* (Cth).

---

## 8.2 Indigenous heritage regulation is under scrutiny across Australia

Heritage regulation has emerged as an issue of significant concern for traditional owners, governments and project proponents following the destruction in May 2020 of several rock shelters in Juukan Gorge, Western Australia by Rio Tinto (box 8.1). While Rio Tinto undertook the action with legal approval, it was against the wishes of the traditional owners, the Puutu Kunti Kurrama and Pinikura (PKKP) peoples, and raised considerable public concern. While this incident brought heritage issues to the fore, the circumstances that permitted the destruction to take place have been raised by traditional owners for some time.

The Juukan Gorge case highlighted shortcomings in Western Australia's heritage protection, which the Western Australian Government acknowledged is outdated:

In order to achieve protection, conservation and management of Aboriginal cultural heritage in Western Australia, and to provide a clear framework that enables land users to manage Aboriginal heritage, a fundamental shift away from the current [*Aboriginal Heritage Act 1972*] is required. (WA DPLH 2020, p. 2)

### Box 8.1 Juukan Gorge

Between 2006 and 2011, Rio Tinto entered agreements with the Puutu Kunti Kurrama and Pinikura (PKKP) peoples of north-western Western Australia to obtain consent to mine iron ore on their land. Initially, the Juukan Gorge rock shelters were identified as having significant material that could be salvaged prior to blasting — they were not seen as necessary to preserve 'in situ'. Rio Tinto also prepared several options for the development of their mine, including options that did not involve the destruction of the rock shelters. However, these options were not presented to the PKKP peoples in seeking their agreement. Government approval to affect the site was obtained in 2013 under the *Aboriginal Heritage Act 1972 (WA)* s. 18 based on a heritage management plan agreed upon by both Rio Tinto and the PKKP peoples.

In early May 2020, Rio Tinto drilled and loaded blast holes in the Juukan rock shelter. Immediately after this was done, the PKKP Aboriginal Corporation made a formal request to visit the site, and it became clear that the two parties did not share a mutual understanding of whether the site itself had cultural value, rather than only the artefacts that had been salvaged and preserved. Investigations were made into the safety of removing explosives, and it was determined that while some could be safely removed, many could not; exploding them was the only safe and practicable way to proceed.

(continued next page)

---

### Box 8.1 (continued)

The PKKP Aboriginal Corporation made a public statement shortly after the destruction of the site. Although they acknowledged that the destruction of the site was legally allowed, a spokesperson said 'Our people are deeply troubled and saddened by the destruction of these rock shelters and are grieving the loss of connection to our ancestors as well as our land.' Near-universal condemnation came from other Indigenous community members, including the Commonwealth Minister for Indigenous Australians:

No site should ever be damaged. When I spoke with the traditional owners, one of them was explaining to me the absolute cultural relevance both those caves had and the destruction of them is like destroying the heart of the community.

Rio Tinto publicly apologised, conceded that the incident fell short of its internal standards for Indigenous partnership and heritage management, and is negotiating with the PKKP Aboriginal Corporation about a path forward. The Australasian Centre for Corporate Responsibility, and other institutional investors, made it clear that the incident has had significant reputational consequences for Rio Tinto. In June 2020, the Joint Standing Committee on Northern Australia began an inquiry into the issue. In September 2020, several senior executives, including the chief executive officer, announced they would be resigning in response to shareholder concerns.

*Sources:* ACCR (2020); Gredley (2020); PKKP Aboriginal Corporation (2020); Rio Tinto (2020).

## Concerns with heritage regimes go beyond Juukan Gorge

Even prior to the Juukan Gorge incident, several shortcomings with current heritage protections concerned both traditional owners and project proponents.

### Heritage is often seen as an afterthought

Traditional owners view some resources companies as only engaging on heritage issues once a project has been given other approvals. In effect, the views of traditional owners are treated as an afterthought, rather than making them integral in decisions about how the site operates. As the Wintawari Guruma Aboriginal Corporation (2020, p. 3) put it:

... it is not a lack of 'consultation' that causes important sites to be lost. The 'consultation' undertaken regarding the preservation of culturally important sites is almost always a discussion had in the context of imminent proposed expansion, and in the shadow of sterilisation of minerally prospective or productive land. It is a conversation that is had after the company has completed its mine planning, and with the full weight of project momentum behind it.

This concern was echoed by the QLS (sub. 41, p. 8), which submitted that government and project proponents do not always actively engage with Indigenous communities on heritage when a tenement is renewed or retroactively expanded; they further observed that there was a lack of coordination between the grants of mining tenements and the notification of heritage and other issues.



---

## Indigenous people often have little say in heritage matters

In some jurisdictions, ministerial approval (rather than agreement making) is the dominant process through which heritage issues are resolved. This can inhibit the ability of traditional owners to manage their own heritage, as there is not a process to enforce heritage agreements made by the groups. For example, current Western Australian legislation ‘does not contain mechanisms to recognise heritage agreements or agreed heritage outcomes’ (BHP 2020e, p. 2) — even though project proponents often develop agreements in practice. The proposed new Western Australian bill would facilitate agreement-making under legislation. Some Indigenous groups have also raised concerns that heritage regulators can struggle to enforce agreements that they reach with project proponents (Quandamooka Yoolooburrabee Aboriginal Corporation 2020, pp. 6–7). Regardless of whether regulation recognises heritage agreements, regulators need to be adequately resourced to enforce all forms of regulation, including Indigenous heritage (chapter 12).

Further, jurisdictions differ in the processes that apply when the parties cannot agree on whether a heritage impact can go ahead. In Western Australia, for example, the minister issues an approval for heritage impact on the application of the project proponent and under the advice of the Aboriginal Cultural Material Committee. Traditional owners are presently not involved in this process and cannot appeal a decision to permit heritage impacts.

This can exacerbate the harm already caused by heritage damage:

... when consent or approval is never sought, or when it can be imposed from above by a government official or Minister because that’s what the Commonwealth and State legal systems provide, even against the wishes of the people for that country, the personal and communal harm can be significant and impact across generations. ... the only authoritative decision makers for cultural heritage are the Indigenous people with rights and interests in that heritage ... (KLC 2020, p. 6)

State and Territory Governments have been reviewing their heritage regimes in response to these concerns (box 8.2).

---

## Box 8.2 Current reviews of Indigenous heritage legislation

New South Wales has consulted on a new Aboriginal Cultural Heritage Bill, which involves multiple measures, including better information management and a new assessment pathway (NSW OEH 2018, pp. 2–5).

The Victorian Aboriginal Heritage Council is reviewing the *Aboriginal Heritage Act 2006* (Vic). It released a discussion paper in June 2020 which included 19 proposals, including that the requirements for ‘reasonable efforts’ at consulting registered Aboriginal parties be strengthened to a requirement for consultation and to introduce civil damages (currently all offences are criminal) (Victorian Aboriginal Heritage Council 2020).

Queensland is reviewing its cultural heritage Acts to examine whether they are operating as intended, are achieving outcomes for Indigenous peoples, and to examine whether they are compatible with the current native title landscape. Consultation closed in mid-2019 and submissions are currently under review (Qld DoATSIP 2020).

Western Australia commenced a review of the *Aboriginal Heritage Act 1972* (WA) in 2018, and intends to introduce a Bill before the end of 2020.

South Australia is presently reviewing its approach to cultural heritage management and resources development on native title land, with the aim of providing ‘greater clarity for all parties as to when exploration activities affect ... Aboriginal heritage’ (South Australian Government, sub. 25, p. 11).

Tasmania has also begun a review of the *Aboriginal Heritage Act 1975* (Tas), with consultation ongoing throughout 2020 (Tas DPIPWE 2019).

---

## 8.3 Leading-practice Indigenous heritage regimes

Indigenous heritage regulation, similarly to environmental regulation, seeks to allow resources development to proceed while protecting heritage places and objects from harm or minimising the degree of harm. A crucial first step in this process is to understand where heritage sites are and their significance to traditional owners.

While registers of sites of significance can help build a knowledge base, given the nature of indigenous heritage, understanding of heritage sites cannot be properly achieved without genuine and direct engagement between traditional owners and companies. Centring traditional owners in decisions about protection of their heritage is therefore a critical element of leading-practice regimes. Where agreement between companies and traditional owners cannot be reached, leading-practice regimes also offer accessible dispute resolution processes.

### Improving registers

To identify heritage sites in advance of resources and other development, governments maintain registers of heritage sites to record existing surveys and reports. Where surveys have not already been conducted in an area, or there is not a public record of relevant

---

heritage, project proponents and governments work with traditional owners and heritage professionals (such as archaeologists) to identify any Indigenous heritage on a site.

Maintaining central registers helps to permit information sharing and avoid wasted time and cost in surveying areas repeatedly. The Commission has previously recommended that heritage authorities require that resources explorers (or other parties) lodge all heritage surveys with the authority, and that they maintain a register which maps and lists all known Indigenous heritage sites.

However, there are important protocols in Indigenous culture about knowing the location and nature of certain sacred sites. To manage this risk, the Commission recommended that authorities adopt measures to ensure that sensitive information collected by a survey is only provided to approved parties (and only as necessary for the purposes of their activities) (PC 2013b, p. 177).

In 2013, the Commission identified that the Northern Territory met these principles (PC 2013b, pp. 173–174). The proposed Western Australian Aboriginal Cultural Heritage Directory (part of that State’s current heritage reform bill) would establish a register that also meets these requirements. However, the Commission has not identified significant reform of the way in which States and Territories record heritage surveys since its 2013 examination of the issue.

#### LEADING PRACTICE 8.1

Heritage registers help to share information and avoid wasted time and cost in surveying areas repeatedly. Under a leading-practice approach, heritage authorities:

- require that resource explorers or other parties lodge all heritage surveys with that authority
- maintain registers which map and list all known Indigenous heritage sites
- adopt measures to ensure that sensitive information collected by a survey is only provided to approved parties (and only as necessary for the purposes of their activities).

The Commission has not identified an example of leading practice.

## **Consent of traditional owners should be sought in the first instance**

The imperative for genuine engagement reflects the fact that Indigenous cultural heritage is protected primarily because of its significance to traditional owners. The Kimberley Land Council highlighted the degree to which damage to heritage impacts traditional owners:

For Aboriginal people, country and culture are not abstract or external, but instead are deeply personal and familial. When a community of native title holders is asked for their permission to

---

damage or destroy sites and country, their consideration of that request involves deeply personal issues for the community and senior individuals within that community. (KLC 2020, p. 6)

Genuine, early engagement on heritage matters is promoted by integrating consultation and agreement-making processes within the broader planning process. This approach is used in a number of Australian jurisdictions. For example:

- under the Victorian *Aboriginal Heritage Act 2006*, registered Aboriginal parties are responsible for negotiating and approving a cultural heritage management plan (CHMP) before planning approval for a project can be given (box 8.3).
- South Australia requires that local heritage agreements set out certain minimum information, including consultation undertaken during the process. Project proponents must apply for authorisation to impact heritage sites; these applications are published and traditional owners are notified. However, project proponents may also seek to negotiate an agreement with traditional owners (though traditional owners are not required to negotiate). Once reached, the agreement can be approved by the Minister and has the same effect as the Minister authorising heritage impacts.
- in Queensland, the ‘cultural heritage duty of care’ requires consultation where there is a high risk of activity damaging Indigenous heritage; compliance can be demonstrated through an agreement covering heritage issues. This can be an agreement under native title, or a CHMP. This process requires that the project proponent engage with the relevant traditional owner group.

**Box 8.3 Cultural heritage management plans (CHMPs) under the Victorian *Aboriginal Heritage Act 2006***

Cultural heritage management plans (CHMPs) are required when a project proponent in Victoria plans on undertaking any activity for which a mining licence is required and that would result in significant ground disturbance. CHMPs are prepared with the assistance of a qualified heritage advisor, who assesses the potential impact of proposed activity on Aboriginal cultural heritage. CHMPs cover:

- details of known heritage on the site
- details of consultations between the project proponent and traditional owners
- consideration of whether the activity can be conducted in a way that avoids harm to heritage, and if this is not possible, then whether the activity will be conducted in a way that minimises harm
- the specific conditions of operating around Indigenous heritage (for example, avoidance of as much heritage as possible, salvaging and requirements relating to the custody of any heritage found)
- contingency plans for managing the discovery of previously unknown heritage on the site.

(continued next page)

---

### Box 8.3 (continued)

Once prepared, a CHMP is assessed by the Registered Aboriginal Party (RAP) for the area — usually either a native title holder or a registered traditional owner under the Victorian *Traditional Owner Settlement Act 2010* (chapter 5), who can either approve or reject the CHMP. If the CHMP is rejected, the project proponent can seek a review of the decisions by the Victorian Civil and Administrative Tribunal. The Tribunal can approve or reject the plan on the same basis as the RAP.

Aboriginal Victoria (2020, pp. 8–9) submitted to a recent parliamentary inquiry that the greatest advantage of the Victorian process is that planning approval for a project cannot be given before a CHMP is approved:

Because the proponent is forced to obtain an approved CHMP in Victoria before they can commence their activity, proponents normally elect to manage their Aboriginal heritage obligations early in the approvals process. This means that unforeseen circumstances can be adequately addressed. It also means that proponents will take their Aboriginal heritage obligations very seriously. Finally, it means that Aboriginal people are not under pressure to approve CHMPs or permits to harm heritage, because the development proposal is not a *fait accompli* and machinery, for example, is not ‘on the ground’. ...

This single powerful provision in the [*Aboriginal Heritage Act 2006* (Vic)] is its most important. It not only provides Traditional Owners with leverage in discussions with proponents not enjoyed in other jurisdictions, but it also provides proponents with the certainty that Aboriginal cultural heritage matters will be addressed before development begins. This saves proponents time and money as they do not need to stop works once started to address heritage issues which were not accounted for by the CHMP.

The National Native Title Council said that, among the State Aboriginal Heritage Acts, the Victorian law ‘comes closest to embedding the legal norms contained in the [United Nations Declaration of the Rights of Indigenous Peoples] in particular, the right of traditional owners to maintain, control, protect and develop their cultural heritage, and the requirement of Free, Prior and Informed Consent’ (NNTC 2020b, p. 6).

Sources: *Aboriginal Heritage Act 2006* (Vic), *Aboriginal Heritage Regulations 2018* (Vic).

### Free, prior and informed consent on heritage issues

Government officials and heritage councils across Australia have endorsed the principle that ‘the affected Indigenous community itself should be the ultimate arbiter of the management of the [Indigenous cultural heritage] aspects [of] any proposal that will affect that heritage’ (NNTC 2020b, p. 21). Australia has declared its support for the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), which includes a right to free, prior and informed consent for resources activity on Indigenous peoples’ land (chapter 11).

These principles are not absolute: they must be balanced against other interests and traditional owners do not generally have a right of veto over resources activity. Where, after genuine engagement with traditional owners, government deems other interests to be more important than heritage protection, development may go ahead — but governments must be explicit and transparent that they are weighing up competing rights in making a decision to allow a project to proceed. For example, governments should publish reasons for the decision to allow development where heritage may be impacted against the wishes of traditional owners.

---

Nonetheless, for traditional owners to be able to offer free, prior and informed consent, they must be involved as early as possible to be able to influence heritage management and be given all the necessary information about the proposed operation to make a decision.

## Dispute resolution should involve traditional owners

While the aim should be to achieve agreement about measures to protect heritage, this may not always occur. It is important that both traditional owners and project proponents are able to seek a resolution on whether or how a project can proceed from an independent decision maker.

Jurisdictions have different approaches to this.

- Under the Victorian legislation, the Victorian Civil and Administrative Tribunal can hear an appeal from a project proponent about traditional owners' decision to refuse a CHMP. Their decision considers whether the activity can be conducted in a way that minimises harm to Aboriginal heritage, even if it is impossible to avoid some impact.
- In Queensland, appeals of decisions to approve CHMPs are heard by the Land Court, which makes a recommendation to the Minister on whether the activity should go ahead.
- Likewise, in New South Wales, the decision to approve or refuse an Aboriginal heritage impact permit can be appealed by the Chief Executive of Heritage NSW to the Land and Environment Court.

### LEADING PRACTICE 8.2

Leading-practice heritage regimes:

- embed heritage engagement in the project assessment process, so that heritage is considered in the earliest stages of, and throughout the life of, a project, rather than being a 'final box to check' when other approvals have been obtained
- centre traditional owners in decision making about their heritage. This means, in the first instance, that project proponents seek agreement from traditional owners on how heritage impacts will be managed
- provide a process where both traditional owners and project proponents can seek dispute resolution or appeal a heritage decision.

Leading-practice examples include:

- the Victorian *Aboriginal Heritage Act 2006*, under which a cultural heritage management plan must be approved by the Registered Aboriginal Party before planning approval can be given
- the Queensland *Aboriginal Cultural Heritage Act 2003* which requires a negotiated agreement on heritage issues before a project can go ahead.

---

## 8.4 What is the role of the Commonwealth?

While the States and Territories have primary responsibility for Indigenous heritage protection, the ATSIHP Act gives the Commonwealth a ‘backstop’ role for protecting heritage. Under the ATSIHP Act, the Commonwealth Environment Minister can make an emergency declaration where a significant Aboriginal area is under serious and immediate threat of injury or desecration. This declaration can limit the activity that can be taken on the site for up to 30 days. The Minister also has the option to make a longer-term declaration of an area, after going through a process to give notice and consult about the proposed declaration.

Participants to this, and other, inquiries have raised concerns with the national heritage legislation, arguing that it is largely ineffective.

### **The ATSIHP Act cannot always be used, and even where it can, it is unclear if it provides adequate protection for heritage**

One reason that the Commonwealth may not be effectively regulating Indigenous heritage matters is because applications to protect sites under the ATSIHP Act are not always made. The NNTC posited that, in some cases, this may be because traditional owners are bound by native title agreements with ‘provisions that prevent traditional owners from objecting publicly about any action of the company, and further provisions release the company from any actions, objections or claims of any kind under Commonwealth and State laws’ (NNTC 2020b, p. 11).

In the Juukan Gorge case, the voluntary heritage agreement in place prevented traditional owners from making an application under the ATSIHP Act without Rio Tinto’s consent (PKKP 2020, pp. 48–49). Despite contact being made by representatives of traditional owners to the Minister for the Environment and the Minister for Indigenous Australians, no application could in fact be made in a timely manner (Gray 2020, pp. 3–4). Breaching an agreement can have disastrous consequences for traditional owners, including unwinding all of the financial or other benefits that come from the agreement.

Since the commencement of the Act in 1984, there have been over 500 applications. Seven resulted in long term declarations, with two currently in place. There have also been 21 or more declarations of other types, including for short-term protection. The most common reasons applications were declined were that insufficient evidence had been provided that the areas were ‘significant Aboriginal areas’, and that no threat to heritage had been identified. Several applications were also resolved through negotiation, were withdrawn, or were not pursued by the applicants (DAWE 2020a, p. 9).

Participants to the parliamentary inquiry also raised concern about a lack of support from States for Commonwealth involvement on Indigenous heritage issues (PKKP 2020, p. 75). Support from States is important as, under the ATSIHP Act, the Commonwealth Minister must consult with the State or Territory Government before intervening to assess whether protection under ordinary heritage legislation is adequate. But in the Juukan Gorge case, for example, the

---

Western Australian Government argued that, despite the problems with their heritage legislation, it still met the minimum requirements for protection (WA DPLH 2020, p. 4).

Beyond these concerns, some participants argued that national heritage legislation should play a bigger role, rather than simply acting as a last resort. Stakeholders have called for:

- the Australian Government to intervene earlier in the approvals process. The interim report of the EPBC Act review said that the ATSIHP Act ‘provides last-minute intervention and does not work effectively with the development assessment and approval processes of the EPBC Act’ (Samuel 2020, p. 30). Participants in recent reviews, including the EPBC Act review and the Juukan Gorge inquiry, have also stated that heritage should be considered by the Commonwealth at an earlier stage as part of development assessment and approval processes (PKKP 2020; Samuel 2020)
- a national Indigenous heritage regime in line with the draft *Best Practice Standards in Aboriginal Cultural Heritage Management and Legislation* and harmonisation of State and Commonwealth laws on Indigenous heritage (Langton 2020; NNTC 2020b; PKKP 2020)
- the Commonwealth to have primary responsibility for heritage. Resource companies and State governments, however, have not supported this (BHP 2020e, p. 5; Roy Hill 2020, p. 4).

## **A history of reviews followed by inaction**

Like many other aspects of resources regulation, these concerns are not new, and there has been a cycle of reviews followed by inaction. The most comprehensive review was the 1996 Evatt review, which specifically examined the ATSIHP Act and found that it provided an ineffective safety net for Indigenous heritage protection. The review suggested a number of reforms, including an accreditation system for states and territories to carry out Indigenous heritage protection (Evatt 1996). While a bill of amendments was announced in 1998 in response, and two Commonwealth parliamentary committees supported the changes, the amendments failed to pass (AHRC 2000).

Subsequent reviews have also examined the Act:

- a 2009 Discussion Paper sought public comment on proposals for more effective laws to protect Indigenous traditional areas and objects (DAWE 2020d, p. 11)
- the 2009 Hawke review of the EPBC Act recommended the provisions of the ATSIHP Act be incorporated into the EPBC Act to improve outcomes and streamline use for stakeholders and administrators (Hawke 2009b)
- the 2013 Productivity Commission report on Major Project Development Assessment Processes stated the need for an accreditation scheme, and highlighted that delay in reforming the ATSIHP Act has prolonged uncertainties for all stakeholders (PC 2013a).

Most recently, the 2020 review of the EPBC Act suggested in its interim report that Commonwealth laws that protect Indigenous cultural heritage need comprehensive review (Samuel 2020, p. 37). An inquiry into the Juukan Gorge incident is also in progress and is due to report in December 2020 (DAWE 2020a).



---

## National heritage protection is in need of comprehensive review and reform

As noted earlier, heritage protection is primarily the responsibility of the State and Territory Governments. This has a number of advantages: the principle of subsidiarity would suggest that lower levels of government, broadly speaking, are more effective at managing local and place-based areas of policy (PC 2017f, p. 12). Most other resources approvals are also at the State and Territory level, and under proposed Commonwealth legislation, assessments approvals under the national environmental law would also be devolved (chapter 6). Retaining primary responsibility for heritage protection with State and Territory Governments would facilitate engagement and decision making being embedded within broader assessment processes (with associated time and cost savings).

While for these reasons the path for improving heritage protection would seem to lie in the State and Territory Governments continuing to improve their heritage regimes (sections 8.2 and 8.3), if state and territory regimes were to remain deficient to any degree, a backstop role for the Australian Government would remain. But the ATSIHP Act does not appear effective even in this limited capacity. As noted earlier, there have been few successful declarations for protection under this Act, and the Act clearly failed to provide an effective backstop in the Juukan Gorge example.

Accordingly, the Commission supports the finding of the review of the EPBC Act that the national heritage protection legislation warrants comprehensive review to assess its effectiveness. As such a review would need to consider the appropriate role for the Australian Government in indigenous heritage protection more broadly than its application in the resources sector; it is outside the scope of this study. A review would also need consider developments that may flow from other ongoing inquiries covering heritage issues such as the EPBC Act review and the parliamentary inquiry. In particular, the relationship between Commonwealth and state heritage legislation may change under a reformed EPBC Act (which would see the Commonwealth set National Environmental Standards and devolve EPBC approvals to state and territory regulators).

A consensus for reform may be building — in July 2020, the Australian Government committed to a ‘national engagement process for modernising the protection of Indigenous cultural heritage’, which commenced with a roundtable meeting of State Indigenous and environment ministers, jointly chaired with the Minister for Indigenous Australians (DAWE 2020a, p. 7).

---

### FINDING 8.1

The *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (Cth) was initially implemented to operate where State and Territory regimes proved ineffective. This role remains important, but the Act does not fit well with the regulatory systems operated by the States and Territories. A comprehensive review of the role of the Commonwealth in heritage regulation and its effectiveness is required.

---



---

## 9 Other factors affecting investment

### Key points

- Investment decisions in resources projects are influenced by a multitude of factors, both commercial and policy-related. This chapter highlights policy issues raised by participants.
- The Commission has only made findings and recommendations on matters that come within the focus of this study, that is, application of sound regulatory practice, or that have been considered previously by the Commission.
- Policy and regulatory uncertainty is regarded as a major impediment to investment.
  - While government policies necessarily evolve in response to changing economic conditions, technology development and shifts in broader societal values and priorities, participants criticised abrupt policy changes introduced without adequate consultation.
  - Several participants noted uncertainty about long-term climate policy and inconsistencies between emissions policies across jurisdictions, leading to higher energy prices and making it difficult for resources companies to predict costs and revenues associated with their investments.
  - Concerns have been raised about the inconsistent application of regulations across similar resources projects, particularly in the treatment of scope 3 emissions.
- The availability of skilled workers, particularly in growth phases, and mismatches between the expiry date of greenfields agreements and the life of resources projects are seen as key workforce issues.
- Australia's capital-intensive resources sector is heavily reliant on foreign investment. Several participants commented that the current and proposed foreign direct investment screening regime add a layer of uncertainty for foreign investors and impose unnecessary costs.
- Participants also raised concerns about Australia's taxation system, horizontal fiscal equalisation and anti-dumping policies, and advocated for government involvement in coordinating and providing infrastructure to facilitate resources projects.

Resources projects are typically long lived and often require substantial and largely irreversible (sunk) investments before any revenue can be derived from a project. This means that decisions about resources investments can be particularly sensitive to uncertainty about future cash flows and potential time delays between the investment and production stage.

Regulatory processes directly affecting resources sector projects have been discussed in earlier chapters. The focus of this chapter is on other aspects of government activity identified by participants as having a material impact on resources investment decisions. These include policy and regulatory uncertainty and inconsistency (section 9.1), regulation of industrial relations and other workforce issues (section 9.2), foreign investment policies

---

(section 9.3) and taxation (section 9.4). Section 9.5 briefly surveys other issues raised by study participants.

Several of the specific issues raised are complex and comprehensive examination is beyond the scope of this study. Commentary has been confined to matters relating to aspects of regulatory practice and, where relevant, issues previously considered in Commission studies.

## 9.1 Policy and regulatory uncertainty

Study participants have emphasised the importance of policy and regulatory certainty and stability for continued investment in the resources sector. QRC (sub. DR81, p. 30) stated that ‘providing regulatory certainty, particularly on the regulatory process, is the single most powerful tool available to policy makers to encourage resources investment’. AMEC (sub. 31, p. 4) also submitted that:

All mining and mineral exploration companies require clarity, certainty, consistency and predictability throughout the mine cycle, particularly for investment and business decision making in a globally competitive resources environment.

This includes policies and processes around taxation, royalties, fees and charges, approvals, compliance, red tape and regulation.

As noted in the discussion of principles of good regulation in chapter 3, frequent or abrupt changes to government policies and objectives, a lack of consistent long-term policy direction, and inconsistent application of existing legislation and policies can increase investors’ perception of regulatory risk and impede investment.

### ‘Surprise’ policy changes risk destabilising investor confidence

Over time, some degree of regulatory change is inevitable. Government policies should adjust, for example, in response to changing economic conditions, the development of new technologies and shifts in broader societal values and priorities.

However, frequent or abrupt changes to government policies and objectives can jeopardise investor confidence. If investors are ‘surprised’ by an adverse policy change after they have committed capital to a project, they may be less inclined to make future investments in fear of further adverse policy changes. The risk that the value of investments will be reduced due to future changes in government policies is sometimes referred to as *sovereign risk*.

Stakeholders pointed to various recent examples of policy changes that have affected the resources sector:

- proposals to increase royalties without ‘proper industry consultation’ in Victoria, Western Australia and Northern Territory (MCA, sub. 11, p. 10)
- a new federal biosecurity import levy announced ‘without a biosecurity risk assessment or regulation impact statement’ (MCA, sub. 11, p. 11)

- 
- ‘[an] “overnight” announcement of royalty increases [on coal seam gas] in Queensland’ (Andrew Garnett, sub. 24, p. 3)
  - a lack of ‘transparency and predictability’ in local government rates on resources sector tenement leases in Queensland (QRC, sub. 27, p. 22)
  - the ‘sudden imposition of a legislated moratoria in the Limestone Coast’ (SACOME, sub. DR75, p. 15).

The Commission is not in a position to assess the veracity of the claimed abruptness and lack of consultation in each of these cases. Some governments strongly dispute the particular claims being made.

But the broader point remains — as observed in chapter 3, stability and predictability of the regulatory environment support long-term investment.

Where changes are considered necessary, governments can mitigate investors’ concerns by clearly articulating how a policy change would deliver net benefits, and engaging in meaningful early public consultation on new policy proposals. For example, QLS (sub. 41, p. 2) submitted that it:

... has seen a number of legislative changes impacting the resources sector made in compressed timeframes, making it difficult for stakeholders to properly consider the changes and provide useful feedback. In the complex legal landscape affecting the resources sector, adequate consultation time is essential to allow stakeholders to identify unintended consequences of proposed changes, which can be many and varied, and may include significant impacts on the legitimate expectations of stakeholders.

Formulating clearly articulated policy objectives and communicating them to the public in a transparent fashion (chapter 12) can further reduce investors’ perception of regulatory risk. For example, in the context of domestic gas market policies, Andrew Garnett (sub. 24, p. 3) submitted that:

Measures such as price controls, broad market supply obligations or threats thereof, such as Australian Domestic Gas Security Mechanism (ADGSM), are not inherently consistent with a policy aim of maximising supply or minimising prices ... The alternative concept in Queensland of tenement release for domestic supply only, has the big advantage of being clear ‘up front’, which improves the investment environment from the perspective of predictability, though, if it impacts price significantly, it is not likely to improve the economic attractiveness.

#### FINDING 9.1

Government policies necessarily must evolve in response to changing economic conditions, technology development and shifts in broader societal values and priorities. However, abrupt policy changes without adequate consultation can undermine investor confidence and discourage investment.

---

## Investor risk associated with inconsistent and uncertain climate and energy policy frameworks

Several study participants stated that policy uncertainty around climate change, and in the related area of energy supply, can pose an impediment to resources investment. For example, APPEA (sub. 44, p. 11) noted that:

The continued [climate change] policy uncertainty and frequent framework shocks that have occurred in Western Australia and Australia more broadly have greatly increased investment uncertainty and risk which must be (negatively) factored into business decisions.

SACOME (sub. 37, p. 14) noted that ‘a lack of clear direction at the Federal level resulted in Australian States and Territories pursuing their own energy policy agendas with a range of unplanned consequences’. INPEX (sub. 34, p. 9) noted that this ‘creates uncertainty and scope for duplication in regulatory processes’, a point echoed by FMG (sub. DR92, p. 30). This uncertainty makes it more difficult for resources companies to predict future costs and revenues associated with their investments. Different targets and policy instruments will have different implications for the viability of various technologies (for example, carbon capture and storage), as well as future resources production.

While this uncertainty can have direct implications for investment in resources projects, participants also commented on the link between this uncertainty and energy prices (CIF, sub. DR58, p. 5; MCA, sub. 11, p. 27). For example, the MCA (sub. 11, p. 27) noted that rising energy prices:

are affecting the commercial viability of new mining and mineral processing projects in Australia [and] minerals processing and other energy intensive activities are increasingly finding themselves priced out of international markets.

Similarly, Alcoa (sub. 45, p. 2) highlighted ‘uncertainty regarding federal and state climate policies and the flow on effect for energy generation of the availability of internationally competitive energy prices’ as an example of ‘regulatory issues which challenge the ability of business in Australia to be internationally competitive’.

Several stakeholders called for a nationally consistent strategy for climate and energy policy. For example, APPEA (sub. 44, p. 11) stated that it supports ‘a national climate change policy that delivers greenhouse gas emissions reductions at least cost and facilitates broad-based investment decisions consistent with an international price on carbon’. Rio Tinto (sub. 26, p. 3) called for an energy policy that delivers ‘more affordable and reliable supplies of energy, while meeting Australia’s emissions reduction targets’. In the absence of a national approach, INPEX (sub. 34, p. 10) suggested that an alternative could be the ‘harmonisation of state approaches to greenhouse gas emissions reduction’.

The Commission has previously recognised the importance of climate policies in resolving the issues confronting the Australian energy market. It observed that a ‘lack of clear stable signals concerning emission policy has created an uncertain investment environment and raised concerns around sovereign risk as policies and rules change after investments have been made’

---

(PC 2017a, p. 19). The Commission recommended that Australian governments ‘stop the piecemeal and stop-start approach to emission reduction, and adopt a proper vehicle for reducing carbon emissions that puts a single effective price on carbon’ (PC 2017e, p. 164).

FINDING 9.2

Uncertainty about and inconsistent climate change and energy policies across jurisdictions risk impeding resources sector investment.

### **Inconsistent regulatory treatment of similar projects undermines investor confidence**

Investors’ perceptions of regulatory risk (along with the overall efficiency of economic outcomes) are negatively affected if projects with similar characteristics are treated differently by regulators. Such risks may arise where there is inconsistent treatment of projects by the same regulator, or misalignment of regulation across agencies and jurisdictions. Participants highlighted examples of inconsistency in regulatory treatment (box 9.1).

One reason for the inconsistent application of regulation across projects relates to varying capability across regulators, which can be influenced by factors such as tight budgets, high staff turnover and increasing project complexity. These factors and relevant leading practices are further discussed in chapter 12.

Unclear guidance on policy objectives and regulatory settings can also lead to inconsistencies, as it leaves regulators with too much room for interpretation. The EDO (sub. 40, p. 29) noted that:

... the chronic ambiguity and discretion that is provided under resource laws throughout all jurisdictions ... can hinder investment in Australia through affecting the certainty as to how it will be interpreted for each project and what is expected of a proponent.

Providing regulators with clear and consistent guidance on policy objectives, and the relevance and application of regulations to achieve these objectives, could assist in addressing this issue (chapter 12).

---

## Box 9.1 Examples of inconsistent treatment of projects

Participants raised examples of the effects of inconsistencies in the application of regulation.

APPEA (sub. 44, p. 21) commented:

... APPEA members advise that they have noted inconsistency in decision making and in the interpretation of legislation in Queensland. ... This uncertainty is aggravated by a perceived reluctance by the Queensland regulator, in many instances, to put policy and legislative interpretation advice in writing which makes relying on their advice difficult.

APPEA (sub. 44, p. 10) also submitted that:

... industry has observed differences in considerations of climate change impacts and greenhouse gas emissions. [The National Offshore Petroleum Safety and Environmental Management Authority] and [Department of Energy and Environment] have had different views on the policy/guidance required for titleholders on this matter and it has created inefficiencies and inconsistencies during the assessment process of recent project applications.

EDO (sub. 40, p. 30) commented on the lack of clear guidance on how climate change should be addressed in environmental decisions:

... due to vague environmental laws which frequently do not require decision makers to avoid or mitigate activities which may increase greenhouse gas emissions, either directly or through downstream impacts, various courts hearing objections on the basis of climate change impacts have interpreted the duty to consider this environmental impact in inconsistent ways.

Woodside (sub. DR82, pp. 3–4) also noted the uncertainty in how downstream emissions should be assessed.

... under the [*Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)] there is a lack of clarity on whether the regulatory assessment and conditioning process for primary environmental approvals should include the impacts of downstream consumption of products from the project under assessment. ... Proponents in Australia would benefit, and the risk of approvals being challenged would be reduced, if the government was clear on its intentions within the EPBC Act in this regard.

## Treatment of scope 3 emissions in recent regulatory decisions

Several study participants raised the treatment of scope 3 emissions<sup>30</sup> as an example of inconsistent decision making across similar projects. For example, the ACF (sub. 32, p. 19) submitted:

At both state and federal levels, there is an acknowledgement that the scope three emissions of proposed projects are relevant to their assessment. However, there is not a consistent approach as to how the contribution of [greenhouse gas] emissions to global climate change should be assessed and how this should be factored into the public interest of a project proceeding.

---

<sup>30</sup> Scope 3 emissions are indirect emissions, other than emissions created via the generation of electricity used by an organisation (scope 2 emissions). They stem from activities of an organisation but are created by entities that it does not own or control (for example, as products sold by the organisation are processed or used by others) (Compare Your Footprint 2018).



---

In New South Wales, scope 3 emissions have been factored into decisions by regulators and courts for coal projects (box 9.2). However, in Queensland, they have been found by courts to be largely irrelevant.<sup>31</sup>

**Box 9.2      Scope 3 emissions and recent approval decisions for coal projects in New South Wales**

Scope 3 emissions have been a factor in recent approval decisions for coal projects in New South Wales:

- In February 2019, the Chief Judge of the NSW Land and Environment Court indicated that scope 3 emissions were a relevant factor in considering a company's appeal of the NSW Planning and Assessment Commission's (NSW PAC) refusal of a development application for the Rocky Hill coal project. The Judge did also note that the 'significant and unacceptable planning, visual and social impacts, which cannot be satisfactorily mitigated' provided sufficient grounds to refuse the project'.<sup>32</sup>
- In August 2019, the NSW Independent Planning Commission (NSW IPC) (replacing the NSW PAC) approved the United Wambo coal project under the condition that its coal only be exported to countries that are signatories to the Paris Agreement (or that have functionally similar policies in relation to greenhouse gas emissions).
- In September 2019, the NSW IPC refused the Bylong coal project's development application, citing a number of reasons, including the project's direct and indirect greenhouse gas emissions and their impact on climate change (NSW IPC 2019b).
- In October 2019, the NSW IPC approved a 21-year extension of the Rix's Creek coal mine. Scope 3 emissions again formed part of the NSW IPC's considerations, but it concluded that 'the consumption of coal in countries that are signatories to the Paris Agreement or have other [greenhouse gas] reduction targets in the export countries should lead to minimised Scope 3 emissions from the Project to the greatest extent practicable' (NSW IPC 2019a, p. 86).

Notwithstanding that targeting scope 3 emissions on a project-by-project basis is likely to be an ineffective mechanism for reducing global emissions (box 9.3), recent decisions in New South Wales do not appear to be invalid under current laws. Study participants suggested that the NSW Independent Planning Commission's (NSW IPC) recent decisions have created uncertainty for investors, in particular with respect to the weight that might be given to scope 3 emissions in future regulatory decisions. For example, the NSW Business Chamber (sub. 3, pp. 1, 3) commented:

Had it been clear from the outset that, for example in the case of Bylong, 'scope 3' emissions would be a significant factor in the way the application was to be assessed, it is possible the proponent would have taken a different approach to the application. There is a risk if such factors are seen to be brought in 'at the last minute', that proponents have little ability to meet review bodies' expectations ... For clarity, this is not an argument that Scope 3 emissions or other factors should not be applied in assessing projects, but it should be clear to proponents and other

---

<sup>31</sup> *Coast and Country Association of Queensland Inc v Smith & Ors (2016) QCA 242.*

<sup>32</sup> [2019] NSWLEC 7, [487]–[513], [556]. The NSW PAC cited similar reasons when it initially refused Rocky Hill's Development Application. Scope 3 emissions did not factor in its decision.

---

stakeholders what factors will be used to judge a project from the outset, not seemingly have them introduced at the last moment.

### Box 9.3 Project-by-project approvals and emissions in export markets

Assessing (and possibly rejecting) individual projects on the basis of their potential scope 3 emissions in export markets is unlikely to be an effective way of reducing global emissions.

- Climate change is the cumulative result of multiple individual actions. Environmental approval processes in Australia are largely configured to manage the risks and impacts created by individual projects — they are not set up to manage cumulative impacts. A decision in one jurisdiction to stop a new coal mine, for example, will not constrain exports from existing mines in Australia or from around the world, or stop new projects from being approved in other Australian states or territories or in other countries.
- Under the global emissions reduction architecture, individual countries are responsible for reducing their scope 1 and 2 emissions. How they achieve their targets is up to them. Abatement actions will likely affect their consumption of coal and fossil fuels to varying degrees, including their consumption of Australian exports of these commodities. There is no case, or need, for Australia to do anything to try to influence or override abatement actions designed to achieve agreed emissions targets in these countries, as acknowledged by the NSW Independent Planning Commission (box 9.2).
- For countries that have not agreed to carbon emissions abatement targets, the question is would reducing Australia's exports (project by project) lower their consumption of coal or gas overall, or could they simply switch to other sources? While Australia is a large exporter, it is not a dominant global producer of thermal coal or gas, representing 5 per cent and 3 per cent of world production respectively in 2019 (chapter 2). As such, a small reduction in its exports due to the rejection of a new mine would be expected to have a negligible impact on world prices and total consumption, and hence global emissions. Moreover, disallowing Australian exports only to countries that do not have emissions targets would likely result in a shift in exports towards countries with emissions targets, while exports from other countries would shift to markets vacated by Australia, further reducing the likelihood of any overall reduction in global emissions. This is consistent with the Queensland Land Court's ruling in *Hancock Coal v Kelly & Ors and Department of Environment and Heritage Protection* in 2014 (upheld by the Court of Appeal in 2016).<sup>33</sup>

A lack of clear policy guidance on how scope 3 emissions should be considered by decision makers is likely to have contributed to this regulatory uncertainty. The NSW Productivity Commission's review of the NSW IPC's role and operations highlighted that 'most of the criticisms of the NSW IPC's interpretation of policy relate to certain policy areas where there are gaps or lack of clarity' (NSW PC 2019, p. 46).

The NSW Government has sought to address this uncertainty, introducing a bill<sup>34</sup> in October 2019 to prevent the imposition of conditions related to scope 3 emissions. However, this was

---

<sup>33</sup> *Coast and Country Association of Queensland Inc v Smith & Ors* [2016] QCA 242; *Hancock Coal Pty Ltd v Kelly & Ors and Department of Environment and Heritage Protection (No. 4)* [2014] QLC 12.

<sup>34</sup> Environmental Planning and Assessment Amendment (Territorial Limits) Bill 2019.

---

opposed by the NSW Legislative Council Planning and Environment Portfolio Committee, as it would still allow projects to be refused on the basis of scope 3 emissions, potentially resulting in the outright refusal of projects that may otherwise have been approved subject to conditions (NSW Parliament 2020). As it stands, considerable uncertainty remains in New South Wales.

FINDING 9.3

Unclear policy objectives can lead to inconsistent and unpredictable application of regulations across resources projects, creating investor uncertainty (such as in relation to approval decisions and conditions on the basis of scope 3 emissions).

FINDING 9.4

Not approving proposed resources projects or curtailing their exports due to potential greenhouse gas emissions in destination markets is an ineffective way of reducing global emissions.

LEADING PRACTICE 9.1

Early public consultation on new policy proposals, accompanied by clear evidence-based articulation of why a proposed change is the best way of addressing an issue (for example, through regulatory impact assessments), can avoid policy surprises.

Clear policy objectives aid consistent and predictable regulatory decision making. Policy makers can achieve this by avoiding the use of vague language in policy documents and providing clearly articulated guidance on the intention and interpretation of policies and legislation.

## 9.2 Workforce issues

As noted in chapter 2 (figure 2.1), resources projects in Australia directly employ about 240 000 people. Technological advances over the past couple of centuries have made resources exploration, assessment, development and production more capital-intensive. While this has reduced demand for some types of workers, new skills are also needed, and the availability and cost of skilled labour can still impact the timing and profitability of resources projects in a material way (EY 2019).

Workplace relations policies, such as those related to the maximum duration of greenfields agreements, affect the level of certainty about the overall costs and timeframes of resources projects and therefore also affect investment decisions, especially at the construction stage. As the MCA (sub. 11, p. 26) commented:

---

A degree of certainty about the industrial environment – including employment conditions and projected labour costs – over the life of a complex and lengthy construction project is vital to providing investors with confidence and making Australia an attractive destination for new capital investment.

Further, public perception of a resources project depends, at least to some extent, on the promise for the project to deliver new jobs, as well as the employment arrangements of the resources company (including management of health and safety risks, opportunities for local communities and use of temporary migrants), along with its workplace culture. These factors contribute to a company's 'social licence to operate' and can, therefore, ultimately affect the bottom line of a resources project (chapter 10).

Issues relating to the availability of skilled workers and workplace relations are discussed below.

### **Availability of a skilled workforce**

Demand for resources tends to go through cycles, and investment adjusts as marginal projects become more or less attractive. The cyclical nature of resources sector activity can lead to temporary fluctuations in demand for skilled labour. Supply-side shocks can also lead to skills shortages and surpluses in the short term, such as travel restrictions recently implemented in response to COVID-19, which have impeded the movement of interstate fly-in fly-out workers and skilled migrants (Ker 2020a).

Governments can influence the availability of skilled labour through migration policy and education and training programs. In general, flexible and responsive skilled (temporary) migration can help meet short-term fluctuations in the demand for skilled labour, although most recently the COVID-19 international travel restrictions have limited the ability of governments to deploy this policy lever. Governments can address longer-term imbalances in the skills pool of the Australian labour force through their coordinating roles in the tertiary education system.

The availability of skilled migrant workers in the Australian resources sector has been raised as an issue by relatively few study participants. The CFMEU (sub. 16, p. 7) suggested there was a limited need for further temporary foreign workers and any skills shortages could be addressed by offering better conditions to Australian workers:

With some 1.5 million foreign citizens with work rights already in Australia, 718,000 unemployed and a further 1.1 million underemployed it is difficult to see why the Australian mining industry, with less than a quarter of a million workers, needs more temporary foreign workers. ...

As the [Australian Council of Trade Unions] policy notes, many employer respondents to a survey that complained about labour shortages had steadfastly refused to consider increasing their pay offers. In the mining industry there has been considerable pay reductions through the use of casuals via third party contractors (notably labour hire firms).

---

Rio Tinto (sub. 26, p. 14), on the other hand, submitted that:

The current immigration framework enables Rio Tinto to source skills critical to our business. However, we believe improvements to the structure of the Temporary Skill Shortage visa (subclass 482) including ‘red tape’ reduction could position Australian businesses to compete more effectively for global talent and reduce timeframes for onboarding talent.

Rio Tinto (sub. 26, p. 14) further proposed the government should ‘expand access to long-term visas with route to permanent residency, move away from the occupational listing model for skilled visas [and] remove the labour market test’. The BCA (sub. 43, p. 5) also commented on skilled migration processes, stating that ‘inefficient visa processes delays access to critical staff and essential skills that are needed from overseas’.

Australian immigration policies — including the Temporary Skill Shortage (subclass 482) visa regime — are not specific to the resources sector and should be analysed in the context of their overall impact on the Australian economy. The Commission has previously observed that employers’ incentives to invest in workforce training are likely to be dampened as a result of ready access to skilled migrants (PC 2016b, p. 210). A Senate inquiry into the impact of temporary migration ‘on the Australian economy, wages and jobs, social cohesion and workplace rights and conditions’ is under way, with a final report to be presented by December 2020 (Parliament of Australia 2020).

Beyond immigration policies, governments’ longer-term role in developing and supporting a skilled workforce was highlighted in the National Resources Statement (DIIS 2019a, p. 40):

It will be important to draw on skills mapping already underway by industry to understand the needs of the entire resources sector supply chain. A more coordinated approach is needed. Governments and industry need to determine the sector’s future skills requirements and how best to meet the needs of a changing sector. The findings will be used to better develop curricula that meet the needs of the sector. This process should be informed by knowledge of the commodities that will form the foundation of Australia’s future resources economy, such as battery and critical minerals.

SACOME (sub. DR75, p. 16) also pointed to the importance of catering to changing skills needs in the longer term:

The resources sector’s transition from a traditionally labour-intensive workforce towards a professional workforce needs greater collaboration between government, industry and educational institutions. This will be important to attract students and to understand, manage and develop educational outcomes that will facilitate future workforce requirements.

The Commission has recently completed a review of the National Agreement for Skills and Workforce Development. The interim report outlined reform directions to improve skills outcomes across the training system as a whole, including better allocation of government funding, greater efficiency and competition in the vocational education and training system, and supporting students and employers to make informed choices (PC 2020b). At the time of writing, the final report has not been released.

---

## Workplace relations

Some stakeholders to this study emphasised the importance of reform to workplace relations to boost the productivity of the resources sector. The MCA (sub. DR97, p. 13) noted that ‘making improvements to workplace relations rules will be important to attracting new investment and boosting productivity, employment and wages — particularly in the aftermath of the COVID-19 pandemic’.

The Australian Government is considering improvements to current settings, and formed working groups of business and union representatives to discuss potential changes in five areas: award simplification, enterprise agreement making, casuals and fixed term employees, compliance and enforcement, and greenfields agreements (Morrison 2020a). These concluded in September and the Government has flagged potential legislative changes (Porter 2020). While broader reforms to workplace relations have been considered as part of this process, there is one key area of specific importance for the resources sector — greenfields agreements.

### Greenfields agreements

Greenfields agreements are a form of enterprise agreement that can be made under the *Fair Work Act 2009* (Cth) (Fair Work Act) before any employees have been engaged at a new enterprise (DoJSB 2017, p. 6). These types of enterprise agreement are highly relevant for new resources projects — they can provide companies with greater certainty about future labour costs and therefore help secure finance and other approvals.

Like other types of enterprise agreement, greenfields agreements generally expire within four years of the date they are approved by the Fair Work Commission.

Several study participants raised concerns about greenfields agreements (APPEA, sub. DR91, p. 11; MCA, sub. 11, pp. 26–27; Woodside, sub. DR82, p. 4). In particular, the MCA (sub. 11, pp. 26–27) stated that:

The current duration of greenfields agreements is out of step with the realities of major project work, which often extends beyond four years.

After a greenfields agreement has passed its nominal expiry date, industrial action may be taken. This means that employers may be subject to significant uncertainty and additional costs at a critical time of project construction when the greenfields agreement passes its nominal expiry date. Extending the duration of greenfields agreements to match the life of projects would increase industrial certainty for employers and investors and encourage additional employment.

The Commission has previously recommended that the Fair Work Act be amended to allow an enterprise agreement to specify a nominal expiry date that matches the life of a greenfields project. In particular, the Commission (2015c, p. 689) noted that:

Any agreement with a life less than the expected duration of the project exposes the business to substantial risks. Delays in negotiating a greenfields agreement can lead to underutilised capital and may cause the contractor to incur a penalty for delay in the delivery of the project. This

---

creates an imbalance in bargaining power. Even if employees do not actually use this leverage, the ex-ante risk of it raises investor risk and may add to project cost.

The Commission recommended that when the duration of a greenfields agreement is longer than the standard duration of an enterprise agreement,<sup>35</sup> ‘the business would have to satisfy the Fair Work Commission that the longer period was justified’ (PC 2015c, p. 691).

An Australian Government review of greenfields agreements in 2017 considered the Commission’s 2015 recommendations, but concluded that the basis for extending the potential duration of greenfields agreements for construction and resource development projects ‘has not been made out in the material provided to this review’ (DoJSB 2017, p. 47). It stated that:

Extending greenfields agreement duration [to five years or the life of a given project] would deny employees the capacity to make decisions about their employment arrangements for what might be very long periods of time. Further, if greenfields agreements are able to operate for the duration of a given project, the review is concerned that wages and conditions agreed at the commencement of one project could adversely affect other projects, commenced in entirely different commercial circumstances.

The CFMEU (sub. DR77, p. 6) made a similar comment:

... allowing for greenfield agreements of unlimited duration ... does not recognise that with each passing year, an agreement reflects less of the context in which it was negotiated. There should be progressively tougher justifications required for each year beyond 4 years.

As the Commission noted in 2015, negotiating parties are not compelled to agree to longer durations if, for example, they consider that their industries are likely to face changing conditions over that term. The benefits of allowing extended durations are, therefore, likely to accrue to the group of firms and employees who have a strong interest in stability (PC 2015c, pp. 690–691).

In September 2019, the Attorney-General’s Department released a discussion paper and invited submissions on whether and how enterprise agreements might be applied for the life of greenfields projects (AGD 2019). The review is still in progress.

The Commission considers that its 2015 recommendation regarding the nominal expiry date of enterprise agreements for greenfields projects remains relevant.

#### FINDING 9.5

Allowing parties to negotiate greenfields enterprise agreements with durations that match the life of a greenfields project would improve investor certainty.

---

<sup>35</sup> In 2015, the Commission also recommended that the standard nominal expiry date for an enterprise agreement should be up to five (rather than four) years. This recommendation was not adopted.

---

#### RECOMMENDATION 9.1

The Australian Government should amend s. 186(5) of the *Fair Work Act 2009* (Cth) to allow an enterprise agreement to specify a nominal expiry date that matches the life of a greenfields project. The resulting enterprise agreement could exceed four years, but where it does so, the business would have to satisfy the Fair Work Commission that the longer period was justified.

### 9.3 Barriers to foreign investment

As noted in chapter 2, a high proportion of resources companies operating in Australia are foreign owned or draw on foreign investment as a source of funding, with the Australian resources sector having a greater stock of foreign direct investment (FDI)<sup>36</sup> than any other sector. Rules and regulations around foreign investment can have a potentially significant effect on overall investment in the sector. For example, AMEC (sub. DR90, p. 16) cautioned that ‘if investment is made to appear too litigious and subject to uncertainty, foreign investors will avoid undue risks by seeking alternate investment locations’.

Australia’s foreign investment policies aim to ensure that investments are not contrary to the national interest, for example, due to potential national security risks or erosion of the tax base. Foreign investment proposals require approval if they meet certain screening criteria. For resources projects, an approval may be required to acquire an interest in a tenement, the underlying land or an operational business, or to start a new Australian business (FIRB 2020). Screening thresholds vary according to factors such as the sector of the investment, whether the investor is from a trade agreement partner country, and whether they are a foreign government. When making decisions on foreign investment, the Treasurer receives advice from the Foreign Investment Review Board (FIRB). In practice, FDI proposals subject to screening are rarely rejected, but are often approved with conditions attached (FIRB 2018, pp. 24–25).

Changes to screening requirements have recently been announced, with the general objective of increasing their stringency on national security grounds. While current policy settings allow the Treasurer to prohibit foreign investment proposals found to be contrary to the national interest, or impose conditions on an investment to address national interest concerns, the proposed changes enable a range of other powers to be exercised, mainly to protect national security. At the same time, some of the proposed changes are technical amendments intended to improve certainty for foreign investors, and these include exemptions for some areas of the resources sector (box 9.4).

---

<sup>36</sup> Foreign direct investment refers to investment in an enterprise or asset where the foreign investor has control or a significant degree of influence over management. Generally, investment is considered to be ‘direct’ when an investor has 10 per cent or more of the voting power in the company, so is often associated with an equity stake (such as through shares), rather than debt securities (ABS 1998; IMF 2009).



---

While foreign investment policies are not intended to impede FDI anticipated to be of net benefit to Australia, they can increase costs for investors, both in terms of time and uncertainty. For example, even prior to the proposed policy changes, the BCA (sub. 43, p. 5) commented that ‘Foreign Investment Review Board decision making timeframes is a source of uncertainty for overseas investors, with delays specifically noted in the oil and gas sector’. And with regards to the proposed reforms, AMEC (sub. DR90, pp. 16–17) commented that:

While supportive of screening measures to protect Australia’s national security ... AMEC is concerned that the extent of reforms proposed under the guise of national security is open to interpretation and could have a detrimental effect on foreign investment.

... Sourcing early capital investment is an extremely challenging task. Certain countries have much greater risk appetites and willingness to invest at an early stage, agree to offtake and other commercial arrangements. If the Commonwealth Government is going to reject investment, there must be a willingness to have a conversation about how this investment will be replaced or alternatively sourced. The current national conversation around FIRB appears singularly focused on the national security dimension, but broader consideration of the opportunity cost of these decisions is needed.

International comparisons suggest that Australia’s existing FDI regime for the mining and quarrying sector (including oil extraction) is relatively restrictive — sitting above the average level for OECD countries in 2019 (figure 9.1). It is unclear how Australia’s regime would compare following the proposed policy changes, particularly as other governments around the world have also been tightening their foreign investment policies. Globally, there has been growing scrutiny over security concerns since 2016, and this has been further accelerated by the COVID-19 crisis (DLA Piper 2020; OECD 2020a).

The MCA (sub. 11, p. 28) suggested that the stringency of Australia’s foreign investment policies should be moderated:

... investment policy settings need to support Australia’s attractiveness as a destination for international investment, ensure the foreign investment and foreign influence review process does not needlessly create political tensions, and provide clarity and transparency for foreign investors seeking to invest in Australia ...

The government should ensure that Foreign Investment Review Board (FIRB) screening requirements are the same for all private investors, irrespective of their country of origin. Screening thresholds in non-sensitive sectors should be raised from \$261 million to \$1.13 billion for non-FTA nations, consistent with the level that applies to Australia’s FTA partners.

---

## Box 9.4 Recent changes to foreign investment policy

On 29 March 2020, the Treasurer announced that the Government would temporarily screen all foreign investment into Australia, to 'safeguard the national interest' as part of the immediate response to the COVID-19 crisis. The Foreign Investment Review Board extended its screening timeframes from 30 days to up to 6 months to accommodate the increased volume of investment proposals requiring approval.

In June 2020, the Australian Government announced further reforms to Australia's foreign investment policy and changes to the *Foreign Acquisitions and Takeovers Act 1975* (Cth) (FATA). These reforms are intended to commence on 1 January 2021 and would be permanent replacements for the temporary COVID-19 measures. Proposed reforms include:

- introducing a new national security test for foreign investors, who will be required to seek approval to start or acquire a direct interest in a 'sensitive national security business', regardless of the value of the investment. The definition of a 'sensitive national security business' includes critical infrastructure and is subject to proposed reforms to the *Security of Critical Infrastructure Act 2018* (Cth). It should be noted that foreign investments in mining tenements are already screened under the national interest test regardless of value, with the exception of those by private investors from the United States, New Zealand and Chile, which are subject to a national interest test threshold of \$1.2 billion
- creating a new 'call-in' power enabling the Treasurer to review acquisitions that raise national security risks outside of proposed acquisitions relating to a 'sensitive national security business'
- creating a 'last resort' power to reassess approved investments where subsequent national security risks emerge, impose or vary conditions, and — in extraordinary circumstances — order disposal of the investment
- introducing measures to streamline approvals for passive investors and investments into non-sensitive businesses.

The Australian Government also announced stronger penalties, compliance and enforcement powers, the development of a new register of foreign ownership, and a review of application fees.

Other technical amendments to FATA have been proposed as part of these reforms, to streamline foreign investment processes in non-sensitive areas and improve certainty for investors. Proposed amendments relevant for the resources sector include exempting the acquisition of:

- revenue streams for mining and production tenements where they do not entail rights to occupy the land or direct control or influence over the land
- exploration tenements by private investors (although this does not extend to certain investments, such as acquisitions subject to the new national security test). While these are generally already exempt from screening under the existing framework, there are exceptions for some tenements in some States and Territories.

Sources: DHA (2020); FIRB (2020); Frydenberg (2020); PC (2020a, p. 41); Treasury (2020a, 2020b).

The Commission has not undertaken a holistic assessment of policy obstacles to foreign investment for this study, but has made observations about elements of Australia's policy framework in previous studies.

In 2017, the Commission (2017d, pp. 90–91) recommended a more simplified and consistent foreign investment policy:

... Australia’s FDI screening processes lack consistency and merit policy attention ... One option to simplify the process would be to extend the higher threshold to other trading partners. Some of the screening criteria, particularly when national security concerns are raised, are broad and vague, making regulatory approvals less predictable.

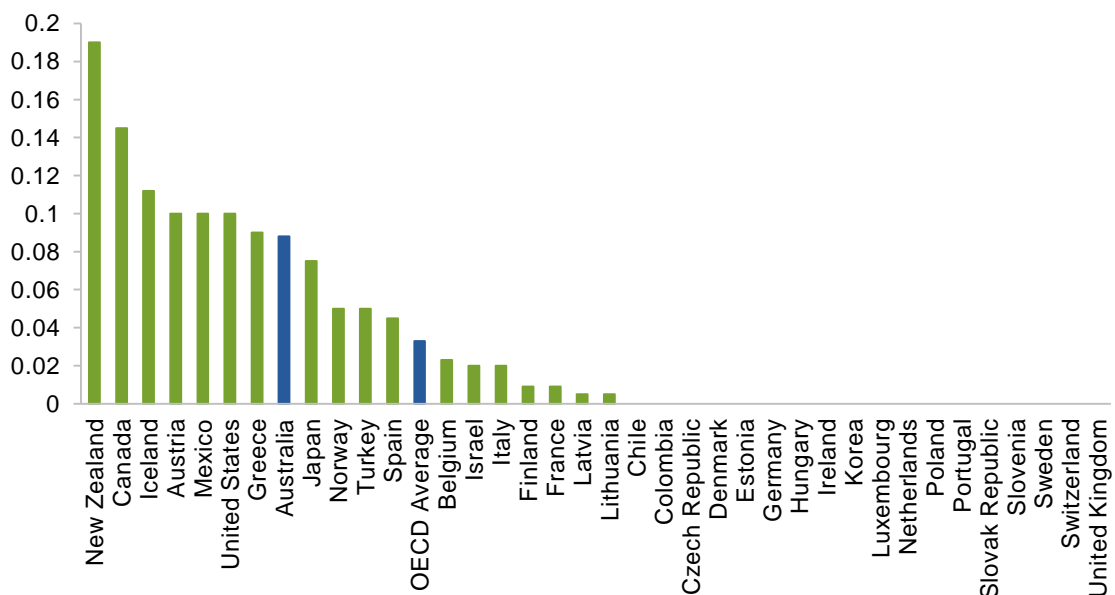
Australia’s reputation as an attractive destination for international investors could be strengthened through more consistent, transparent and predictable approval processes while preserving our vital national security interests.

The Commission also recommended making screening thresholds consistent across investors from different countries in its 2015 research report *Barriers to Growth in Service Exports*. The Commission (2015a, p. 102) noted that ‘lower foreign investment screening thresholds should not be maintained solely for use as a bargaining chip in trade negotiations’.

Most recently, in June 2020, the Commission made further recommendations to tighten policy guidance, improve certainty and transparency around timelines, avoid imposing conditions that duplicate regulatory requirements, and lower application fees to a level that matches administration costs (PC 2020a).

**Figure 9.1 Australia’s screening of FDI in mining and quarrying (including oil extraction) is relatively restrictive**

OECD FDI Regulatory Restrictiveness Index<sup>a</sup>, mining and quarrying (including oil extraction), OECD countries, 2019



<sup>a</sup> The FDI Regulatory Restrictiveness Index measures statutory restrictions on FDI. Restrictions are evaluated on a 0 (open) to 1 (closed) scale. Measures taken for reasons of public order and essential security interests are not scored.

Source: OECD (2020b).

---

These identified opportunities to improve the regime should be pursued alongside any changes required to address emerging national security threats.

## 9.4 Taxation

Several study participants submitted that the tax burden on the resources sector in Australia is high by international standards and suggested measures that would lower the effective company tax rate on resources companies.

For example, the MCA (sub. 11, p. 25) submitted that:

Australia's 30 per cent company tax rate is too high for a capital-hungry country ... The combination of a high company tax rate and a broad base in the absence of investment allowances or accelerated depreciation of investment costs delivers Australia a high and uncompetitive effective company tax rate. Consideration should be given to other measures that reduce the tax burden on new investment, such as accelerated depreciation.

Similarly, Rio Tinto (sub. 26, pp. 15–16) submitted that 'in recent years, Australia's tax competitiveness has declined compared to both OECD member countries and our regional competitors' and named the company tax rate, capital allowances regime, funding rules, stamp duty among the 'factors which impact on tax competitiveness'.

Anglo American (sub. 42, p. 16) supported 'a reduction to the headline corporate tax rate' and 'introduction of some form of accelerated depreciation for new investment' to 'incentiviz[e] additional investment in the Australian mining sector'.

Andrew Garnett (sub. 24, p. 2) observed that:

A reduction (or delay) of government take [the direct benefit to governments] can have a significant incentivising impact on new investment. In addition to simple rate reductions, other jurisdictions have employed a range of further measures such as accelerated depreciation, uplift, royalty holidays and exploration or R&D tax credits ...

He further referred to the 'possibility to tune tax and royalty arrangements to the quality, location and maturity of the resource' (sub. 24, p. 6).

In contrast, the Mineral Policy Institute (sub. DR72, p. 6) suggested that Australia should consider '[changing] tax to increase the public share of profits', to provide greater benefits for communities from resources extraction.

As part of the Australian Government's COVID-19 economic recovery plan, the 2020-21 Budget included a \$26.7 billion investment allowance, which will enable firms with turnover of up to \$5 billion to deduct the full cost of capital purchased before 30 June 2022 (Australian Government 2020, p. 20).

---

The Commission has not reviewed resources sector taxation for several decades or corporate income taxation more generally, and examination of the taxation regime lies beyond the scope of this study.

## 9.5 Other factors raised in submissions

Study participants also suggested a number of other factors affecting resources sector investment that are briefly discussed below.

### Horizontal fiscal equalisation

Alex Dobes (sub. 2) raised concerns about Australia’s system of horizontal fiscal equalisation (HFE), which underpins the distribution of goods and services tax revenue to the States and Territories. Alex Dobes proposed that (sub. 2, p. 10):

The Commonwealth Government and the Productivity Commission should re-consider the option of applying a discount to resources revenues in calculating equalisation payments.

Any discount for resources revenues should apply only to future projects, to ensure that states with a smaller resource endowment are left no worse off than the status quo.

To overcome Western Australia’s current disadvantage, the Commonwealth Government should consider a time-limited decreasing subsidy.

The Commonwealth Government should consider the option of providing incentive payments to the states for project approvals and legislative changes that facilitate resources development.

In 2018, the Commission commented on the proposal to impose discounts to mining revenue assessment (PC 2018, pp. 210–211):

On balance, the introduction of a discount for particular revenue assessments is not justified on equity or efficiency grounds. A discount is inconsistent with the broad objective of HFE. Mining revenue, in particular, is a prime example of a source-based advantage that should prima facie be included in the equalisation process ... Permanent discounts should also not be introduced to provide a supposed solution in cases where jurisdictions have managed the fiscal returns of buoyant conditions in a less than ideal way over time. The temporary use of a discount factor is also far from ideal, and runs the risk that it would become permanent over time ...

Discounting mining (or other revenue categories) in the HFE process — or removing it entirely — is not justified and would come at a high cost to fiscal equality.

The Commission’s earlier observations remain relevant.

### Public investment in infrastructure, including export infrastructure

SACOME (sub. 37, pp. 12–13) cited infrastructure availability as one of ‘the two major impediments materially affecting resources sector investment in South Australia’ (the other

---

being energy security). It noted that ‘road, rail, port and power infrastructure are critical for the development of resources projects, particularly for greenfield resource provinces’, and also emphasised the ‘importance of maintaining “economic infrastructure” so that existing resources projects can continue to operate efficiently’ (SACOME, sub. DR75, p. 16).

Similarly, QRC (sub. 27, p. 21) submitted that:

Timely access to competitively-priced infrastructure services such as rail, water, port, energy, pipelines, roads, mobile and internet services are imperative to support industry growth. The government’s planning and coordination of infrastructure is essential.

And Andrew Garnett (sub. 24, p. 4) observed that ‘public investment or partial investment in new export infrastructure can be a significant accelerator for new, long term, gas to market’.

The Commission has previously considered the role of governments in infrastructure provision (PC 2014b, pp. 60–62). Rationales for governments taking a lead role include to:

- ensure equitable access to a basic quality of service (for example, to water or sewerage)
- address market failures, for example, where:
  - a natural monopoly occurs making it more efficient for one business to supply an entire market
  - the infrastructure in question has public good characteristics (consumption by one person does not diminish consumption by another and excluding consumers is technically impossible or economically too costly)
  - externalities arise for users from others’ use of infrastructure
- (historically) take on the risks of an infrastructure improvement sought by the community where markets or institutions have not been sufficiently mature.

The Commission (2014b, p. 62) noted that:

The existence of market failure indicates a departure from an economically efficient ideal. Whether or not government involvement would be able to produce an overall improvement needs to be considered on a case-by-case basis, having regard to the severity of the market failure, and the costs and benefits of potential government actions. There is a range of ways that governments can respond to market failures, for example, they can choose to provide the infrastructure, or they can subsidise or regulate private provision.

In essence, government should demonstrate a sound business case for providing or funding any infrastructure, including infrastructure that might directly or indirectly benefit the resources sector. The Commission has also previously argued that to provide signals about net economic benefits, the total costs of providing freight infrastructure, for example, should be met from users of that infrastructure unless parts are provided as a Community Service Obligation (PC 2006b, pp. 56–57).

---

## Trade regulations

On the issue of trade restrictions, Alcoa (sub. 45, p. 2) submitted:

Less obvious examples [of regulatory issues which challenge the ability of business in Australia to be internationally competitive] can be found in government regulations which support interventions in markets for imported goods and raw materials, including in relation to antidumping provisions under the *Customs Act 1901* and associated regulations.

Alcoa made a submission in response to the recent Anti-Dumping Commission inquiry into alleged dumping of ammonium nitrate by China, Sweden and Thailand into the Australian market. The Commissioner upheld the dumping allegation and approved several anti-dumping measures. The effect of those measures will be to lower import competition from international sources into Australia and impact on Alcoa's ability to negotiate on a level playing field to source an internationally competitive contractual supply of ammonium nitrate.

While the discrete impact of this type of regulations is modest, the combined effect of these and the broader regulatory hurdles present material challenges to the competitiveness of Australian operations in a global context.

The Commission conducted a comprehensive review of Australia's anti-dumping system in 2009 (PC 2010) and updated its observations in 2016 (PC 2016a). As the Commission observed, imposing anti-dumping measures largely ignores the resulting costs for downstream users and the wider economy (PC 2016a, p. 79). However, Australia has continued to impose an array of anti-dumping measures. In December 2019, a World Trade Organization ruling against Australia found that the calculation methodology used by Australia's Anti-Dumping Commission is faulty, opening the door to further challenges in similar circumstances (PC 2020e).

The Commission maintains that 'a fundamental rethink on anti-dumping policy in Australia is required' (PC 2016a, p. 80).





---

# 10 Community engagement and benefit sharing

## Key points

- Resources projects generally bring net benefits to the economy as a whole and to nearby communities. But positive and negative effects on local communities are typically amplified. The fortunes of towns and residents can rise and fall with those of nearby resource projects.
- Some consider that resources companies should do more to address the negative impacts of resources extraction and provide greater benefits to local communities, leading to calls for more intervention. The relevant policy question is what should companies be expected to do (or pay for) and what impacts are more efficiently managed by governments.
  - It is appropriate that companies are required to conduct social impact assessments to identify potential negative effects of a project, and to be responsible for mitigating negative externalities they create such as noise and dust.
  - Impacts such as volatile house prices are a market response to increased demand that signal a need for adjustment. Rather than seeking to suppress market signals, it is more appropriate that governments directly address social impacts and any impediments to adjustment that may aggravate price swings. The use of external workforces can moderate housing price increases (but would likely reduce the local employment benefits).
  - Companies should generally be expected to provide or pay for infrastructure built solely for their operations. Governments are likely better placed to coordinate the provision of shared infrastructure and provide additional services for local population growth.
  - Requiring companies to use local workers or services can be costly, reducing both opportunities to generate services or employment in other parts of Australia and company profitability. Assisting businesses and prospective employees in local communities to build relationships with resources companies is likely to provide more enduring benefits.
  - It is appropriate that governments fund regional services. But hypothecated royalties for regions (or similar programs) can encourage spending on projects without fully considering the payoffs.
- Many resources companies voluntarily contribute to local communities beyond the economic benefits of their operations, such as through financial payments, infrastructure contributions, programs to increase local employment and approaches to lessen negative social effects.
  - Engagement can help to identify the community's wishes. Leading practice involves the coordination of benefit-sharing activities with the local government, such as through formal partnerships or less formal consultative approaches.
- Community engagement allows communities to have a say in projects that affect them, and can be a valuable tool in creating support for resources activity. Early engagement can help to identify issues and impediments to projects proceeding.

---

Community engagement and benefit sharing are two distinct but interrelated sets of activities.

Community engagement refers to activities undertaken by companies to communicate and consult with key stakeholders, and can range from simply providing information to providing a vehicle through which stakeholders can influence company decisions.

There is no standard accepted definition of benefit sharing. It can include the ‘normal’ (or ‘market-related’) economic benefits of new activity that flow through via new jobs, higher wages, local rates, consumption of local services and provision of infrastructure. It can also include companies making a contribution to local communities beyond that which would occur naturally through their commercial activities (and taxation and royalty payments). This may include:

- financial payments beyond compensation payments for land access (chapter 5), such as contributions to local councils and payments to Aboriginal and Torres Strait Islander communities through native title and other agreements (chapter 11)
- investment in key infrastructure needs, such as roads and water networks, and community services such as gyms and education facilities
- programs to increase the use of local workers and services
- approaches that seek to mitigate the negative social or other effects that resources projects can have on communities — such as developing and implementing social impact management plans at the outset of the project.

This chapter focuses on these ‘beyond market’ activities.

Community engagement and benefit sharing can be mandated by governments — for example, community engagement may be a requirement of licences, and governments often require some action on issues identified by companies through social impact assessments.

In addition, companies will often participate in community engagement and benefit-sharing activities voluntarily, over and above regulatory requirements.

This chapter outlines the rationale for benefit sharing and community engagement — what companies and governments are seeking to achieve (section 10.1). It also outlines leading-practice approaches to community engagement (section 10.2) and benefit sharing (section 10.3). Community engagement and benefit sharing with Aboriginal and Torres Strait Islander people is covered in chapter 11.

## **10.1 What problems are community engagement and benefit sharing trying to address?**

Within the broader economy, businesses are typically not expected or required to contribute to the community over and above their economic contribution, and beyond meeting regulatory and taxation requirements. Many businesses do seek to build relationships with

---

the communities in which they operate to some degree — supporting the local footy team, for example.

Expectations of the resources sector, however, seem to be higher. For example, the Australian Small Business and Family Enterprise Ombudsman (sub. 23, p. 1) stated:

... there remains a need to ensure that economic benefits derived from resource extraction projects flow through to local communities. This should not be limited to royalties and the flow through of taxation, but through supply chain engagement for small businesses and employment for local workers.

These expectations are understandable. The fortunes of many towns and residents rise and fall with those of nearby resources projects. Local communities can suffer from congestion of health and education services, dust and noise, boom and bust cycles and multiple legacy issues, among other impacts. As a result, many resources companies invest in local communities voluntarily, such as by constructing infrastructure and making efforts to employ local workers.

However, the Commission has heard of pressure by local communities on governments to require some level of benefit sharing, such as by requiring companies to employ local workers or use local goods and services. Calls for regulated benefit sharing should be linked to a clear rationale. In this context, it should be noted that mining generally also brings substantial economic benefits to communities (section 10.3). Furthermore, governments need to consider the costs and benefits of resources activities to the whole Australian community, given resources are owned by the Crown on behalf of the entire State or Territory.

This section outlines some of the reasons why voluntary community engagement and benefit sharing may take place, and possible roles for government to regulate or support community engagement and benefit-sharing activities.

## **Why do companies go beyond regulatory requirements?**

### **The social licence to operate**

The changing expectations of society in recent years have heavily influenced the way resources companies conduct their business. Increasingly, many businesses feel that they need to go beyond simply meeting regulatory requirements to obtain broad community acceptance for resources projects (Moffat and Zhang 2013, p. 61). This concept of community acceptance is often called a ‘social licence to operate’.

---

The term social licence to operate emerged in the late 1990s due to a lack of trust in the resources industry globally (Gehman, Lefsrud and Fast 2017, p. 294), and has gained significant traction since.

... [A]fter mentioning the concept of social license in less than 10 articles a year from 1997 through 2002, news media mentioned social license in more than 1000 articles a year from 2013 to 2015, and more than 2000 articles in 2016. (Gehman, Lefsrud and Fast 2017, p. 293)

In a 2019 survey, mining and metals companies nominated licence to operate as their biggest risk going forward (EY 2019, p. 4).

Several factors may explain why the social licence to operate has gained prominence.

- Over the past few decades, resources operations have become increasingly automated and efficient. This has perhaps led to less (or different) employment of local community members. Boutilier, Black and Thomson (2012, p. 5) noted that ‘since there are often not enough jobs for local residents to satisfy sentiments of social and/or economic equity ... there has to be more than employment in the social contract’.
- Boutilier, Black and Thomson (2012, p. 4) also noted that resources projects are increasingly using land that is already used for other purposes, such as agriculture, creating tension between landowners and resources companies.
- There is a broader trend in society towards increased community and stakeholder involvement. There is an increasing number of non-government organisations involved in raising the profile of issues — particularly environmental issues — that arise from resources developments (Boutilier, Black and Thomson 2012, p. 5). Increased global connectivity and use of social media has increased the influence of stakeholders in decision making and political processes (Meesters and Behagel 2017, p. 274).

*What effect does a social licence to operate have on a business?*

Whether or not a project is accepted by the community can have a substantial effect on its profitability. Most prominently, conflict between the community and the project proponent can lead to costly delays, restriction of access to resources needed for the project to operate, or the project being scrapped altogether. These outcomes can emerge as a result of protests or blockades, political pressure leading to governments retracting legal licences to operate, or financiers withdrawing funding from projects (Boutilier 2014).

Within Australia, there are many examples of conflict between project proponents and communities. In 2014 and 2015, protesters at the Maules Creek mine locked themselves to equipment to prevent clearing of the Leard State Forest, disrupting the development of the mine (Sturmer 2015). In 2013, a gas terminal at James Price Point was abandoned on

---

commercial grounds following pressure from a local Indigenous group and environmental groups. A former head of the Kimberley Land Council noted that:

In retrospect the environmental groups have created that much pressure on Woodside that we missed the window. Because it was dragged out because the protesting took so long, it destroyed the commercials of the project. (Bergman quoted in Patrick 2018)

Similarly, protests have affected the coal seam gas industry in some regions. Luke (2017, p. 267) noted that:

Protests in the Northern Rivers ultimately led to the exit of the [coal seam gas] industry from the region in 2015. Such a result could be considered costly, both for the companies that had sought to operate there, and for the New South Wales Government who [bought] back the license of one company, Metgasco, for AUD \$25 M.

Internationally, Boutilier (2014, p. 267) pointed to the example of mineral exploration in Ontario, Canada.

When the indigenous people of the Kitchenuhmaykoosib Inninuwug First Nation blocked mineral exploration by Platinex Inc. that had been legally licenced by the Canadian Province of Ontario, and succeeded in gaining news media coverage for their protest against the exploration, the government backed down in 2009, rewrote its regulations on mineral exploration and reimbursed Platinex CAD\$5 million.

Even when the conflict does not result in the proponent withdrawing from the project, the costs can be substantial. For example, Franks et al. (2014, p. 7578) cited a Latin American mine where conflict led to a nine-month delay during construction, costing the company US\$750 million. Another company noted that conflict cost one of its projects US\$100 million per year.

Communities affected by projects may also lobby governments for increased regulation on a project. Boutilier (2014, p. 267) noted that:

Another hypothesis suggested by observations and conversations with mining executives is that [governments] have an interest in receiving assurances that the company has done the socio-political groundwork needed to ensure that the government's popularity would not suffer were it to grant a legal licence. If this hypothesis is supported, it would imply that it is foolhardy for companies to count on a legal licence without addressing the stakeholder concerns that would win it a social licence.

Failure to obtain a social licence to operate can affect the 'reputation capital' of a company (Gunningham, Kagan and Thornton 2004, pp. 320–321). Companies with a good reputation have easier access to development approvals, the trust of regulators and less risk of being targeted by community groups and government policies. On the other hand, companies with a poor reputation face the risk of product boycotts, conflicts with communities and reduced investor confidence. For example, Gunningham, Kagan and Thornton (2004, p. 323) noted that:

... when members of an environmental group at a European port painted a derogatory 100-meter-long slogan on the hull of a Canadian cargo ship carrying pulp and lumber, naming

---

the companies involved, this caused not only major embarrassment to one of the companies in our sample but also a threat of boycotts by industrial customers and ultimate consumers.

### *What is involved in obtaining a social licence to operate?*

There are several models that outline the factors underpinning a social licence to operate. One of the most common is the pyramid model, which suggests that the key factors needed for a social licence are legitimacy (whether a stakeholder gets a net benefit from the project), credibility and trust (box 10.1). Similarly, the Gas Industry Social and Environmental Research Alliance (GISERA) identified the perceived effects of a project, trust in the industry, procedural fairness and the quality of relationships with the company as key factors needed for a social licence (Walton, McCrea and Jeanneret 2018, p. 28).

One of the key takeaways from these (and other) models is the importance of trust. Moffat and Zhang (2013, p. 62) noted that:

We expect trust to be a central element of a model of social licence to operate, representing a mechanism by which perceptions of impacts from mining operations, intergroup contact experiences and perceptions of procedural fairness relate to acceptance and approval of a mining operation.

#### **Box 10.1      The pyramid model of social licence**

The pyramid model of social licence was developed by Boutilier and Thomson (2011). It contains four broad levels of social licence.

- At the lowest level, the social licence is **withdrawn**. This creates a high level of risk for a company.
- The next level is **acceptance** of the project. This occurs when the project is seen to have legitimacy. According to Boutilier, Black and Thomson (2012, p. 10), legitimacy occurs when stakeholders see a personal net benefit in the project proceeding. However, the social licence is unstable — ‘the cost/benefit calculation is recalculated daily with no forgiveness for temporary lapses’ in company behaviour.
- **Approval** of the project occurs where the company has credibility with stakeholders — it is seen as conforming to local ideas of how a company should behave. Boutilier, Black and Thomson (2012, p. 10) noted that the most important factors for gaining credibility are ‘listening to stakeholder concerns, planning a solution together and collaboratively implementing the plan’.
- The highest level of social licence is **psychological identification**. This requires full trust by the community in the company. ‘This takes repeated experiences of having the other party take the initiative to protect and promote one’s interests’ (Boutilier, Black and Thomson 2012, p. 10).

Communities are more likely to trust companies that demonstrate integrity and competence, manage risks, work collaboratively with the community and do not take advantage of the vulnerabilities of the community (Moffat and Zhang 2013, p. 62). Importantly, effective community engagement is central to obtaining trust from the community — trust requires genuine engagement with stakeholders, and addressing their concerns. Indeed, even if a

---

company is providing benefits to the community or mitigating any negative effects of its activities, this will be for naught if the community is unaware of these actions.

On the other hand, transactional approaches such as simply providing communities with new infrastructure may create acceptance for the project and avoid conflicts in the short term. However, absent other initiatives, transactional measures are unlikely to build long-term trust in the company.

### Companies seek to attract and retain workers

Beyond dampening community disquiet, there are other reasons why companies participate in benefit-sharing activities. In particular, benefit sharing can help to attract workers to local (often remote) communities, and retain them. For example, community facilities such as gyms, and infrastructure such as better roads, make communities more desirable places to live, and make it easier for companies to attract skilled workers.

Benefit sharing can also make workers within the community more productive. For example, some companies invest heavily in education facilities, which can improve the productivity of the workforce over time. A participant in Bice (2013, p. 143) noted that:

... growing concern for corporate social responsibility is linked partly to companies' apprehension about the effects on productivity which may occur where a rural community does not have the capacity to support the mining workforce: If you look at [a certain mining operation], they had huge issues where they couldn't even get the workforce to work because of child care issues. So, how do you help the community to build capacity to become more productive?

Indeed, for many companies, workforce retention and productivity may have been a bigger driver of their community investments than the need for a social licence (Brannock and Tweedale 2012, p. 3).

### What is the role of governments?

Given the importance of social licence, companies have a strong incentive to participate in community engagement and benefit sharing without government regulation. Many companies have policies on community engagement and benefit sharing. However, the Commission (PC 2013b, p. 142) has noted that some minerals and energy explorers may lack the skills or motivation to obtain the support of the community — in some cases because explorers sell the rights to any discoveries they find, and thus view obtaining a social licence as unimportant.

Thus there may be a role for government to protect the interests of stakeholders, including local communities. The key question is whether leaving community engagement and benefit sharing as a voluntary option is optimal for the community as a whole, or whether government regulation may be needed. There are several reasons why government involvement may be warranted.

---

## Regulating the adverse effects of resources extraction

As noted in earlier chapters, resources activities can have negative effects, for example, on the environment and on the owners of land on which resources activity takes place. Governments usually regulate company activities to limit (or compensate for) these negative effects.

Resources activities can also have negative social and economic effects on nearby communities (box 10.2). These can range from increased noise and demands on key infrastructure to changes in the social dynamics of a community.

There are some social and economic effects on communities that are appropriately the domain of the company (box 10.3). Externalities occur when a decision by a company affects a person's wellbeing, but that effect is not taken into account by the decision maker — leading to a sub-optimal outcome (chapter 3). For example, noise and dust can cause effects on communities, but, without intervention, these effects may not be adequately considered by companies. It is reasonable and efficient that companies are required to address negative externalities. Typically, measures to address significant negative effects will be required under proponents' licence conditions.

### Box 10.2      **Social impact assessment — Carmichael coal mine and rail corridor**

The social impact assessment for Adani's Carmichael coal mine considered the effects of the mine and rail corridor on neighbouring towns and the broader region. The assessment outlined a range of potentially negative social effects, including:

- a higher cost of living in the neighbouring town of Clermont due to higher house prices
- a reduction in the ability of local businesses to meet local needs, as people moved to being employed in the mining sector
- traffic disruptions and delays, and increased road maintenance requirements
- increased noise and dust
- disruptions to nearby cattle farms
- increased fire risks along the rail corridor
- increased demands on emergency and social services due to an increased population
- a low risk of increased crime and antisocial behaviour.

The assessment also found a range of positive effects from the mine — mostly economic, such as increased employment, opportunities for local businesses and development within the region.

*Source:* Adani (2015).



---

## **Box 10.3    The role for governments and companies — addressing social effects**

### **Governments provide essential services to communities**

All levels of governments provide a range of essential infrastructure and services to communities. For example, the Commission (PC 2012, p. 52) has previously noted that a role of local governments is to:

... provide and plan for adequate, appropriate and equitable services and infrastructure in their local communities (either directly or on behalf of other levels of government) striking a balance between social, environmental and economic objectives.

These services and infrastructure can include (but are not limited to) roads, healthcare, education, waste collection, water, power and sewerage.

Governments often provide these services because they would be underprovided (or not provided efficiently) by the private market. Some services are public goods, have positive externalities, or are natural monopolies (chapter 3). In some cases, services are provided for equity reasons — there is an expectation that these services should be available to all members of the community. Rather than providing the infrastructure or services themselves, governments may choose to regulate or subsidise private provision.

### **Governments plan the effective functioning of communities**

Governments are involved in planning communities to manage their growth, coordinate community services and promote the orderly and economic use of land (PC 2011a, p. 1). The Commission (PC 2017c, p. 3) has noted that:

Planning policies particularly affect the productivity and growth of cities through their determination of possibilities for the use of land, coordination of different activities, and the management of positive and negative spillover effects from concentrations of people and activity.

### **Companies should be responsible for negative externalities**

Externalities refer to the effects of activities not taken into account in an entity's decisions, but which affect others' wellbeing. An example is pollution — without regulation, businesses would not fully account for its harmful effects on society when making in their production decisions.

Governments generally require businesses to manage externalities, either through requiring them to change their practices, or levying a tax or other charge.

It is important to draw a distinction between technical externalities and pecuniary externalities. Technical externalities refer to direct effects on people or communities, such as the pollution example above. Failing to address these externalities would result in a net loss to society.

On the other hand, pecuniary externalities are related to changes in prices resulting from individuals' or businesses' actions. For example, where a new firm enters an industry, it may drive down prices received by other firms while also reducing prices to consumers. These effects do not reduce welfare for society — rather they reflect price changes needed for the reallocation of resources to uses that are more highly valued by the community. However, they do affect income and wealth distribution, such that the net impact may favour some groups over others. Decreasing house prices, for example, decreases existing homeowners' equity, but increases affordability for prospective homeowners.

While activities and associated price effects should not be suppressed, significant and persistent distributional impacts may warrant attention from governments.

---

### *Price signals should not be suppressed*

Many of the social and economic effects of resources activities stem from ‘pecuniary externalities’ — changes in prices of goods and services due to project-induced shifts in demand. While significant price changes will have social and distributional effects, they are not a market failure or negative externality — they signal needed market adjustments (box 10.3).

For example, one of the commonly cited effects of resources projects on nearby towns is higher house prices. In the Pilbara town of Karratha, median house prices rose from \$250 000 in 2004 to just over \$700 000 in 2009, before falling to about \$300 000 by 2018, and have since increased to just under \$450 000 by June 2020 (Razaghi 2020; Regional Development Australia 2018, p. 37; WA PC 2010, p. 31). Similarly, in the Queensland town of Moranbah, median rents for a three-bedroom home increased by 275 per cent between 2001 and 2006 (Haslam McKenzie et al. 2009, p. 72).

While high house prices and rents can benefit home owners, they can crowd out other residents, particularly key workers such as nurses, teachers and police who earn lower incomes than the resources workforce (Haslam McKenzie and Rowley 2013, p. 380). In some cases, this can lead to relocation to towns with more affordable housing, overcrowding of social housing or even homelessness (Haslam McKenzie et al. 2009, p. 91).

Housing effects can be severe and cyclical. As noted by the West Coast Council (sub. DR54, p. 1):

For the individuals it can lead to homelessness, increases in domestic violence and drug abuse, as those who are displaced from low cost housing often have nowhere else readily available to go to. For the community it leads to periods of over demand for housing, replaced by empty towns, where buildings are left to deteriorate as the project ends and people move on.

Rapidly increasing house prices indicate the need for more accommodation in towns for resources workforces, and attempting to suppress prices would reduce the incentives for increased supply. Strategies such as appropriate planning and targeted investments can increase supply and moderate price spikes (box 10.4). Planning should also consider the likely temporary nature of increases in demand for housing, to manage the transition back to ‘normal’ once demand wanes.

There is no one-size-fits-all housing strategy to respond to booms, and the best approach for any town is largely determined by contextual factors. For example, it may be more appropriate to expand permanent housing supply in a town with a diverse economic base and that is designated as a regional centre, than to do so in a small remote town that did not exist prior to the boom (box 10.5).

---

#### **Box 10.4 Recent housing and planning measures in regional WA**

Recent actions by Local and State Governments have aimed to improve the supply of affordable housing in Karratha as it experiences strong growth in house and rent prices due to elevated industrial investment activity and high iron ore prices.

##### **City of Karratha's City Housing Investment Program**

In December 2019, the City of Karratha committed to investing \$35 million in new local housing stock. This decision was made after observing increasing rents and house prices, an impending undersupply of residential properties (indicated by decrease in housing stock availability from 7 per cent in 2013 to 1.5 per cent in 2019), population growth projections, an anticipated industrial boom, and a desire to avoid the housing shortfalls experienced in previous booms (City of Karratha 2020; Standen 2019).

##### **Western Australia's Regional Land Booster**

In July 2020, as part of their COVID-19 pandemic stimulus measures, the Western Australian Government released discounted residential and industrial land in areas including Karratha, Kambalda and Broome, with the intention of providing affordable land. Land purchasers included a mix of first home buyers, investors and business owners (Wyatt 2020; Wyatt and MacTiernan 2020).

There may be a need for state governments to provide additional funding to local governments where the demand for government services increases as a result of increased resources activities. At a basic level, this could be aimed at enabling local governments to undertake planning activities to manage the social and economic effects of resources activities (such as changes in the cost of housing). Support from state governments may also be needed to address the social impacts of these changes directly, for example, through housing services. There may also be a need to provide additional funding for other essential community services such as emergency, education and health services. Local government capacity is discussed further in section 10.3.

Another commonly cited issue is the effect of fly-in, fly-out (FIFO) or drive-in, drive-out (DIDO) workers on the community. For example, a House of Representatives Standing Committee on Regional Australia inquiry (HRSCRA 2013, p. 44) stated that the use of FIFO workers near towns can affect social cohesion.

A large influx of non-resident workers is a permanent disruption to the social fabric and feeling of a town and this 'shadow population' has a serious and negative impact on the safety, image and amenity of communities.

The West Coast Council (sub. DR54, p. 3) also noted that DIDO is linked to negative economic and social effects, including low house prices due to a lack of long-term housing investment (which lowers revenues for local governments to provide services and infrastructure), and a loss of social cohesion from a lack of community participation or volunteering in important community organisations by DIDO workers.

---

### Box 10.5 Factors that affect the long-term sustainability of mining towns

While there is significant economic and social variation across Australian mining towns, there are some key factors that can influence their long-term sustainability. These factors include:

- the town's purpose before mining. Some towns almost solely exist due to mining, whereas others may act as regional hubs or growth centres.
- the economic base of the town. Some communities have only a single mine or industry, due to geographic, historical or political factors. These are likely to be less sustainable relative to towns with a diverse economic base across several industries.
- the town's strategic significance. Some towns host support industries to major economic activities, or provide a key government services for the broader region, such as health and education.
- proximity to major transport, tourist routes, or other major centres.

#### Boomtown governance

Boomtowns experience a variety of governance challenges, including shortened time horizons, increased expectations for service provision, regulatory pressures, and pressure to invest in infrastructure that favours the booming industry. Some actions that can help ensure local planners support sustainable development include:

- undertaking regular assessments of the social and economic environment. This includes examining why local planners chose particular responses to volatile changes, considering whether those responses are still appropriate and learning from past responses or the experiences of other communities. These assessments should ideally help governments in balancing industry support with the social and environmental needs of the broader community
- maintaining long-term perspectives. A common challenge experienced by boomtowns is significantly shortened time horizons for local government decision making due to rapid changes in the community, which prevents full consideration of the implications of actions taken and lessens the strategic use of land use tools.
- improving coordination within and between different levels of government. This involves coordinating state government activities at a local level, and coordinating with other local governments through regional planning strategies and information sharing
- factoring the flexibility of land-use tools into decisions. Policy choices during a boom often occur under considerable uncertainty, so they should ideally reach a balance between being sustained and having sufficient flexibility to adjust as new information emerges
- using land-use tools as part of a broader development strategy to maximise their effects.

*Sources:* Centre for Social Responsibility in Mining (2012); Haslam McKenzie et al. (2009, pp. 95–100); Van Assche et al. (2020).

But reducing the flexibility of companies could have undesirable and unintended impacts. For example, restricting the ability of companies to hire FIFO and DIDO workers to encourage companies to shift workers to local townships will likely exacerbate house price increases as they compete for the existing housing stock.

The effects of FIFO and DIDO workers are discussed further in section 10.3.

---

*Public infrastructure is generally the domain of governments*

Resources activities may also affect community infrastructure. An influx of new residents can place pressure on economic infrastructure such as roads and power supply and social infrastructure such as schools and hospitals.

Companies should be required to provide or pay for infrastructure or other services that they use, for example, road or rail transport to and from their projects. Governments can recoup the cost of infrastructure they provide through developer charges — up-front contributions that property developers are required to make to the infrastructure associated with the land they develop (PC 2014b). And users of infrastructure can be required to pay prices based on the cost of provision. These are effective means of funding infrastructure, as they require users or developers to account for the cost of infrastructure in their decision making.

However, companies should not be required to fund or construct infrastructure that is not directly associated with their projects — such as water and power expansions needed due to the increasing population of the community. Such public infrastructure is generally the domain of governments, and the costs can be recouped by charges on developers of housing, or on the users of the infrastructure (for example, through direct user charges or indirectly through council rates and general taxes) whether they are associated with the resources operation or not.

Some companies voluntarily invest in these areas to improve community amenity for their workers and to build community support, but they should not be expected to do so, unless they are users of the infrastructure. Bice (2013, p. 146) highlighted several communities that have become reliant on resources company investment in infrastructure because adequate investments have not been made by governments.

**FINDING 10.1**

The effects of resources extraction, both positive and negative, are amplified for local communities. By stimulating economic activity in the community, resources extraction can contribute to effects such as house and rental price increases and strains on local infrastructure.

It is appropriate that resources companies are required to address significant negative externalities directly associated with resources extraction, such as noise and dust, and provide or pay for infrastructure that they directly use. However, indirect effects, such as fluctuating house prices, signal the need for market adjustments and thus suppressing them would have costs. Governments are better placed to assess and address related social impacts. Approaches such as appropriate planning and targeted investments can moderate the community impacts of price spikes.

Companies should not be required to fund or construct infrastructure that is not directly associated with their project (although they may do this voluntarily).

---

## Meeting regional development objectives

Regulated benefit sharing may be seen by governments as an opportunity for promoting regional development or equity goals. Resources extraction generally takes place in regional or remote areas where access to key amenities such as education and healthcare can be relatively limited. Participants to this study also noted that many remote areas near resources projects experience a lack of access to essential infrastructure and government services, which contributes to poorer health, education and economic outcomes relative to metropolitan areas (FMG, sub. DR92, p. 33; MPI, sub. DR72, pp. 7–8; NSWMC, sub. DR83, pp. 14–15). Other challenges experienced by resources communities include a narrowing economic base. Funding from resources companies may be seen as one way of developing these communities.

There is a sentiment that, due to their close proximity to resources projects, local communities should receive benefits from resources companies over and above those accruing from employment and other economic effects. For example, the House of Representatives Standing Committee on Industry, Innovation, Science and Resources (2018, p. 30) stated:

In addition to compensating communities for the negative impacts of mines, mining companies should support mining regions by reinvesting a reasonable percentage of the wealth they generate back into the regions where mines are located.

Some local communities appear to believe that they have ownership rights over nearby resources. But as discussed in chapters 4 and 5, resources are owned by the Crown on behalf of the broader community in a given State or Territory, not just those located near resource extraction sites. It is unclear why communities located near resources projects should benefit over and above other regional or remote communities from resources royalties as a matter of right rather than of need — especially given that resources communities generally benefit substantially from resources projects. Indeed, net social benefits of public expenditure may be greater in very remote areas that are not located near resources projects — the Commission has previously found that very remote areas tend to experience significantly more disadvantage and lower access to essential services, relative to other regional areas (PC 2020d, pp. 87–118).

In other words, where funding is considered for a community close to resources extraction sites, it should be justified by the *net benefits* of the programs funded, not by the community's *proximity* to resources activities.

---

#### FINDING 10.2

Although negative externalities of resources projects on local communities should be efficiently addressed, these communities should not benefit over and above other regional or remote communities from resources royalties because of their *proximity* to resources activities. Instead, funding should be allocated wherever it generates the largest net social benefits.

### Coordinating and planning investment

As noted above, resources companies often invest in a range of infrastructure, notably social infrastructure services such as pools, schools and community hubs. However, if this investment is not coordinated, particularly where there are several resources companies investing in a community, it may not deliver the greatest possible benefits to the community. Brannock and Tweedale (2012, p. 3) noted that the ‘strategies adopted by mining corporations to address the social externalities of mining development are often ad hoc, isolated and reactive’. Similarly, Dhawan (2014, p. 4) stated that ‘many organizations struggle to demonstrate the effectiveness of their [social investment] expenditure’. There is a risk that companies are spending money on projects that are not valued by the community, potentially undermining the reasons for doing it.

In the context of Chile, Martinez and Franks (2014, p. 301) noted the issues that can arise when investments are not coordinated.

A lack of coordination among mining companies has resulted in overlaps of investments, and increased inequality between communities that are not defined as impacted by a mine site, and those that are. Re-thinking the current degree of collaboration is required. This also applies internally to the different units of operation of ... corporations.

The Centre for Social Responsibility in Mining (2012, p. 15) noted that in some cases, mining company investment can even add to the burden faced by local governments.

Australian local government already has a backlog of infrastructure renewal works, particularly in the areas of community infrastructure such as swimming pools, community centres and libraries. In some cases it appears that mining company contributions to the local region (through swimming pools, libraries and even jetties) simply increase that backlog when they include infrastructure works that require ongoing maintenance, even after mining activity has ceased.

This suggests there may be a role for government, particularly local governments, to assess the community’s needs and coordinate benefit-sharing projects within their community. This could be through ongoing engagement with resources companies (section 10.3).

---

## Providing guidance to companies

Engaging with the community and obtaining a social licence is the responsibility of companies. Indeed, given that a social licence is often seen as involving activities that go beyond government requirements, Lacey, Parsons and Moffat (2012, p. 5) noted that ‘the combining of community relationships and formal licencing accountabilities is potentially problematic’.

Nonetheless, where companies are struggling to obtain a social licence (and thus projects with net benefits to the wider community are facing delays or being abandoned) there may be scope for governments to issue guidance on community engagement and benefit sharing. This may be particularly useful for smaller miners (who may not have experience of the approvals process) or foreign miners (who may not be as familiar with the Australian culture).

Guidance for companies is discussed further in sections 10.2 and 10.3.

## Aboriginal and Torres Strait Islander communities

Resources companies may engage with and provide benefits to Aboriginal and Torres Strait Islander communities. The principles behind these activities are similar to other community engagement and benefit-sharing activities, but a distinction is that Aboriginal and Torres Strait Islander people can have rights and interests in land arising from their traditional affiliations with land. This is discussed further in chapter 11.

## Comparing the costs and benefits of benefit sharing

The above sections provide some reasons as to why benefit sharing may be beneficial for companies and local communities. However, this does not necessarily mean that benefit sharing should proceed, or that an unlimited amount of benefit sharing is of highest value to Australia — benefit sharing has costs that need to be weighed against the benefits, which may include:

- forgone tax and royalty revenue for governments, and a reduction in investment, if benefit-sharing activities become so onerous that companies do not proceed with projects
- a reduction in employment and service provision opportunities in other communities, particularly where governments restrict FIFO workforces or encourage local procurement
- reduced company profitability, which reduces returns to shareholders.



---

#### FINDING 10.3

Companies have an incentive to engage and share benefits voluntarily with communities, to maintain a social licence to operate and improve the liveability of local communities for their workers. The appropriate role for government in this area is limited to coordinating resources companies' community-focused investments, providing guidance to companies and efficiently regulating negative externalities borne by communities due to resources extraction.

## 10.2 Identifying leading-practice community engagement

As noted in section 10.1, effective community engagement is crucial for obtaining community support for resources projects that are likely to affect communities — and thus avoiding the risks of costly delays or projects not proceeding. There are several reasons why this is the case. Involving stakeholders shows respect for them, and recognises that they have a long-term interest in the outcomes of the project (COAG Energy Council 2016, p. 10). It can provide an opportunity for stakeholders to inform companies about their concerns, and provide companies with a chance to take these concerns into account in the operation of their project. Providing communities with agency can allow them to adapt better to changing circumstances. And community engagement can be a way for companies to inform communities of the benefits of a project, and allay community fears.

### Guidance for companies is available

There are many guidelines and leading-practice examples of community engagement. These include guidelines from:

- Australian Government agencies and the then Council of Australian Governments (Australian Government 2016a; COAG Energy Council 2016; MCMPR 2005)
- State and Territory Government departments (for example, NSW DPE et al. 2017; NT EPA 2020; Vic DJPR 2019b)
- international organisations, such as the Organisation for Economic Co-operation and Development (OECD 2017a), the International Association for Public Participation (IAP2 2014), the Mining Association of Canada (MAC 2019), the US Environmental Protection Agency (US EPA 2008) and the National Coalition for Dialogue and Deliberation (NCDD 2009).

The OECD's *Due Diligence Guidance for Meaningful Stakeholder Engagement in the Extractives Sector* was raised by some participants to this study as leading practice (Resources Law Network, sub.DR76, p.10; Transparency International Australia, sub.DR85, p.9). The guidance is supported by some accountability mechanisms in

---

Australia, due to Australia's assent to the relevant OECD Declaration<sup>37</sup> — parties concerned about non-compliance with the guidelines by certain types of companies can request that the Australian National Contact Point of Australian Government Treasury initiate an examination and conciliation process.

Despite this mechanism, however, the principles contained in the guidance broadly align with those in other publications. These include:

- engage early, often and meaningfully
- undertake engagement transparently
- consult with a diverse range of stakeholders
- provide opportunities for marginalised stakeholders to participate
- adopt a fit-for-purpose approach (discussed below).

These principles appear sound, but given that the available guidelines generally cover similar themes, the Commission has not identified a single set of guidelines that is better than the others.

### The community engagement spectrum

A commonly cited framework for understanding community engagement is the spectrum designed by the International Association for Public Participation (figure 10.1). Some articles suggest that approaches to the right of the spectrum — collaboration and empowerment — are more effective forms of engagement, but this is not always the case. Sometimes more basic forms of engagement, such as information provision, will be entirely appropriate (Australian Government 2016a, p. 5). Information provision can be used to reach a wide range of stakeholders easily, and may be suitable when companies are undertaking activities such as less invasive exploration. For example, in preparation for exploration activities in the Stavelly Arc region, the Victorian Government held community information sessions to provide information about minerals exploration, environmental safeguards, land holder rights, explorer obligations and to introduce minerals exploration licensees.

Involvement, collaboration and empowerment may be used once a company is more advanced in its project, or where its activities are likely to have a substantial effect on stakeholders. These types of engagement may include workshops, interviews, reference groups and discussion groups (Australian Government 2016a, p. 5).

Irrespective of the consultation approach used, it is important that participants can see that their engagement has been duly considered in the decisions made by the company. If there

---

<sup>37</sup> Australia assents to the Declaration on International Investment and Multinational Enterprises, which requires member states to promote use of the OECD Guidelines on Multinational Enterprises, including the *OECD Due Diligence Guidance for Meaningful Stakeholder Engagement in the Extractives Sector*.

is no follow through, or engagement is of a ‘tick a box’ nature, then stakeholders will, unsurprisingly, be less likely to engage in the future and may express dissatisfaction.

**FINDING 10.4**

There is sufficient guidance available to companies from a range of institutions on how to engage with communities and other stakeholders. Most cover similar themes, and no one set of guidelines has been identified as better than the others.

**Figure 10.1 Community engagement spectrum**

Increased community influence on decisions					
	Inform	Consult	Involve	Collaborate	Empower
Participation goal	To provide the public with information to help them understand issues and opportunities	To obtain feedback	To work with the public to ensure that concerns are understood and considered	To partner with the public in each aspect of the decision	To place final decision making in the hands of the public
Participation promise	We will keep you informed	We will keep you informed, listen to concerns and seek feedback	We will work with you to ensure your concerns and aspirations are reflected in the alternative options developed	We will look to you for advice and incorporate your advice to the maximum extent possible	We will implement what you decide

Source: Adapted from IAP2 (2014).

**How are companies engaging with communities?**

Industry participants to this study emphasised the importance of community engagement in their operations. For example:

Effective community engagement underpins the acceptance of the mining industry across regional and remote Australia. Industry engagement with regional communities has evolved over

---

past decades, in line with improved understanding and the development of innovative approaches. (MCA, sub. 11, p. 29)

Community engagement is a two-way process and INPEX is grateful for the feedback the community has provided which enhances decision-making processes on issues that may affect local people's wellbeing and/or interests. (INPEX, sub. 34, p. 18)

Today, more than ever, interactions between company and community that aim to increase understanding on all sides, build trust, and strengthen relationships are vital to the success of resource operations. (QRC, sub. 27, p. 19)

Most resources companies have a stakeholder engagement strategy that sets out who they plan to engage with, and how they plan to engage with them. (This can be a requirement of the approvals process — discussed below.) For example, Glencore's stakeholder engagement strategy for its Mt Owen mine identifies a range of stakeholders, including landowners and neighbouring landowners, community groups, Indigenous heritage groups, government departments and the local government. It outlines a plan to engage with each of these stakeholders, generally through annual or biannual one-on-one meetings, group meetings and mailouts (Glencore 2019).

Community engagement by companies is more effective when it is undertaken early and has a meaningful impact on the decisions made by the company. For example, early consultations by INPEX in relation to its Ichthys liquefied natural gas project identified concerns about plans to blast a shoal in Darwin harbour. Following this, INPEX announced it would not blast in the harbour (COAG Energy Council 2016, p. 29). INPEX (sub. 34, p. 18) noted that it uses 'a wide range of avenues ... to stay in contact with local people' including community feedback lines, advertising, industry forums and information stands. The COAG Energy Council (2016, p. 28) noted that:

It is widely accepted that the level of community and stakeholder engagement by Inpex on behalf of its joint venture partners has been extensive, embracing and effective at all levels of the community and at each and every stage of the construction project thus far.

Companies are also increasingly seeking to survey community attitudes, to be better informed about the concerns of the community. Several companies, including BHP and Rio Tinto, have engaged CSIRO to undertake regular surveys of the community through its Local Voices program to assess community attitudes to issues such as dust, employment, and the effectiveness of community investment and engagement (CSIRO 2020a, 2020b). Similarly, GISERA, a partnership between governments and industry, undertakes regular surveys of community attitudes to conventional and unconventional gas to inform community engagement activities. Andrew Garnett (sub. 24, p. 6) noted the role that independent institutions can play in community engagement.

There is a trust 'ladder' and both government and industry tend to be relatively low down. While trust in societal institutions as a whole is reducing, the Universities and CSIRO tend to retain a high place. While clearly also in our interest, we feel that the promotion and dissemination of independent research can play a useful part in engagement.

---

In general, companies have a strong incentive to engage with key stakeholders, to help projects run smoothly.

## **Requirements to consult with the community**

Despite the general incentive for companies to engage, some lack the capacity, incentive or inclination. While companies themselves will be exposed to many of the negative effects of a lack of community engagement (section 10.1), poor engagement can also affect the reputation of the industry as a whole. This may result in a negative externality on the industry, and while the industry itself can use codes of practice and other reputational mechanisms to deal with this, there may be a case for government intervention. Governments have some regulatory approaches in place to ensure that interested stakeholders can comment on resources projects.

### **Consulting on environmental impact assessment processes**

In all jurisdictions, regulations require that stakeholders are provided with an opportunity to comment during the environmental impact assessment process for resources projects. This generally includes opportunities to comment on both the terms of reference for the environmental impact statement, as well as the statement itself.

The Commission has heard concerns that consultation requirements can be time consuming for little benefit, particularly where few to no material submissions are received. Nonetheless, consultation processes do have benefits, even where there are no submissions. Giving people the option to engage can increase community confidence and trust in the process, and improve knowledge about resources activities (NOPSEMA, sub. 13, p. 11). They help improve decision-making processes and help build a social licence for the company (EDO, sub. 40, p. 16). And, as noted by the Law Council of Australia (sub. 29, p. 5):

Where there is a lack of effective community engagement through statutory assessment processes, or before, this has the potential to lead to perceptions of bias and collusion, and a greater risk and number of appeals.

The Commission considers that community consultation throughout the assessment period is leading practice — this is a requirement in all jurisdictions and no approach stands out as better than the others. This should include an opportunity to comment on both the draft terms of reference and the environmental impact assessment. Chapter 6 also considers consultation in assessment processes.

### **Other regulatory requirements**

Each jurisdiction also places other requirements on resources companies to consult with local communities and other key stakeholders. Companies are generally required to prepare a stakeholder engagement plan during the approvals process, which sets out the engagement

---

that has taken place to that point, how companies have responded to this engagement and plans for further engagement.

Jurisdictions may require certain types of community engagement through the regulatory process. For example, in New South Wales, community consultative committees may be required for major projects, which include members of the community, members of the project team and the local government (NSW Government 2019).

In Victoria, requirements go further. Mining licence holders have a general ‘duty to consult’ with the community under the *Mineral Resources (Sustainable Development) Act 1990* (Vic) (s. 39A). This requires companies to share any information about the project that may affect the community, and give the community reasonable opportunity to express their views. Victoria also explicitly considered a company’s capacity to engage with the community, including with traditional owners, in a tender process for exploration in the Stavely Arc in western Victoria.

Finally, Victoria has a fit and proper person test for companies to obtain mining licences — guidance issued in 2019 confirmed that a licence can be rejected or withdrawn if a company has ‘behaved unethically towards or failed to work cooperatively with relevant landholders and local communities’ (Vic DJPR 2019c, p. 5). This guidance is still in its infancy, and it remains to be seen how it will operate in practice. Chapter 4 further considers fit and proper person tests in approvals processes.

### **10.3 Identifying leading-practice benefit sharing**

As noted above, benefit sharing covers a wide range of activities undertaken by resources companies to provide benefits to communities. These include:

- assessing and mitigating the economic and social effects of resources projects
- purchasing goods and services from local businesses, or employing local people
- building, contributing funds to, or co-investing in infrastructure that benefits the community
- providing financial benefits to landholders and the community.

This section identifies leading practices in each of these areas, and also considers the role of government.

#### **Identifying and addressing environmental and social costs**

International guidelines recommend that communities be, at a minimum, ‘protected from harm and recompensed for damage done to them by resource projects’ (IFC 2015, p. 62). Social and economic effects (as well as environmental effects — chapter 6) on communities

---

are considered through the approvals process, either through the environmental impact assessment or a dedicated social impact assessment (table 10.1). Social impact assessment:

... includes the processes of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions. (Vanclay 2003, p. 6)

It is often the social and economic effects identified in these assessments that motivate benefit-sharing activities, such as the construction of infrastructure to mitigate congestion on existing infrastructure.

The principles for social impact assessment are similar to those for other parts of the approvals process (chapters 3 and 12). They should be risk based — prioritising the areas most likely to be of significance for the community. They should consider cumulative effects of multiple projects where feasible. And there should be the flexibility to update them as new information becomes available over the life of the project.

Social impact assessment is a useful tool for identifying social effects on a community early so that they can be addressed by the company or government where desirable. What a social impact assessment should take into account, and how one should be undertaken, will vary depending on the community involved, the project and its likely effects.

Like other aspects of the approvals process, companies need guidance as to what social effects governments expect them to consider, and how they should be considered. Detailed guidance that outlines what is expected of proponents is available in jurisdictions such as Queensland and New South Wales, but in some other jurisdictions, requirements are less clear (table 10.1). Guidance would help improve the quality of assessments, and potentially improve community faith in social impact assessment processes.

Once impacts have been identified, the next question is how they are best managed. Some jurisdictions require social impact management plans — for example, Queensland’s social impact assessment guidance states that companies must have:

- a local business and industry procurement plan for the construction and operational phases of the project, which includes measures to mitigate potential negative impacts on local industries
- housing plans, with the objective of ensuring that the project does not contribute to significant affordability impacts on housing
- workforce management plans, with measures to enhance employment opportunities for local communities (Qld DSDTI 2018).

**Table 10.1 How are social effects considered in State and Territory approval processes?**

State	Legislative requirements	Guidance
New South Wales	The <i>Environmental Planning and Assessment Act 1979</i> (NSW) requires social and economic effects in a locality to be considered in the assessment of a development application (s. 4.15).	The then Department of Planning and Environment issued guidelines for social impact assessments for resources projects (NSW DPE 2017c). A template scoping spreadsheet for social effects is also available.
Victoria	Section 10 of the <i>Environmental Effects Act 1978</i> (Vic) allows the minister to make guidance about what should be included in environmental effects statements.	Ministerial guidance defines the environment to include social impacts. The guidance includes a range of social impacts that may be considered (Vic DSE 2006a).
Queensland	The <i>Strong and Sustainable Resources Communities Act 2017</i> (Qld) requires large resources projects to prepare a social impact assessment as part of their development application (s. 9).	The Coordinator-General has issued detailed guidance, which includes the process for conducting a social impact assessment, and what should be considered (Qld DSSTI 2018).
South Australia	The <i>Mining Act 1971</i> (SA) defines environment to include infrastructure, land use, and public health, safety and amenity (s. 6(4)). <sup>a</sup>	Guidance notes that factors to be considered in mining plans include the local community, infrastructure, amenity and land use (SA DSD 2015b).
Western Australia	The <i>Environment Protection Act 1986</i> (WA) definition of environment includes social and economic effects, where these are affected by changes to physical or biological surroundings (s. 3(2)). <sup>a</sup>	Statutory guidance for mine closures notes that it is good practice to consider the economic and social effects of mine closure (WA DMP 2015).
Tasmania	The <i>Environment Management and Pollution Control Act 1994</i> (Tas) requires that key social and economic effects must be considered in a notice of intent for a resources project, to allow the Environment Protection Agency (EPA) to determine the class of assessment. The EPA is required to issue guidance to proponents about what should be considered in environment assessments (s. 27B).	EPA guidance states that socio-economic effects should be considered in the environment impact statement (Tas EPA 2019).
Northern Territory	The <i>Mining Management Act 2001</i> (NT) defines the environment to include the wellbeing of humans, structures made or modified by humans, amenity value and economic, cultural and social conditions (s. 4). <sup>a</sup>	Guidance for mining management plans outlines the expectations for social and economic effects to be considered. The guidance notes that the minister may require a community benefits plan and a socio-economic management plan (NT DPIR 2017).

<sup>a</sup> Where the definition of environment includes social and economic impacts, these would be required to be considered as part of the environmental impact assessment process.

However, the responsibility for addressing negative effects identified in social impact assessments should not always fall on companies. As noted by Holm et al. (2013, p. 219) the identification of an effect in a social impact assessment ‘should not necessarily require a resources company to provide or fund a service that is normally within the responsibility of



---

government'. Governments may be better placed to address certain social impacts (section 10.1). Similarly, as noted by the OECD (2017b, p. 9):

Regions and cities have a key role to play in mitigating these costs [associated with mining] and investing in measures to take advantage of the opportunities associated with mining and extractive industries. It is important to develop a vision for the development of the region in collaboration with public and private sector actors, and include citizens and community organisations (particularly hard to reach and vulnerable groups) in this dialogue.

This suggests that companies and governments should work together to manage the effects on local communities, and ensure that benefits are maximised and impacts are mitigated where feasible.

---

#### LEADING PRACTICE 10.1

Guidance on the social impacts that should be considered in the approvals process, and how they should be considered, helps improve the quality of social impact assessments. For example, the New South Wales Government has issued guidance that outlines:

- what social impacts should be considered in the assessment
- how to engage with the community on social impacts
- how to scope the social impacts and prepare the assessment.

The effects identified in social impact assessments should not always be the domain of companies to address. Rather, leading practice requires that social impact assessments provide a framework for companies and governments to work together to address these effects, in line with the principles outlined in finding 10.1. The Commission has not identified a leading-practice jurisdiction in this area.

## Using local goods and services

Resources companies generate benefits to local communities through their purchases of local goods and services. This can occur at all stages of the resources project — from construction through to rehabilitation — and can offer significant benefits, including additional employment, diversification of the local economy and development of new skills (South Australian Government, sub. 25, p. 13).

### Resources companies contribute significantly to local businesses

Many resources companies have made commitments to source goods and services from the regions in which they operate. The MCA (2018c, p. 10) noted that:

Suppliers in host communities and regions are an important source of high-quality mining equipment, technology and services for the Australian mining industry. The minerals industry also recognises that engaging local suppliers is part of its broader commitment to ensure shared benefits from minerals development.

---

The House of Representatives Standing Committee on Industry, Innovation, Science and Resources heard many examples of where resources companies had engaged with local businesses, for example:

- In Mackay, in 2016-17 the resources sector spent \$2 billion with 1733 local businesses, and in the Hunter Valley it contributed \$15.2 billion to the local economy.
- Rio Tinto stated that it had spent \$1.5 billion with Queensland businesses, and \$244 million of that with businesses in Cape York.
- Fortescue stated it had spent \$2 billion on procurement with Western Australian businesses (over three years), with \$200 million of that sourced from the Pilbara region.
- Glencore stated that about 80 per cent of the \$4.8 billion it spent on goods and services was with local and regional businesses in 2017.
- Peabody Energy stated it spent about \$280 million on suppliers in the Mackay and Bowen Basin regions in 2017-18, and about \$160 million in New South Wales in communities close to its operations (HRSCIISR 2018, pp. 34–37).

Participants to this inquiry noted further examples of local procurement practices. The MCA (sub. 11, p. 20) observed that the New Acland Mine injected ‘more than \$110 million into the Darling Downs economy each year and more than \$300 million into the broader south-east Queensland economy each year’. INPEX (sub. 34, p. 5) stated that its Ichthys LNG project engaged with more than 1150 local businesses, and that more than \$175 million in contracts have been awarded to Aboriginal and Torres Strait Islander businesses.

Resources companies have also noted that they have initiatives to help local businesses to improve their capabilities so that the benefits of resources activities are more likely to last beyond the life of a project. In general, these initiatives:

- provide support to help businesses with tender processes
- invest in local business capability through regional industry bodies
- hold forums for local businesses
- maintain databases of local businesses.

One approach to increasing local procurement is BHP’s Local Buying Program (box 10.6).

Resources companies can benefit from using local businesses in several ways. Local businesses may be able to offer a cheaper product to the company, if transport and other costs are lower, and products and services may potentially be provided more quickly. Local procurement can also help a company to maintain a social licence to operate and improve the liveability of the community for its workforce (section 10.1).

---

### Box 10.6 **BHP's Local Buying Program**

BHP's Local Buying Program was established in Queensland in 2012, and provides support to local small businesses looking to supply to BHP. BHP has engaged with a provider, C-Res, to deliver a platform for businesses to engage with BHP as well as deliver a streamlined procurement and payment process. C-Res also provides mentoring and other direct support to businesses. The platform has been expanded to cover all of BHP's operations in Australia.

Between 2012 and November 2020, the Local Buying Program has spent over \$588 million with over 1300 suppliers (BHP 2020c).

The South Australian Government (sub. 25, p. 13) noted some of the benefits of C-Res in South Australia.

A C-Res business engagement adviser in Roxby Downs offers direct support to local businesses, backed by a program administration team. Since opening in October 2017, the program has delivered over 379 new work opportunities involving 85 approved businesses. Total spending is over \$3.2 million (to April 2019), with an average payment time of 12 days. Local businesses have provided services and goods including freight and logistics, maintenance and repair hardware, training, office supplies and other consumables.

Similarly, in its submission to the House of Representatives Inquiry into Resources Industry Support for Local Businesses, Isaac Regional Council (2018, p. 6) described C-Res as an example of genuine mining industry support for regional businesses.

### Mandating local procurement is likely to be costly

Governments at all levels in Australia have programs in place to increase procurement opportunities for local businesses. These programs can be divided into two broad categories:

- approaches to increase the capacity of local businesses to win contracts with larger companies
- requirements on resources companies to source a proportion of their goods and services locally.

Small regional businesses can face several barriers to engaging with mining companies, including difficulties with complex tendering processes, resources company headquarters being located away from regional areas, and a lack of skills and labour — particularly where resources companies in the region attract the available skilled labour (Australian Small Business and Family Enterprise Ombudsman, sub. 23, p. 2). Governments attempt to address these barriers in several ways.

- Some State and local governments employ people whose role is to promote local content opportunities. For example, in Western Australia, regional development commissions employ local content advisers, who connect local businesses to opportunities in the region, provide advice on procurement processes and provide support for infrastructure and training (PDC nd).

- 
- Regional Development Australia Committees are an Australian Government initiative that can, amongst other roles, provide support for businesses in regional areas (HRSCIISR 2018, p. 56).

These approaches have some merit in principle as they seek to fill information gaps, but there is limited evidence on their effectiveness. A 2016 review of the Regional Development Australia initiative found significant shortcomings, including a lack of performance indicators and evidence on the success of the committees, large variation in the quality of regional plans, and limited capacity to implement those plans. The review noted that more focus needed to be put in areas such as developing skills, business competitiveness and access to markets (Smith 2016). The Commission (PC 2017g, p. 35) has previously recommended that the Regional Development Australia scheme be abolished, in large part due to duplication of State and Territory schemes.

Despite the volume of local procurement that already takes place, governments are placing an increasing focus on local procurement. For example, as noted earlier, Queensland requires companies to develop a local content plan as part of its social impact assessment processes. Western Australian State Agreements often require companies to use local goods and services where feasible — although this generally refers to Western Australian goods and services rather than the local region. Some local councils have also reported that they require companies to meet local content targets (HRSCIISR 2018, p. 56).

There are calls for this practice to become more widely used. In particular, the House of Representatives Standing Committee on Industry, Innovation, Science and Resources (2018, pp. xi–xii) recommended that:

... the Federal Government work with state, territory and local governments, and land councils, who make licensing agreements with companies to ensure these agreements:

- include targets for minimum levels of true local procurement, based on the specific circumstances of the region and the project, including regional business capability; ...
- require companies to make procurement opportunities readily available and accessible to regional small and medium enterprises and locally-based businesses of any size, and to advertise their contracts and tenders for at least 30 days; and
- require companies to ensure their higher-tier contractors also commit to local procurement.

Local procurement requirements are likely to be costly from a whole-of-community perspective and may not even help local business in the long term. Resources companies will source goods and services from local communities where the service is the most efficient or highest quality and/or because it helps with social licence objectives. Mandating procurement beyond this level implies that businesses are required to use lower-quality or higher-cost goods and services. This has flow-on effects to shareholders and taxes and royalties, and may reduce investment in resources, leading to longer-term detrimental effects on the community. Local businesses can become reliant on procurement targets — leading to issues when the resources extraction site eventually closes.

---

Local procurement requirements will also affect businesses in other regions of Australia which lose resources company contracts. This includes businesses from other regional areas. It is unclear why businesses located near mines should benefit over and above those in other regions.

In sum, local procurement requirements are likely to be an inefficient and ineffective way of supporting local development. Providing businesses in regional areas with the support needed to engage with resources companies, such as local content advisers, is likely to be a better way of encouraging procurement from regional areas.

#### LEADING PRACTICE 10.2

Local procurement requirements can be a relatively high-cost way of meeting development objectives. In contrast, resources companies and governments providing businesses in local communities with the support needed to engage with resources companies, such as BHP's Local Buying Program, is likely to create more enduring benefits for communities.

## Employing local workers

Resources projects benefit local communities by employing local workers. This contributes to the economic prosperity of a region by, for example, increasing employment, wages and providing incentives for people to move to the region.

### The resources industry is a large regional employer

While resources companies often use FIFO workers, there remains a large local employment component. For example, in New South Wales, 80 per cent of the workforce lives close to resources operations (HRSCIISR 2018, p. 137). In Western Australia, FIFO is more prevalent — at least in part reflecting the more remote nature of the industry and the scale of the workforce required — with 63 per cent of the mining workforce estimated to be FIFO (HRSCIISR 2018, p. 135).

While most FIFO workers come from major cities, a sizeable proportion comes from regional areas. For example, Rio Tinto has a program of sourcing FIFO workers from other regional areas — about 2300 Rio Tinto employees fly in from other regional Western Australian areas (HRSCIISR 2018, p. 140).

Some resources companies are also making efforts to increase their local employment. Through consultations, the Commission heard that companies such as Yara Pilbara and Woodside are moving towards, or have, residential workforces in the Pilbara. Companies such as Glencore and Origin Energy provide incentives to promote local residence by their employees.

---

## FIFO and DIDO are valuable tools for companies

FIFO remains heavily used in some regions (although this has been affected by the COVID-19 pandemic), as is DIDO — the Commission has estimated that there were about 60 000 FIFO and 10 000 DIDO workers in Australia in 2016 (including non-resources employees) (PC 2020d, p. 258). There are several reasons for this. Long-distance commuting through FIFO or DIDO can:

- allow companies to obtain workers and skills that may not be available in the local region. In mines that are situated far from major towns, long-distance commuting may be the only option. FIFO was instrumental in allowing companies to meet their workforce needs during the resources boom, particularly to accommodate temporary workers during construction (PC 2017g, p. 103).
- moderate the effects of resources extraction on communities, particularly during the relatively short-lived construction phase. Without it, price fluctuations, including in house prices, in resources communities during the resources boom would have been even more pronounced (PC 2014a, p. 68). For example, following a commodity price downturn starting in 2014-15, Western Australian communities closest to mining operations ‘did not experience a sudden depopulation and withdrawal of services. Instead, FIFO workers moderated the decrease in demand’ (Haslam McKenzie 2020, p. 8).
- spread the benefits of resources to other, non-resources regions. As noted above, this includes both capital cities and non-resources regional areas.

However, there are also long-standing concerns about the negative effects of both FIFO and DIDO. As previously noted by the Commission (PC 2017g, p. 103), non-resident populations may be less committed to the community and temporary populations can place strains on community resources.

Local communities are also concerned about the economic effects of FIFO and DIDO. In particular, some communities have in the past been faced with the burden of providing infrastructure for temporary residents, without receiving the funds to do so (for example, HRSCRA 2013, p. 58). Reforms in Western Australia to allow local governments to levy rates on resources camps are a positive move that should somewhat address this problem.

Finally, there are also concerns about the effect of FIFO and DIDO practices on the workers themselves and their families, including mental health issues and the effects of workers spending long periods of time away from their families.

The above concerns have led to governments beginning to legislate against or discourage FIFO practices.

- The Queensland Government passed reforms in 2018 that prevent resources companies located near regional towns from having a 100 per cent FIFO workforce. The effect of this legislation is unclear — the QRC (sub. 27, p. 6) noted that, when the legislation commenced, none of the regulated companies had a 100 per cent FIFO workforce.

- 
- The City of Karratha (sub. DR84) has a policy of aiming to transition FIFO workforces, particularly long-term operational workers, towards a residential workforce over time, and for town-based accommodation to be used wherever possible. Accordingly, it issues time-limited approvals for temporary-workforce accommodation to allow for reviews regarding their need.
  - As part of its COVID-19 pandemic stimulus measures, the Western Australian Government announced measures to encourage east coast FIFO workers to relocate permanently. These measures include the Building Bonus grant for new homes and the Regional Land Booster Package (box 10.4).

As the Commission has previously argued, FIFO has many benefits, both for companies and the broader community, and it is a business decision as to whether to employ workers locally. Indeed, employing local workers has benefits for companies, including building a social licence in the community, and some companies are implementing strategies to reduce FIFO, and to minimise its negative effects when used. For example, the Commission heard examples of companies locating FIFO workers closer to nearby towns, and promoting their engagement within the community.

It appears likely that the COVID-19 pandemic, and associated border closures, will have a further effect on the willingness of companies to use FIFO, although the longer-term effects remain to be seen. One example is that, from September 2020, BHP stipulated that job applicants for Western Australian operational roles in ‘iron ore, nickel and petroleum operations ... must live in or be willing to move to WA for the duration of their employment’ (Hondros and Hastie 2020). The Western Australian Government has encouraged other resources companies to adopt similar practices.

While regulating the practice of FIFO is not warranted, there is merit in companies identifying through social impact assessment processes whether FIFO workers will be used, and any likely negative effects. Early engagement with local governments can also allow effective planning for changes in demand for local infrastructure and other community services. And engagement between resources companies and the community about the reasons why FIFO workforces are used may help to ease community resistance to the practice. This is a preferable approach to using regulation to curtail the practice.

#### FINDING 10.5

Fly-in, fly-out (FIFO) (and drive-in, drive-out) workforces provide flexibility for companies, and distribute the employment benefits of resources development around Australia. The use of these workforces can also moderate some of the effects of resources extraction on local communities such as higher housing demand and prices, particularly during the construction phase.

---

#### LEADING PRACTICE 10.3

Early identification of FIFO requirements and their potential social effects, together with effective community and local government engagement, can ease resistance and lead to better integration of workers into communities.

---

## Building local infrastructure

Local resources communities often need additional infrastructure to manage the influx of population associated with new investments. This can range from essential infrastructure such as roads and electricity networks to community infrastructure such as swimming pools and town halls. Resources companies themselves require infrastructure to be constructed to operate.

### Many resources companies invest heavily in local infrastructure

Many large resources companies invest in community infrastructure facilities in regions near their projects, such as community hubs, education and healthcare. This can occur through direct investment or through providing funding to local governments. For example:

- Rio Tinto has contributed \$8.5 million to a community hub in the Shire of Ashburton, and \$8 million to a community hub in the City of Karratha (MCA 2018a)
- Anglo American (2020) has a Moranbah community investment program — a \$20 million fund it has used to invest in infrastructure such as an aquatic centre, housing infrastructure and upgrades to local infrastructure
- INPEX (sub. 34, p. 18) noted that it had spent more than \$4.5 million on community programs since 2012, plus \$9 million to develop education and training institutions in the Northern Territory
- Shell has established a program in the Western Downs regions of Queensland to deliver telehealth services to students (QRC, sub. 27, p. 20)
- the NSWMC (sub. 28, p. 39) noted that New South Wales resources companies provide community contributions to local governments through voluntary planning agreements — for example, KEPCO provided about \$9 million over 27 years to the Mid-Western Regional Council in New South Wales for community facilities.

Resources companies may also invest or co-invest in economic infrastructure needed for their operations, which also generate community benefits. For example:

- Roy Hill (sub. DR60, p. 5) has funded a \$39 million project to fully seal a 22 km gravel section of Marble Bar Road in Western Australia. This has improved the safety of part of a main road that connects remote communities



- 
- Hillgrove Resources has constructed a water pipeline to deliver process water to its Kanmantoo mine as part of a public-private partnership with the Mount Barker District Council. This was later extended to Callington town through a \$850 000 South Australian Government grant, and allowed surplus water from mining operations to be used in other properties along the pipeline route and for agriculture, irrigation of local parks and reserves (Hillgrove Resources 2011, p. 5; MBDC 2015).

Because companies themselves benefit from these investments, it is not always clear if these projects should be considered cost recovery for public infrastructure or voluntary benefit sharing.

### Community use of resources company infrastructure

As noted above, infrastructure required by resources projects can also provide benefits to the community. One approach is to construct resources infrastructure in a way that it can also be used by the local community. For example, this may involve building a road to a mine in such a way that it can also be used by the community, or generating excess power from a mine site so that can be fed into the grid at low cost.

There are many potential benefits to sharing resources infrastructure with the community. It can be a way of providing infrastructure to the community more efficiently. However, there can also be costs — particularly where the costs of coordinating multiple users of the infrastructure are high.

Dobbs et al. (2013, p. 10) found that up to 30 per cent of resources company infrastructure investment globally could be shared with other (non-resources) users. They found that infrastructure such as power and roads was most amenable to sharing, with rail and ports more costly to share with other users. However, Ramdoo (2015, p. 4) noted that there are few examples of successful greenfield multi-user resources infrastructure projects in the world.

One example of infrastructure sharing was offered by Roy Hill (sub. DR60, pp. 4–5) — unoccupied rooms in its FIFO accommodation villages and other facilities are offered to a range of groups, including the Earbus Foundation charity, Water Polo WA, visiting police officers from Perth, and the Martu Leadership Program, which aims to improve Martu families understanding of governance, business and various areas of law.

BHP has also committed to sharing empty company housing facilities with disadvantaged groups in Newman (box 10.7), which has the potential to improve these groups' housing outcomes.

---

### Box 10.7 Vacant housing in Newman, WA

In April 2019, concerns surfaced about problems with vacant housing owned by BHP in the Western Australian town of Newman. BHP boarded the windows of many of its properties after they were constantly subject to vandalism, squatting and being used for substance abuse, leading to concerns from community members that they were contributing to a cycle of youth crime (Parish 2019). Despite problems with vacant houses, disadvantaged groups experienced difficulties in securing accommodation, overcrowding in social housing, or homelessness (Pascual Juanola 2019).

In June 2020, BHP announced a program to improve and upgrade their housing stock in Newman over the next ten years, with an expected spend of \$100 million (BHP 2020a). In addition to refurbishments, the program also includes leasing properties to Indigenous community groups, Newman Day-Care Centre and White Ribbon Women's Shelter, with more leases expected.

Investments in power and energy infrastructure by resources companies have also been used by the community for other future projects. For example, investments by the coal seam gas and LNG industry to upgrade transmission networks and substations in the Western Downs region of Queensland have facilitated the development of wind and solar energy projects (Powerlink Queensland 2015, p. 9; QRC, sub. DR81, pp. 31–32; TBSE 2019).

The repurposing of legacy petroleum infrastructure is one emerging area in infrastructure sharing, subject to approval processes to transfer infrastructure to landholders (APPEA, sub. DR91, pp. 18–19). One potential example of petroleum infrastructure sharing is repurposing pipeline infrastructure into water pipes. Another example is the conversion of petroleum wells to water bores, which can provide benefits if conducted safely, including:

... a community benefit from the tenure holder, a low cost bore for a landowner and an environmental benefit by reducing the numbers of bores that may have been constructed if the well had not been converted. (Qld DNRME 2019b, p. 57)

### Coordination is key

As noted in section 10.1, there are cases where resources companies struggle to demonstrate the value of their community investments, or their investments add to the burden on local governments where there is an ongoing maintenance cost. It is crucial that community infrastructure investments are coordinated if the benefits from these investments are to be maximised.

In some cases, the infrastructure investment may not turn out to be very productive or of much benefit if it is not part of an integrated approach that ensures that the teachers, nurses, doctors, and medicines needed to operate services will be available. Even more basic infrastructure investment, such as for roads, needs to be integrated into an appropriate process for maintenance and repair if the benefits are not to be quickly lost. Close coordination with and support for relevant government agencies may be needed. (IFC 2015, p. 46)

---

Isaac Regional Council (sub. 48, p. 7) noted that partnerships between local governments and resources companies are needed to ensure that the benefits from investments are maximised.

Experience in the Isaac has taught us that what has worked is that local government needs to be a genuine partner in the process. Experience has also highlighted that the best outcomes are achieved when local government identifies community-based solutions.

There are several examples of such partnerships. In the Pilbara, Rio Tinto entered into partnerships with the Shire of Ashburton and the City of Karratha in 2012 to deliver infrastructure and services to the community. These partnerships have been used to deliver community hubs, events, festivals, upgrades to public amenities and community development programs. Some of these community projects have been jointly funded by direct contributions from Rio Tinto and rate revenues from the local governments (MCA 2018a). The City of Karratha (2019, p. 1) has noted that:

The Partnership Agreement between the City of Karratha and Rio Tinto has been instrumental in enhancing community life through the delivery of new and improved services, the support of festivals and events and through seminal investments in key civic infrastructure projects.

In Queensland, the Isaac Affordable Housing Trust is an initiative funded by Isaac Regional Council and companies including BHP Billiton Mitsubishi Alliance and Rio Tinto. The trust invests in affordable housing to reduce the effects of increased housing demand on the community. Isaac Regional Council (sub. 48, p. 8) noted that:

An objective of the trust is to provide long-term sustainable housing investment in the Isaac region by bringing together resource proponents, developers, investors and the [trust] manager will ensure that all parties work together towards this goal.

In late 2018, the Shire of Coolgardie in Western Australia signed a memorandum of understanding with ten resources companies to work collaboratively to deliver economic and social benefits to the community (Shire of Coolgardie 2019). Such an approach has promise, although there is limited evidence of its effectiveness thus far.

Another approach that has been used is to coordinate projects with a consultative committee consisting of a broad range of stakeholders. For example, Hillgrove Resources has established a consultative committee with the Kanmantoo and Callington communities in South Australia. Through this committee they have established a ‘master plan’ to set up a long-term vision for the community after the mine ceases production. Current and future projects established through the plan include irrigation systems, improvements to halls and community centres, and the establishment of heritage trails, open air museums and nature corridors. The South Australian Government (sub. 25, p. 15) noted that:

The community’s vision is that this process will be held up as a model for mining companies across Australia to positively engage with their host communities for the collective betterment of regions, the mining industry and government into the future.

Coordination between local government, resources companies and other stakeholders can draw together expertise from both the public and private sectors. Resources companies often

---

collaborate with local governments and other stakeholders when making investments, but more formal partnerships like those outlined above may help to strengthen relationships, and deliver greater benefits for communities.

#### LEADING PRACTICE 10.4

Coordination between local communities and resources companies can improve the effectiveness of benefit-sharing activities. Coordination can involve formal partnerships, such as that between Rio Tinto and the City of Karratha, or community consultation, such as that established by Hillgrove Resources in Kanmantoo and Callington.

### Local government capacity

The above identifies a role for local governments to coordinate and provide infrastructure related to resources developments. As noted earlier, there is also a role for local governments to mitigate some of the negative effects of resources development, such as through planning frameworks.

Participants to this study expressed concerns about local government capacity constraints. Andrew Garnett (sub. 24, p. 7) noted the need for capacity building for local governments to fulfil their roles. The AEPLG (sub. DR63, p. 2) also stated that ‘many rural and remote communities may be insufficiently resourced or supported to promote the best outcomes for themselves’. And the West Coast Council (sub. DR54, p. 4) submitted that:

there needs to be more done to address the inequality of local government revenue raising ability across Australia ... Funding regional Australia appropriately would allow regional local governments to attract and retain the staff needed to ensure appropriate and efficient assessment of projects, and, ensure that local communities are able to support projects and their workforces with services and infrastructure.

The Commission has previously considered the capacity of local government in its role as a regulator, public service provider and planning entity, and noted that many local governments faced capacity constraints — including financial capacity and the availability of skilled staff (PC 2012, 2017g, p. 154). It has stated that:

Some local councils lack resources and expertise to undertake effective planning, prioritisation of projects and implementation or delivery ... In particular, small to medium-sized local governments frequently lack in-house specialists or technical expertise to determine value for money and prepare an appropriate business case for proposed projects. (PC 2017g, p. 154)

The Commission has identified the need for State governments to assess the capacity of local governments, and identified benefits from State governments reviewing the performance of individual local governments, such as through the Promoting Better Practice Review program in New South Wales. These leading practices are also relevant for the role of local government in benefit-sharing activities.

---

In addition, the Commission has previously commented on the effect of government policies that restrict local governments' revenue-raising abilities, noting that they:

... can make it difficult to fund the required technical expertise in analysing data, undertaking business case analysis and prioritising investments, let alone contributing to investment or funding operating costs associated with projects ... The constraints on local governments' ability to raise revenue have broader implications for the capacity of local governments and can act as an impediment to the provision of local government services. (PC 2017g, pp. 154–155)

Local governments near resources activities face heightened challenges to attract and retain skilled employees, in part due to resources companies often offering significantly higher wages and accommodation subsidies to their workers (CSRM 2012, p. 35). These challenges are amplified during boom periods, where sharp increases in overall housing and rent prices create further difficulties for local governments to attract skilled workers. Under these circumstances, resources companies can work with local governments to help secure affordable housing and attract skilled workers for the council and other essential services.

The financial capacity challenges of local governments can also be aggravated by FIFO or DIDO workers, as these workers may use community services and facilities without being fully charged. This is because many local services are mostly funded through residential property rates or supplementary grants issued by the Australian, State and Territory governments, calculated on the basis of resident or permanent population data (Isaac Regional Council, sub. 48, p. 5). As noted by Cheshire et al. (2014, p. 334):

... linking grants to resident population numbers when a significant proportion of the workforce are fly-in-fly-out means that the pressure on services and infrastructure is often underestimated ...

In general, local governments in resources communities may need greater financial support and capabilities to effectively address industry and community concerns, particularly amid the pressures that emerge in boom periods.

## **Sharing financial benefits**

Companies can also provide benefits for stakeholders in the form of financial agreements. These come in several broad forms.

- As noted above, companies can provide funding to local government to be used on infrastructure projects.
- Companies enter into financial agreements with Aboriginal and Torres Strait Islander communities as part of native title and other obligations. This is discussed in chapters 5 and 11.

Governments have also implemented other initiatives to share the financial benefits of resources with local communities, typically referred to as royalties for regions programs.

---

## Royalties for regions is not the best answer

Several States have, or have previously had, ‘royalties for regions’ schemes. These schemes hypothecate a proportion of royalty revenue from resources into a fund which is used for regional development initiatives. For example:

- Western Australia has had a royalties for regions program since 2008, which pays 25 per cent of forecast royalty revenues into a fund. The program has invested over \$9.3 billion into projects in regional areas since its inception (WA RDT 2019, p. 7).
- A royalties for regions program operated in Queensland from 2012-13 to 2015-16 (HRSCIISR 2018, p. 18).
- South Australia introduced the Regional Roads and Infrastructure Fund in 2018-19. 30 per cent of revenue from resources royalties are paid into the fund (South Australian Government, sub. 25, p. 12).

There is pressure on other jurisdictions to adopt similar approaches. The House of Representatives Standing Committee on Industry, Innovation, Science and Resources (2018, pp. 30–31) stated that many regional communities are not getting their fair share of the wealth generated from the resources sector, and that, the WA Royalties for Regions program was the only program (at the time) that returns a significant proportion of royalties to resources-affected communities. The Committee (HRSCIISR 2018, p. 32) recommended that:

... the Federal Government advocate through the Council of Australian Governments for states and territories with significant mining and resources sectors to adopt ‘Royalties for Regions’- type programs, which guarantee a share of royalties from resource extraction are reinvested in regional areas, especially those directly impacted by mining.

However, reviews of royalties for regions programs have identified several flaws. In 2018, a special inquiry in Western Australia was conducted to review several government programs, including Royalties for Regions. The review found severe deficiencies in the program.

It is evident that the Royalties for Regions program has many shortcomings in governance, strategy and administration. ... Hypothecation creates a strong incentive to spend money faster than may otherwise be optimal for the State. ... The ongoing rationale for a hypothecated program of the size and scale of the Royalties for Regions program should be reviewed. (Langoulant 2018, p. 147)

The review noted that the hypothecated nature of the program created incentives to spend money on projects without developing a strong business case. In addition, because royalty revenue is shared throughout Australia through horizontal fiscal equalisation, in some cases the Government needed to borrow money to fund Royalties for Regions. The review also noted that there was limited evidence that outcomes for regions had improved due to the program.

From the indicators available, it is not clear whether there has been any significant or consistent economic or social progress in WA’s regional development areas since the introduction of the Royalties for Regions program. (Langoulant 2018, p. 145)

---

Similar concerns were found in a 2014 Auditor General’s report.

The audit also left us with some concerns about the extent that projects were funded without long term viability being a key consideration and that project evaluations were focusing on what had been done rather than on whether the desired outcomes were achieved. (OWAAG 2014, p. 4)

And also in an audit of the previous Queensland scheme:

The R4R grant program is delivering much-needed infrastructure to regional communities, and in this respect is fulfilling its aims. However, [the Department of State Development, Infrastructure and Planning] cannot demonstrate the suite of projects funded under this program represented the optimal mix and so, best value for money. (QAO 2015, p. 2)

These programs typically provide support to all regions, which can spread the benefits of resources to non-resources regions. Nonetheless, a central theme from reviews of royalties for regions programs is that their hypothecated nature weakens incentives for good governance and oversight of expenditure to ensure that it is in the best interests of the community overall. The Commission (PC 2017g, p. 163) has previously noted that:

There is scope to achieve considerably improved outcomes for regional communities by changing the way regional programs are designed and delivered. Fundamental to this is applying rigorous and transparent processes for choosing, implementing, and evaluating regional spending.

And, to some extent, royalties for regions programs may simply substitute for other government spending — an increase in royalties for regions funding may be offset by a reduction in other government funding sources for regional areas.

Royalties for regions programs create incentives that may be inconsistent with a rigorous process for selecting and evaluating spending. Robust governance arrangements help ensure that spending decisions produce the best possible outcomes for communities, and that programs continuously improve over time (PC 2014b, pp. 75–107, 2017g, pp. 68–77). While it is important that regional areas have appropriate infrastructure and other services, royalties for regions programs are unlikely to be a leading-practice way to share the benefits of resources extraction across regional areas.

Some participants to this study also expressed support for programs similar to Royalties for Regions, where funds are sourced from hypothecated royalties or fixed budget allocations to be spent on communities near resources projects (MPI, sub. DR72, pp. 7–9; NSWMC, sub. DR83, p. 14; West Coast Council, sub. DR54, pp. 2–3). Such programs would bring governance risks similar to those involved in Royalties for Regions programs.

---

FINDING 10.6

Governments have a responsibility for funding and supporting services in regional areas. However, the case for hypothecating royalty payments to communities near resources projects is not compelling. There is evidence that such programs weaken governance and encourage projects that do not deliver community benefits. Royalty revenues should be spent where community net benefits are greatest, which may or may not be in communities close to resources.



---

# 11 Indigenous community engagement and benefit sharing

## Key points

- Indigenous communities comprise both traditional owners whose cultural affiliations with land may give rise to legal rights, and other Aboriginal and Torres Strait Islander people. Only traditional owners with recognised rights are entitled to make land access agreements with resources companies; other Aboriginal and Torres Strait Islander people are generally only entitled to be consulted as part of broader environmental impact or heritage processes.
- However, Aboriginal and Torres Strait Islander people who are not recognised traditional owners are often voluntarily included as beneficiaries of agreements. Resources companies also undertake a range of voluntary initiatives outside agreements that aim to benefit Aboriginal and Torres Strait Islander people.
- Because agreements are confidential, it is difficult to know their exact value. However, they are broadly commensurate with the value of projects and can be worth in the millions of dollars.
- Under international law, traditional owners have a right to give their free, prior and informed consent to resources developments on their traditional lands. In Australia, this manifests as a right to make agreements with resources companies and governments about how resources developments can proceed, rather than a right of veto. In some cases, resources companies choose not to develop land where traditional owners do not give their consent.
- Limited resourcing of prescribed bodies corporate (PBCs) constrains their capacity and effectiveness in negotiating agreements. Both governments and resources companies have a role in providing resources to PBCs.
- Traditional owners must be at the centre of decision making about how financial benefits are held, managed and used. Resources companies can work with and support traditional owners to articulate their goals and realise them.
- Ambiguity in charity law is sometimes perceived as limiting native title holders' ability to use charitable trust funds for economic development purposes. Giving the Australian Charities and Not-for-profits Commission the ability to make private rulings about which economic activities charitable trusts can pursue will provide greater clarity for native title groups. However, charitable trusts may not always be the most appropriate way to manage benefits given the goals of traditional owners.
- The proposed PBC Economic Vehicle Status model has merit as a way of holding and managing native title funds without the restrictions associated with charities — but it is unlikely that all activities undertaken by such entities would be eligible for charitable tax concessions.
- Ensuring that native title benefits flow to their intended recipients requires clarifying the legal duties of native title applicants, claim groups, and private agents that represent native title interests.

---

Chapter 10 set out principles for effective community engagement and benefit sharing in the context of the whole Australian community. This chapter focuses specifically on how resources companies engage and share benefits with Aboriginal and Torres Strait Islander people.

## 11.1 Understanding Indigenous community engagement and benefit sharing

### Who is the Indigenous community?

In the context of community engagement and benefit sharing by the resources sector, the Indigenous community comprises two distinct groups:

- traditional owners of land that is used for resources extraction, whose cultural affiliations with land may give rise to rights under Indigenous land legislation (chapter 5)
- other Aboriginal and Torres Strait Islander people who live in communities close to resources operations, but who are not traditional owners.

Traditional owners sometimes comprise all of an Indigenous community located close to resources operations. Often, however, the community includes both traditional owners and other Aboriginal and Torres Strait Islander people (as well as non-Indigenous people). Traditional owners may also live away from their traditional lands.

Traditional owners generally have rights to engage with and receive benefits from resources companies over and above those held by other Aboriginal and Torres Strait Islander community members.<sup>38</sup> This is because Indigenous land legislation provides for traditional owners to obtain compensation from, or make agreements with, other land users when their rights to land are affected. For example, the *Native Title Act 1993* (Cth) gives native title claimants a right to negotiate about certain proposed actions (known as ‘future acts’) that affect their native title. Aboriginal and Torres Strait Islander people who are not traditional owners are generally only entitled to be consulted through processes such as environmental impact assessments.

The right held by traditional owners to receive compensation or benefits from resources companies arises not by virtue of living close to resources operations, but from their spiritual and cultural connections to land. Thus, Aboriginal and Torres Strait Islander people who live in the area but are not traditional owners have equivalent legal claims to benefits as non-Indigenous members of the local community. The community engagement principles that apply in these circumstances are similar to those set out in chapter 10.

---

<sup>38</sup> Exceptions occur where legislation specifically provides for Aboriginal and Torres Strait Islander people who are not traditional owners but who are affected by resources activity to receive benefits, such as the *Aboriginal Land Rights (Northern Territory) Act 1976* (Cth).

---

That said, Aboriginal and Torres Strait Islander community members may receive greater benefits than non-Indigenous community members as a result of being included as beneficiaries in agreements, or through voluntary programs aimed at benefitting Aboriginal and Torres Strait Islander people broadly (discussed further below).

## **When do companies engage and share benefits with Aboriginal and Torres Strait Islander people?**

Resources companies interact with both traditional owners and other Aboriginal and Torres Strait Islander community members at multiple points throughout the life cycle of resources projects. As noted in chapter 5, companies may be required to make agreements with traditional owners when seeking access to land in which they have interests. Companies are also required to engage with Aboriginal and Torres Strait Islander community members (including traditional owners) as part of environmental and heritage regulatory processes, if projects are likely to have social, environmental and heritage impacts (chapters 6 and 8). And engagement can occur as part of voluntary programs that aim to create a social licence to operate for the resources company or increase the pool of suitable workers (chapter 10).

The majority of Indigenous community engagement and benefit sharing occurs through agreement making. In the Indigenous context, land access agreements are often made with communities because Indigenous land legislation provides for communal rights to land among traditional owners. This contrasts with non-Indigenous agreements which are typically made with individual landowners. Aboriginal and Torres Strait Islander people in the community who are not traditional owners are also often (voluntarily) included as beneficiaries to Indigenous agreements (box 11.1), although traditional owners generally remain the primary beneficiaries. Given the key role that agreements play in Indigenous community engagement and benefit sharing, much of this chapter focuses on agreement making.

Benefit sharing with Aboriginal and Torres Strait Islander people also occurs through other mechanisms. For example, the *Aboriginal Land Rights (Northern Territory) Act 1976* (Cth) (ALRA NT) establishes the Aboriginals Benefit Account, which receives royalty equivalents from the Commonwealth based on the estimated value of statutory royalties generated from mining on ALRA NT land (DPMC 2015, p. 203). Funds from the Aboriginals Benefit Account are used, among other things, to administer the four land councils set up under the Act, and to support projects that benefit Aboriginal people living in the Northern Territory.

In addition, many resources companies have voluntary programs designed to benefit Aboriginal and Torres Strait Islander people or communities other than traditional owners. For example, Fortescue Metals Group (sub. DR92, p. 35) submitted that it implements a range of initiatives that are accessible to the broader Aboriginal community beyond native title holders, which includes training and employment programs, business development and school-based support programs.

---

**Box 11.1 Other Aboriginal and Torres Strait Islander people are often included in agreements**

Although Indigenous land legislation provides for traditional owners with recognised rights in land to be parties to agreements, other Aboriginal and Torres Strait Islander people living in the community are also often voluntarily included as beneficiaries. For example:

- in the Gulf Communities Agreement, some provisions (such as those related to employment opportunities) included ‘all Indigenous people living in the Gulf communities ... rather than these benefits being restricted to the native title groups’ (Brereton & Everingham 2016, p. 10)
- the beneficiaries of many native title charitable trusts are defined as ‘Indigenous persons residing within or having a traditional connection to a geographical region (such as the Pilbara)’ (Levin 2016, p. 256).

There are many reasons why Aboriginal and Torres Strait Islander people who are not traditional owners may be included as beneficiaries of agreements.

- Inclusion of broader groups may be driven by a perception that the traditional owner group does not form a sufficient section of the public — a criteria that needs to be satisfied when charitable trusts are used to manage agreement funds. This issue has been partially addressed through amendments to Commonwealth charity legislation (section 11.3).
- The nature of programs funded through agreements may make it difficult to exclude those who live in the community but are not traditional owners. Levin (2016, p. 256) gave the example of school-based programmes that ‘do not differentiate between Indigenous people who are members of one claim group or another, they are simply delivered for the benefit of all Indigenous people in that school’.
- Resources companies may negotiate for all Aboriginal and Torres Strait Islander people living in the local community to benefit from agreements (in addition to traditional owners) because of social licence considerations (Adam Levin, pers. comm., 17 September 2020; Queensland South Native Title Services, pers. comm., 31 August 2020).
- Traditional owners may wish to share the benefits of agreements with other Aboriginal or Torres Strait Islander people or groups. This may be because they want to contribute to the broader community or because some relatives may not have recognised rights and interests in land (Adam Levin, pers. comm., 22 October 2020). Cultural norms regarding reciprocity may also be a factor.

---

**FINDING 11.1**

Agreements between resources companies and Aboriginal and Torres Strait Islander people primarily benefit traditional owners who have cultural and spiritual connections to land, as they are intended to do. However, agreements can also benefit other Aboriginal and Torres Strait Islander people who live in the community, who are sometimes voluntarily included as beneficiaries of agreements.

---

## Agreement making is a key feature of Indigenous engagement and benefit sharing

Agreement making involves resources companies, traditional owners (and their representatives) and, sometimes, governments coming together to negotiate the terms under which a proposed resources development might proceed. Bodies that have statutory responsibilities to help traditional owners negotiate agreements — such as native title representative bodies (NTRBs), native title service providers (NTSPs) and land councils — may also be part of the negotiation process or be parties to agreements. Chapter 5 outlines the various legislative regimes under which agreement making with Aboriginal and Torres Strait Islander people can take place.

### What do agreements contain?

Agreements between Indigenous groups and resources companies are generally confidential, private contracts. As such, the Commission was unable to examine the specific provisions contained within many agreements. That said, the *types* of provision included in agreements are fairly well known (for example, Northern Territory Chamber of Commerce and Industry, sub. 35, p. 9; O’Faircheallaigh 2016). Provisions often relate to:

- financial payments, including:
  - fixed payments when milestones in the project development process are reached
  - periodic (such as annual) payments
  - payments that depend on the profit, revenue or output of the mine (Levin 2016, p. 245)
- employment and training, including commitments by resources companies to employ a certain number of Aboriginal and Torres Strait Islander people, and to offer training to achieve these targets
- environmental management, which allow traditional owners to carry out their obligations to country and/or fulfil environmental obligations on behalf of resources companies
- cultural heritage and sacred site protection, which may reinforce existing company obligations under regulation
- business development, which promote opportunities for Indigenous businesses, including by strengthening the ability of businesses to win resources company contracts and overcome barriers such as a lack of access to investment capital, skills and expertise
- rights and interests in land, which recognise Aboriginal and Torres Strait Islander groups as the owners of their ancestral lands and may confer titles to them under Australian law. Any legal recognition or conferring of title requires the support of the relevant State or Territory Government
- implementation measures, including monitoring and implementation committees and provision for periodic review, as well as funding for these activities.

---

The value of financial payments and other commitments made under agreements can be large — although the confidentiality of agreements makes it impossible to ascertain their aggregate worth (box 11.2). The potential high value of agreements underscores the importance of ensuring that agreement making and the legislative frameworks that govern them are effective.

The confidentiality of agreements has also made it difficult for the Commission to understand the scale of many of the issues identified in this chapter and identify leading practice. The Commission has therefore relied heavily on the knowledge of study participants in undertaking its analysis, particularly Indigenous organisations, and academics and practitioners in this area. Transparency of agreements is discussed further in section 11.2.

### Is agreement making ‘compensation’ or ‘benefit sharing’?

The outcomes of agreements made with individual landowners in the non-Indigenous context are usually termed ‘compensation’. ‘Benefits’ in the non-Indigenous sense usually refers to activities outside of agreements that aim to increase the company’s social licence or its pool of suitable workers (chapter 10). Community members receive ‘benefits’ rather than ‘compensation’, as they generally do not hold titles to the land that a resources company wishes to access.

However, in the Indigenous context, the line between compensation and benefits is less clear. This is because:

- Indigenous rights to land are communal, and compensation for the use of Indigenous land belongs to groups of traditional owners rather than any individual within those groups
- agreements may include other Aboriginal and Torres Strait Islander people as beneficiaries, even though they are not traditional owners
- confusion about terminology can arise due to the different processes under the Native Title Act for obtaining compensation and making agreements. As the CLC and NLC (sub. DR79, pp. 12, 26) stated, ‘compensation is a term associated with litigated outcomes [under Part 2, Division 5 of the Native Title Act]’, and ‘payments made under native title agreements should be characterised as benefits’.

Ultimately, conceptualisations of outcomes from agreements as either ‘compensation’ or ‘benefits’ are likely to matter little to the value of financial payments and other company commitments obtained by Aboriginal and Torres Strait Islander parties under agreements. This is because outcomes are determined by factors such as the commercial value of the relevant land, the value of the proposed resources activity and the bargaining power of the respective parties, regardless of the term used to describe them. Thus:

Benefits provided to Indigenous parties can be conceptualised as either or both *compensation* for impact on lands or the *sharing of the benefits* flowing from resource development. (Limerick et al. 2012, p. 75)

---

For simplicity, this chapter uses the term ‘benefits’ to capture outcomes from agreements between resources companies and Indigenous interests.

### **Box 11.2 What are agreements worth?**

The confidentiality of agreements made it difficult for the Commission to gain a broad view of how much agreements can be worth. However, several examples indicate the potential value of agreements.

#### **The INPEX-Larrakia Ichthys LNG Foundation Trust**

INPEX (sub. 34, attachment D) submitted that, through its 2018 agreement with the Larrakia people in the Northern Territory which established the Larrakia Ichthys LNG Foundation Trust, it will make total payments of \$24 million to the trust over the course of the agreement.

- Annual payments of \$500 000 are delivered on the anniversary of the first LNG cargo departure for 40 years, or the end of economical production.
- Payments are made when milestones are reached, such as \$3 million at the commencement of operations, and \$1 million when an annual production target is achieved.

#### **The Western Cape Communities Co-existence Agreement**

The Western Cape Communities Co-existence Agreement was signed in March 2001 between Comalco (now Rio Tinto Aluminium), the Queensland Government and 11 traditional owner groups in Western Cape York. At signing, the agreement included:

- annual contributions of \$2.5 million from Comalco (approximately \$3.9 million in 2019 dollars) and \$1.5 million from the Queensland Government (approximately \$2.3 million in 2019 dollars) to the Western Cape Communities Trust, indexed to mine revenue and inflation, with 60 per cent of contributions placed into long-term secure investments
- \$500 000 towards a Comalco-managed Employment and Training Budget (approximately \$771 000 in 2019 dollars)
- \$150 000 Cultural Awareness Fund for bursaries, cultural heritage and ranger programs (approximately \$231 000 in 2019 dollars) (Crooke, Harvey & Langton 2006, pp. 6–7).

#### **The Argyle Diamond Mine Indigenous Land Use Agreement (ILUA)**

The Argyle Diamond Mine ILUA (also known as the Argyle Participation Agreement) was signed in 2004 between traditional owners of the East Kimberley in Western Australia, the Kimberley Land Council and Argyle Diamond Mine (owned by Rio Tinto). The agreement includes:

- annual payments of \$791 636 (approximately \$1.1 million in 2019 dollars), indexed to inflation and split between five local Aboriginal communities (Freehills nd, p. 8)
- annual payments made into two trusts (a charitable trust and special purpose trust), calculated according to formulas set out in the ILUA. These formulas make reference to Argyle’s net earnings before interest, taxes, depreciation and amortisation (EBITDA) and the agreed EBITDA percentage between Argyle and traditional owners (the value of this is not available) (Freehills n.d., p. 330).

From 2013 to 2017, Argyle Diamond Mine contributed a total of \$27.6 million in payments to traditional owners and Indigenous trusts (Rio Tinto 2018, p. 24).

---

## What can agreement making achieve?

At a transactional level, agreement making is a mechanism to provide redress for actions that affect traditional owners' rights to land. However, the social context in which resources activities and agreement making take place means that it is often ascribed greater significance by both traditional owners and resources companies.

Traditional owners often view agreements as a way to achieve cultural recognition and autonomy, and to generate economic opportunities to overcome historical disadvantage. They can therefore be willing to support resources activities, as long as measures to protect culture are in place (box 11.3). When the Comprehensive Agreement between BHP Billiton and the Banjima people was signed, Banjima Elder and Banjima Native Title Aboriginal Corporation chairman Slim Parker said that:

This agreement provides for the Banjima people to be able to take control of their destiny, their future, and to be able to sustain themselves through their teaching of their language, law and culture. (Banjima Native Title Aboriginal Corporation 2016, p. 14)

### Box 11.3 **Aboriginal and Torres Strait Islander people balance multiple considerations in supporting resources activities**

When considering whether to support resources activities, Aboriginal and Torres Strait Islander people must often consider the potential social and economic benefits as well as potential impacts on culture and heritage. A senior Bardi man involved in consultations regarding a proposed hydrocarbon development in the Kimberley in 2008 illustrated this situation vividly.

On my left is our past and all of our culture, our heritage and my history; on my right is our future, my children and my grandchildren. I am in the middle making sure that the best of my past and my culture is kept strong as we make our way into the future. (O'Faircheallaigh & Twomey 2010, p. 28)

In some cases, traditional owners face trade-offs between preserving culture and gaining economic benefits. However, economic benefits from resources activities can also facilitate the development of culture. Limerick et al. (2012, p. 54) explained that:

Paradoxically, while resource development will inevitably mean sacrifice to the sanctity of traditional lands, an important motivation for Indigenous people in supporting resource development on their land is the opportunity that the material benefits might provide for strengthening culture and connections to land that have been eroded by the process of colonisation and dispossession.

Thus:

Indigenous people cannot be assumed to be either standing in the way of development or selling off their heritage for profit. They are involved in a difficult balancing exercise within a highly politicised environment. (Limerick et al. 2012, p. 53)

The CLC and NLC (sub. DR79, p. 6) considered that Aboriginal people are often willing to allow resources activities to occur on their land, as long as they can be confident that cultural heritage will be protected and the environment well managed.

Agreements can be a major source of income and opportunity for traditional owners (and other Aboriginal and Torres Strait Islander people), similar to how resources projects can bring opportunities to regional communities in general (chapter 10). Thus, it is



---

understandable that great hope is often placed in agreement making as a way for Aboriginal and Torres Strait Islander people to advance socially, culturally and economically. But while agreements can bring significant benefits to traditional owners who are party to them (and their communities), the reach of agreements and the magnitude of benefits are commensurate with, and accordingly limited by, the size and location of resources activities. This means that agreements with resources companies alone should not be relied on to deliver economic independence and other social goals across Aboriginal and Torres Strait Islander communities. In reflecting on the lessons from the Gulf Communities Agreement, Brereton and Everingham (2016, p. 12) said that:

The far-reaching socio-economic transformation of the region expressed as aspirations in the [Gulf Communities Agreement], could not realistically be achieved by one mine or one agreement. Realising this ambitious vision required facilitating conditions and complementary measures by other actors; these were not — and could not be — addressed in the agreement.

In particular, governments play a critical role in enabling holistic and sustainable socio-economic development in a region through ensuring the provision of essential community services and undertaking planning. Even where companies commit to providing community services, governments retain their role as ‘system steward’ (box 11.4), and are ultimately responsible for the effectiveness of these programs. Thus, governments and resources companies have separate but complementary roles.

The negotiation of an ILUA should result in the mining company being responsible for generating the value-adding enterprise activity and the relevant government being responsible for ensuring that there is a sustainable basis (that is, infrastructure and services) for delivering a net benefit to the regional economy. (Crooke, Harvey & Langton 2006, p. 9)

#### **Box 11.4 Government as system steward**

Stewardship relates to the range of functions governments undertake to determine what community services should be made available and the effectiveness of those services. It includes overseeing the market, understanding the population and its service needs, policy design, regulation, oversight of service delivery, monitoring of provider performance, and developing ways for the system to learn and continuously improve. It also includes developing institutional and regulatory arrangements to underpin service provision that is responsive to users, accountable to those who fund the services, equitable, efficient and high quality.

Governments will (or should) always have the role of system stewards, which means they retain ultimate responsibility for ensuring that community services deliver intended outcomes, regardless of the arrangements under which services are funded or provided.

*Source:* PC (2017, pp. 63, 80).

Where agreements are used to fund community services, some consider that there is a risk that governments will reduce the services they provide and the local community will not gain an overall net benefit. However, O’Faircheallaigh (2004) considered that service provision by resources companies through agreements can allow communities to leverage additional government spending, fund services at a level or of a nature that governments

---

would not provide, give Indigenous people greater control over service provision and strengthen Indigenous organisational skills and governance capacity.

## **11.2 Engaging and making agreements with Aboriginal and Torres Strait Islander people**

### **Indigenous-specific guidance is available**

Engaging with Aboriginal and Torres Strait Islander people can be an unfamiliar task for some resources companies. Companies may lack competencies or experience in this area because, for example, they are small, or they have not previously conducted business in Australia. Guidance can be helpful in assisting companies to engage effectively with Aboriginal and Torres Strait Islander people.

Such guidance is widely available. For example:

- government agencies have published guidance on how companies can engage with Aboriginal and Torres Strait Islander people to fulfil regulatory obligations under environmental and heritage legislation, as well as how to make agreements (Australian Heritage Commission 2002; DIIS 2016b; DoE 2016a). The Australian Human Rights Commission (AHRC) (2009) has also identified principles of effective consultation and engagement with Indigenous communities
- the International Council on Mining and Metals (ICMM), an international organisation whose members consist of large multinational mining companies, has published a good practice guide on Indigenous peoples and mining (ICMM 2015), which is publicly available
- Rio Tinto (2016) has published a ‘how to guide’ on agreement making as part of its guide on integrating social performance into its work
- academic publications have identified features of effective or leading-practice engagement with Aboriginal and Torres Strait Islander people (Limerick et al. 2012; Loutit, Mandelbaum and Szoke-Burke 2016).

As with guidance on general community engagement (chapter 10), much of the guidance on Indigenous community engagement covers similar themes. The principles set out in the Indigenous-specific guidance also largely resemble those for general community engagement, with additional considerations relating to:

- culture — for example, guidance by the Department of Industry, Innovation and Science (2016b, p. 19) advises that considerable time is often needed for Aboriginal and Torres Strait Islander communities to fully work through issues and make decisions, because of cultural protocols requiring consensus
- the rights of traditional owners — such as statutory rights under the Native Title Act and ALRA NT, and the right to give free, prior and informed consent (discussed below).

---

No one set of guidelines has been identified as better than the others.

## **The principle of free, prior and informed consent (FPIC)**

When proposing resources development on Aboriginal and Torres Strait Islander peoples' traditional lands, one consideration is the right of traditional owners to give or withhold their 'free, prior and informed consent' (FAO 2020) (box 11.5). FPIC is a human rights norm grounded in the right to self-determination and to be free from racial discrimination, as set out in the International Covenant on Civil and Political Rights (ICCPR), the International Covenant on Economic, Social and Cultural Rights (ICESCR), and the International Convention on the Elimination of All Forms of Racial Discrimination (CERD) (UNHRC 2018, p. 2). It is also recognised in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), the Convention on Biological Diversity and the International Labour Organisation Convention 169. Article 32(2) of UNDRIP states that:

States shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free and informed consent prior to the approval of any project affecting their lands or territories and other resources, particularly in connection with the development, utilisation or exploitation of mineral, water or other resources. (UN 2007, p. 9)

Australia declared its support of UNDRIP, which is the main instrument of international law that articulates requirements for FPIC, in 2009. This reflects a commitment from the Australian Government to advance the economic, social, cultural and political rights of Aboriginal and Torres Strait Islander people in its policies, through initiatives such as the National Agreement on Closing the Gap (Macklin 2009; Wyatt 2019).

Australia is also a party to the ICCPR, ICESCR and CERD, which are binding international treaties through which signatories make a general commitment to honour the human rights standards codified within them (AGD 2020). Each of the treaties has committees that monitor member states' compliance with their human rights obligations (AGD nd), and there are also mechanisms under the ICCPR and CERD to help resolve disputes where individuals are concerned their rights have been violated.

### **Does FPIC imply a right of veto?**

There is considerable debate about whether FPIC, as set out in international law, implies that traditional owners should have a right of veto. This is a contentious issue because, as the AHRC noted, the ability of Indigenous peoples to say no to development can be perceived as 'challenging State sovereignty or territorial integrity' (Gooda & Kiss 2013, p. 10). Some participants to this study considered that FPIC amounts to a right of veto (EDO, sub. DR62, p. 62; FNLRS, sub. DR87, p. 2; WWF, sub. DR93, p. 5), while others did not (CLC and NLC, sub. DR79, p. 12, MPI, sub. DR72, p. 9; NNTC, sub. DR70, p. 4).

---

### Box 11.5 What is free, prior and informed consent (FPIC)?

The scope of FPIC can be understood through each of its constituent elements.

- ‘Free’ means the absence of both direct and indirect factors that may hinder Indigenous peoples’ free will. This includes that:
  - negotiations are free from coercion, force, manipulation and intimidation
  - the relationship between parties is characterised by trust and good faith, rather than suspicion, violence or prejudiced views
  - Indigenous people have the opportunity to contribute to defining timelines, rather than have these imposed on them.
- ‘Prior’ means that:
  - Indigenous people are involved as early as possible in the process, rather than only after crucial decisions have been made
  - Indigenous people have the necessary time to absorb, understand and analyse information and undertake their own decision-making processes.
- ‘Informed’ means that Indigenous people have sufficient information that is objective and clear, and which is communicated in a manner and form that is understandable (such as in a traditional language).
- ‘Consent’ means the ability to say yes or no to proposed actions. Consent is not a freestanding device of legitimation, but can only be received when the criteria of ‘free’, ‘prior’ and ‘informed’ have been satisfied. If consent is withheld, the other party is expected to not take the risk of continuing with the proposal.

Source: UNHRC (2018, pp. 6–8).

Some international institutions, such as the Inter-American Court of Human Rights and the UN Human Rights Committee, have suggested that FPIC may imply a right of veto in *some* cases where developments have substantial impacts on Indigenous lands and culture.<sup>39</sup> Domestic courts in countries such as Canada, Colombia and Bolivia have also upheld similar principles (Barelli 2018, pp. 265–267; UNHRC 2018, pp. 10–11).

However, there is ongoing debate as to *when* FPIC might constitute a right of veto, as FPIC is not an absolute principle that always overrides the rights of other members of society (Doyle 2015, p. 172). Interjurisdictional courts have acknowledged that public interest may be one factor to consider when examining the lawfulness of restricting Indigenous peoples’ right to give their free, prior and informed consent — restrictions may be justifiable if they are undertaken with an ‘aim of achieving a legitimate objective in a democratic society’<sup>40</sup>

---

<sup>39</sup> *Saramaka People v Suriname (Judgment)* (Inter-American Court of Human Rights, Series C No 172, 28 November 2007), [134] (*‘Saramaka v Suriname’*); *Saramaka People v Suriname (Judgment)* (Inter-American Court of Human Rights, Series C No 185, 12 August 2008), [41]; Human Rights Committee, *Views: Communication No 1457/2006*, 95<sup>th</sup> sess, UN Doc CCPR/C/95/D/1457/2006, (24 April 2009) (*Ángela Poma Poma v Peru*), 11 [7.6].

<sup>40</sup> *Saramaka v Suriname* (n 39) [127]; see also Barelli (2018, p. 257).

---

or are ‘proportionate to a legitimate need’.<sup>41</sup> As noted by former United Nations Special Rapporteur James Anaya (2009, p. 17):

principles of consultation and consent do not bestow on indigenous peoples a right to unilaterally impose their will on States when the latter act legitimately and faithfully in the public interest. Rather, the principles of consultation and consent are aimed at avoiding the imposition of the will of one party over the other, and at instead striving for mutual understanding and consensual decision-making.

The efficacy of public interest qualifications to FPIC has been challenged in some domestic courts overseas, such as in Canada and Colombia (Doyle 2015, pp. 168–172). Courts have also suggested that public interest arguments must be considered together with other factors, such as necessity and proportionality.<sup>42</sup>

The United Nations Expert Mechanism on the Rights of Indigenous Peoples also considered proportionality to be a key consideration in the strength of the right of Indigenous peoples to give their free, prior and informed consent. Proportionality refers to the effects of the proposed development, with FPIC more likely to amount to a right of veto for actions that have large impacts. Assessment of impacts requires consideration of the nature, scale, duration and long-term impacts of the proposed actions, such as damage to community lands or harm to the community’s cultural integrity (UNHRC 2018, p. 10).

### How does FPIC apply in Australia?

In Australia, traditional owners, like other land users, generally do not have a right of veto in relation to resources activities. One notable exception is the right of veto held by traditional owners at the exploration stage under Part IV of the ALRA NT (chapter 5). In 2019, the Western Australian Government also announced that it would ‘introduce a requirement for consent of relevant Traditional Owners before hydraulic fracture simulation production is permitted’ (Western Australian Government 2019, p. 7). As at November 2020, this proposal was undergoing scoping and drafting, with expected completion in December 2020 (Western Australian Government 2020a).

Native title parties have no right of veto under the Native Title Act, which some participants viewed as a fundamental impediment to effective engagement under the native title framework. For example, FNLRs (sub. DR87, p. 2) said that:

In our opinion the fact that the Right to Negotiate provisions of the [Native Title Act] do not include a veto is at the heart of the unequal bargaining position of native title parties in any commercial negotiation with mineral resource and energy companies.

---

<sup>41</sup> *Centre for Minority Rights Development v Kenya (Judgment)* (African Court on Human and Peoples’ Rights, Comm No 276/2003, 11-25 November 2009), [214] (‘Endorois case’); see also Doyle (2015, pp. 170–171).

<sup>42</sup> *Saramaka People v Suriname* (n 39), [127]; *Endorois case* (n 41), [212]–[215]; *Tsilhqot’in Nation v British Columbia* [2014] 2 SCR 257, [87].

---

Similarly, the National Native Title Council (NNTC) (sub. DR70, p. 4) said that ‘best practice agreement making would also include the right to veto’.

Instead, Australian law generally incorporates FPIC by providing for agreement-making processes under legislation. Some participants raised issues with the degree to which agreement making under the Native Title Act enables native title groups to give their free, prior and informed consent — this issue is discussed further below.

### How do resources companies apply FPIC?

Even when there is no statutory right of veto, some companies choose not to proceed with resources activities unless traditional owners give their consent. For example, under the terms of the Jabiluka Long-Term Care and Maintenance Agreement between the Mirrar people and Energy Resources Australia, mining activity cannot be conducted on the lease without the informed written consent of the Mirrar (ATNS 2020).

More commonly, FPIC is incorporated into resources companies’ practices through the building of respectful relationships, and negotiating with traditional owners with the aim of obtaining consent. Many large resources companies operating in Australia are members of the ICMM, whose position statement on Indigenous peoples and mining includes a commitment to:

Work to obtain the consent of indigenous communities for new projects (and changes to existing projects) that are located on lands traditionally owned by or under customary use of Indigenous Peoples and are likely to have significant adverse impacts on Indigenous Peoples ... (ICMM 2013, p. 4)

BHP (2019b, p. 1), for example, states in its *Indigenous Peoples Policy Statement* that it commits to:

Working to obtain the consent of Indigenous Peoples to BHP activities consistent with the ICMM Position Statement.

Where companies cannot obtain the consent of traditional owners, they may choose not to proceed with proposed developments, or to pursue dispute resolution through the processes provided for in legislation. The ICMM position statement on Indigenous peoples states that:

Where ... consent is not forthcoming despite the best efforts of all parties ... ICMM members will determine whether they ought to remain involved with a project. (ICMM 2013, p. 5)

---

#### FINDING 11.2

Effective engagement with traditional owners about the use of their traditional lands for resources development is guided by the principle of free, prior and informed consent (FPIC). In Australia, traditional owners generally do not have a right of veto, but agreement-making processes are provided for through legislation. Some resources companies choose not to proceed with development unless traditional owners give their consent, but most apply FPIC by building relationships and working with traditional owners to obtain consent.

### FPIC under native title agreement processes

Some participants considered that several features of the future act regime under the Native Title Act acted as impediments to the giving of free, prior and informed consent by native title groups. These were that:

- parties negotiating section 31 agreements (also known as future act agreements — chapter 5) have six months to do so before any party to the negotiation can apply to the National Native Title Tribunal (NNTT) for a determination about whether the act can be done (and, if so, under what conditions), which was considered too short (CLC and NLC, sub. DR79, p. 11)
- the NNTT has rarely determined that a future act cannot be done, which was seen by some as an indication of the likelihood of obtaining such a determination in the future (although, of course, the NNTT determines future act applications on a case-by-case basis) (CLC and NLC, sub. DR79, p. 11, MPI, sub. DR72, p. 9)
- the NNTT is unable to determine a condition that native title parties are entitled to payments calculated with reference to the profits, income or volume of production of the proponent (Native Title Act, s. 38(2)) (ACF, sub. 32, pp. 27–28).

Together, participants considered that these factors placed considerable pressure on native title parties to reach agreement with resources proponents even if they did not fully support the terms of a proposed agreement (ACF, sub. 32, p. 28; CLC and NLC, sub. DR79, p. 11).

One way in which resources companies can alleviate this pressure is through making commitments to reach genuine agreement, and only referring matters to the NNTT as a last resort — for example, when negotiations become deadlocked despite the best efforts of all parties. A relevant consideration here is the requirement to negotiate in good faith (Native Title Act, s. 31(1)(b)), without which the NNTT is unable to make a future act determination (Native Title Act, s. 36(2)). Beyond satisfying good faith requirements, however, a genuine commitment from companies to reaching agreement increases the likelihood of coming to an agreement that native title parties support.

Data from the NNTT (pers. comm., 24 January 2020) suggest that, for the most part, proponents do allow reasonable opportunity for agreements to be reached before applying

---

to the NNTT for a determination. Between 1 July 2016 and 30 June 2019, only about 6 per cent of future act negotiations that were begun and concluded within that timeframe resulted in an application to the NNTT.<sup>43</sup> Further, where applications were lodged, the average time elapsed since the notification date<sup>44</sup> was 15 months — the same as the average time taken to come to a resolution without the involvement of the NNTT.

Where agreement cannot be reached and the NNTT is asked to make a determination, the extent to which traditional owners can give their free, prior and informed consent depends on the processes used by the NNTT in making determinations. However, assessing this would require analysis beyond the scope of this study, including comprehensive examination of the NNTT's previous future act determinations.

### **Other impediments to effective Indigenous agreement making**

The Commission and study participants also identified several other issues that impeded the effectiveness of agreement making with Aboriginal and Torres Strait Islander people. These were that:

- the confidentiality of agreements makes it difficult to assess how the system is working, and to identify and share leading practices
- resourcing and capacity issues within prescribed bodies corporate (PBCs) mean that these organisations cannot operate at their full potential
- ineffective implementation of agreements means that the promises contained within agreements were often not being realised.

#### **The confidentiality of agreements limits knowledge transfer**

As noted in section 11.1, the confidentiality of agreements has limited the degree to which the Commission has been able to assess outcomes and identify leading practice. More broadly, however, opacity limits the ability of governments to assess whether the legislative frameworks and other arrangements (such as funding) that affect agreement making continue to be fit for purpose. It also constrains the ability of agreement parties to share insights on leading practice to improve the quality of agreements.

In 2019, the Minerals Council of Australia (MCA) and NNTC, with support from several academic and industry partners, established a Community of Practice to provide opportunities for networking and discussion among Aboriginal and Torres Strait Islander people, industry, government and academia on best-practice agreement making

---

<sup>43</sup> Excludes negotiations resulting from expedited procedure objections being upheld.

<sup>44</sup> Before a future act is done, the Australian Government must give notice of the act to any relevant PBCs or native title claimants. The notice must specify a notification date, which must be a date by which the Government considers it reasonable that PBCs and native title claimants would have received the notice. Parties have six months from the notification date to negotiate a section 31 agreement before any party is able to apply to the NNTT for a future act determination.



---

(MCA 2019b). While the establishment of this forum is a positive development in the dissemination of knowledge on agreement making, its effectiveness is necessarily limited by the confidential nature of the agreements themselves.

There would be advantages in greater sharing of the content of agreements — greater knowledge about what agreements contain, particularly in relation to implementation provisions, would enhance discussion on leading-practice agreement making and make it easier to identify leading-practice examples. However, the Commission acknowledges the private and commercial nature of agreements and is not advocating requiring them to be made publicly available. Decisions to make agreements public (or sections of them) would need to be driven primarily by traditional owners in collaboration with resources companies and other agreement parties. The Commission encourages traditional owners and resources companies to consider if any aspects of their agreements could be made public, in the interests of enhancing the ability of negotiating parties to improve the quality of future agreements, and of informing possible improvements to the legislative framework.

**FINDING 11.3**

The confidentiality of many agreements between resources companies and Aboriginal and Torres Strait Islander people makes it difficult to assess whether legislative frameworks and other arrangements that affect agreement making are fit for purpose, and whether changes are required. It also limits the capacity for parties to agreements to share insights on leading-practice agreement making to improve the overall quality of agreements. While there would be advantages in making agreements more transparent, decisions to do so should be driven by traditional owners in collaboration with resources companies.

### **Inadequate resourcing of prescribed bodies corporate undermines effective engagement**

The resourcing of PBCs (also known as Registered Native Title Bodies Corporate — RNTBCs) has long been raised as impeding the ability of native title groups to engage effectively with the resources sector and maximise the benefits that can be gained through native title agreements. For example, a 2014 review of the roles and functions of native title organisations for the Department of Prime Minister and Cabinet observed that:

... most RNTBCs struggle with the capacity to meet their regulatory responsibilities and pursue wider community aspirations ... this gap between capacity and aspirations continues to be a source of considerable frustration and distress among native title holders. The limited capacity of RNTBCs seriously constrains their ability to give effect to the Act. (DAE 2014, p. 2)

---

Similarly, the AHRC (2016, p. 128) stated that:

In particular, PBCs have suffered from a lack of ongoing funding certainty for their core functions. ... PBCs are rarely sufficiently resourced to meet the costs of:

- compensation claims over areas that have been excluded from native title determinations due to extinguishment
- litigation to enforce the terms of Indigenous land use agreements
- other negotiations, dispute resolution or litigation, e.g. in relation to membership disputes or future act matters.

Participants to this review also raised the lack of funding of PBCs as an issue (FNLRS, sub. DR87, p. 1; FMG, sub. DR92, p. 36; NNTC, sub. DR70, p. 4; QDNRME, sub. DR95, p. 11; Roy Hill, sub. 7, p. 8).

PBCs are central to the functioning of the native title system, including the making of section 31 agreements and Indigenous land use agreements (ILUAs). They are the primary means by which native title groups organise and represent their native title interests. Where PBCs can harness their political agency, for example by uniting native title holders through a common vision for their country, they increase the likelihood of achieving meaningful outcomes through native title agreements. But this is difficult to accomplish if PBCs struggle to fulfil their basic statutory obligations, let alone perform broader strategic functions.

#### *Government agencies provide some support*

As institutor of the Native Title Act, the Australian Government has primary responsibility for ensuring that organisations established by the Act are adequately resourced and supported to give effect to its provisions. Currently, PBCs, NTRBs and NTSPs are funded by the National Indigenous Australians Agency through the Indigenous Advancement Strategy (IAS).

- NTRBs and NTSPs receive funding via individual program funding agreements to perform their core functions. In 2018-19, the Government provided \$74 million of funding through this scheme (DPMC and AGD 2019, p. 37).
- PBCs receive basic support funding through NTRBs and NTSPs. This funding is designed to meet basic administrative expenses such as ‘retaining a part-time bookkeeper, [assisting] with holding meetings or [assisting] with basic office equipment’ (Australian Government n.d., p. 2). In 2019-20, 121 PBCs received \$9.8 million in total (NIAA, sub. DR68, p. 5).
- PBCs can apply for further capacity-building funding to improve their capacity to generate economic benefits from native title land, including by using this funding to support effective native title agreement making. As at June 2020, a total of \$26.6 million had been provided to 6659 capacity building projects across Australia since the commencement of the program in 2015-16 (NIAA, sub. DR68, p. 5).

---

Other government funding is also available to support the development of native title land, such as through the Land Tenure Reform Pilots program (DPMC and AGD 2019, p. 38). The Office of the Registrar of Indigenous Corporations (ORIC) (sub. DR86, p. 3) also supports PBCs by offering free governance training, publishing fact sheets and policy statements and providing free legal referral and recruitment services.

It is unclear to what extent the IAS is meeting its objectives. An examination of its implementation conducted by the Australian National Audit Office (2017, p. 8) found that:

The performance framework and measures established for the Strategy do not provide sufficient information to make assessments about program performance and progress towards achievement of the program outcomes.

Based on their experiences, the CLC and NLC (sub. DR79, pp. 19–20) considered that it was difficult to access the capacity building funding under the IAS. The NNTC (sub. DR70, p. 4) also raised similar concerns in relation to IAS funding in general.

The National Indigenous Australians Agency is currently in the process of commissioning a comprehensive evaluation of the PBC capacity building funding, which is expected to be completed in 2021.

#### *Resources companies also have a role in supporting PBCs*

While responsibility for funding the effective functioning of the native title system in general falls to the Australian Government, resources companies also have a role in bearing the direct costs of engaging with native title organisations (such as those associated with meetings to negotiate agreements). This is because these costs arise directly from resources companies' need (or desire) to engage with native title organisations, and companies themselves benefit in the form of access to native title land.

Section 60AB of the Native Title Act allows RNTBCs to charge resources companies or other persons fees associated with negotiating native title agreements. In practice, companies often pay 'sitting fees' — remuneration for time, expertise and contribution to the agreement-making process — to Indigenous representatives on negotiating teams, and to members of coordination or implementation committees after agreements are finalised (Limerick et al. 2012, p. 63). Resources companies may also pay for the costs of independent specialist advice required by native title parties (Strelein & Tran 2007, p. 12).

Resources companies may also provide support for activities not directly related to the agreement-making process, such as participation in governance training and education (MCA 2019a, p. 9).

---

#### FINDING 11.4

Prescribed bodies corporate (PBCs) are central to the ability of native title holders to represent their interests when making agreements with resources companies. However, resourcing and capacity constraints mean that many PBCs are unable to carry out this function effectively. Both government and resources companies have a role in resourcing and building the capacity of PBCs.

### Implementation of agreements

Implementation refers to the way that provisions of agreements are translated into action. The implementation of agreements is equally as important as the commitments themselves (if not more important), since agreements can only be said to be successful if their benefits are realised in practice. However, participants to this study considered that agreements were generally poorly implemented. The EDO (sub. 40, p. 24), for example, said that:

The concern is that the implementation of the terms of agreements are not monitored ... meaning that there is a risk the benefits negotiated in ILUAs or right to negotiate processes are not always distributed to the community.

There are many possible reasons for poor implementation, and fault does not usually lie with any one party. Often, during negotiations, much attention is paid to negotiating benefits (particularly the value of financial payments), and attention to implementation is left as an afterthought. The result is that agreements can lack adequate provisions about how they will operate in practice. In addition, both resources companies and Indigenous groups can underestimate the complexity of honouring certain commitments, and there can be inadequate provision for periodic reviews and how the outcomes of reviews will be addressed (Brereton & Everingham 2016, p. 16).

Research has identified several factors that are important to the successful implementation of agreements (Barnes 2013; Brereton and Everingham 2016; Crooke, Harvey and Langton 2006). These include:

- strong resources company leadership and commitment to the agreement
- clearly articulated goals
- effective organisational structures and governance capacity
- sufficient financial and human resources for implementation activities, including for reviews and to respond to reviews.

Greater transparency regarding agreements (discussed above) would also assist with implementation by enabling parties to identify existing implementation provisions and practices that are considered to be effective. In this vein, the MCA and NNTC's Community of Practice (discussed above) offers promise as a mechanism to improve implementation over time.

---

## 11.3 Managing benefits from agreements

This section focuses on the management of financial benefits arising from native title agreements.

### How are benefits managed?

When native title agreements are made between resources proponents and native title groups, various entities are typically set up to receive, hold, manage and distribute benefits. Where the benefits involved are large, as is common in areas such as the Pilbara, an array of entities may be set up within a ‘benefits management structure’. Benefits management structures typically include a charitable trust, a discretionary trust, a professional or Indigenous trustee, one or more Indigenous corporations and a number of decision — or advisory committees (Murray, Fardin and O’Hara 2019). For smaller agreements, funds may be placed into a single trust or Indigenous corporation, which may be registered as a charity (Levin 2016, p. 246; Limerick et al. 2012, pp. 104–105).

### Traditional owner goals in managing benefits

Traditional owner groups are diverse, and their specific goals in applying agreement benefits vary. That said, Murray et al. found that traditional owner goals when managing benefits generally fall under two broad headings:

- building capability to achieve autonomy and self-determination
- pursuing social, economic and cultural development (Murray and Fardin, sub. DR55, attachment, pp. 16–17).

A review of native title trusts in the Pilbara region in 2008 also suggested that traditional owner priorities for the distribution of funds fell into four broad categories, namely:

- social capital and infrastructure
- accumulation for future generations
- distribution to current native title holders
- business and economic opportunities (Strelein & Tran 2007, p. 21).

In pursuing these goals, traditional owners need to balance short-term and long-term priorities. Many traditional owners receiving benefits are economically disadvantaged, and agreement funds can be used to meet pressing needs. In addition, Elders who have often fought hard for recognition of native title have less opportunity to enjoy the benefits of agreements over the long term. For this reason, cash payments are often made directly to Elders upon the establishment of native title trusts (Levin 2016, p. 253).

---

At the same time, funds can be used for the benefit of future generations of traditional owners. In particular, they can be used to enable traditional owner groups to pass on their language and culture to future generations, and to alleviate economic disadvantage over the longer term. The question of how to balance short-term and long-term goals is one faced by many traditional owner groups, and each weighs the costs and benefits of different courses of action in the context of their overall objectives.

### The governance of funds is a key concern for resources companies

Resources companies themselves also have a keen interest in how benefits are used. In large part, this links to companies' social licence to operate (chapter 10) — the reputation of companies could be damaged if there is a perception that funds are not well used, or worse, that they contribute to poor social cohesion within Aboriginal and Torres Strait Islander communities.

As a result, companies often advocate for strong governance arrangements in the management of funds. Governance arrangements can also be important to resources proponents because they are seen to 'aid compliance with international best practice and with anti-corruption legislative regimes around the world' (Murray and Fardin, sub. DR55, attachment, p. 18).

The desire by companies for strong governance arrangements can lead them to negotiate for funds to be held in certain ways, or for decision-making power over how funds are spent. For example, companies can insist on funds (or a portion of them) being held in charitable trusts, which are seen as an attractive vehicle for the management of agreement funds (Levin 2016, pp. 251–252; Strelein and Tran 2007; UWA CMENRL, sub. DR69, attachment, p. 16). Levin (2016, pp. 251–252) notes that resources proponents' affinity for charitable trusts:

... coincides with the mindset that native title payments are analogous to 'goodwill' or 'a social licence to operate' ... which are concepts that have long been embedded in the mindset of the mining companies.

As a result of this, companies may engage in actions that are perceived by Aboriginal and Torres Strait Islander people as paternalistic. Contrasting current practices with early forms of Indigenous engagement in which cash was given to individuals unconditionally and then perceived to be wasted, Mundine and Henderson (2017, p. 26) said that:

Today the preferred model is payments into trusts for the benefit of communities at large and with a focus on preservation of funds. However mining companies often retain control or veto of how funds are used. So in many ways this is a new form of paternalism and reinforces dependency.

---

## Traditional owners must be at the centre of benefits management

The goals of both resources companies and traditional owners in managing agreement benefits may align — for example, both parties may want a portion of the benefits to be set aside for the long term. In other cases, however, resources companies and traditional owners may disagree on how best to hold, manage and use benefits. Where this occurs, the wishes of traditional owners should take precedence over those of resources companies.

Benefits management should be part of overall strategic plans set by traditional owners, where goals and desired outcomes are clearly articulated. Companies, by virtue of their close working relationship with traditional owners, have the opportunity to support traditional owners in making these plans and implementing them, including by strengthening traditional owners' understanding of Western systems of law, governance, business and finance.

Companies can also support traditional owners to identify and respond to capacity constraints — for example, in relation to governance and implementation. Where traditional owners have a need to increase capacity, they may adopt companies' proposals for certain temporary arrangements, with a view to transitioning to full autonomy over the long term. An example of this is the appointment of an independent trustee for trusts within the benefits management structure, with a view to the future appointment of an Indigenous trustee.

## Using charitable trusts to manage agreement funds

As noted above, the use of charitable trusts to hold agreement funds is relatively common. While this may partly be a result of resources companies negotiating for their use, traditional owners can also view charitable trusts as desirable because of the tax concessions associated with being a charity. These include income tax exemptions at the Commonwealth level, the potential for deductible gift recipient status, and various tax concessions at the state and territory level. Murray considered that 'given accumulation tax concessions, [charities are] likely to continue to be very widely used by native title groups' (UWA CMENRL, sub. DR69, attachment, p. 16).

But the use of charitable trusts to manage native title funds has limitations. To maintain registration as a charity with the Australian Charities and Not-for-profits Commission (ACNC), charities must only be involved in activities that are:

- consistent with their charitable purpose (charitable purposes are listed in the *Charities Act 2013* (Cth))
- for the public benefit (ACNC 2014, p. 1) (box 11.6).

The purposes that traditional owners wish to pursue with native title funds — in particular economic development, including commercial activities — do not always clearly satisfy these requirements (discussed below). Thus, charitable trusts may not always be the most appropriate vehicle to manage native title funds, and traditional owners may need to look to alternatives such

---

as Indigenous corporations. The PBC Economic Vehicle Status (PBC EVS) entity proposed by the MCA and NNTC (discussed further below) is one potential way forward.

Another issue with charitable trusts raised by study participants was that, because native title charitable trusts can benefit only relatively small groups of related individuals, it is not clear whether they satisfy the public benefit test. This issue has been addressed at the Commonwealth level through amendments to the Charities Act (box 11.6) — however, Murray considered that it had not been resolved at the state and territory level, where the definition of charity is found in common law rather than statute.

While a sufficient section of the public, at least at the federal level, may be interpreted to countenance a native title claim group, there are limits on the relevant provisions and they do not apply at the state and territory level, such that charitable trusts, to be valid, must meet the more restrictive test at common law. (UWA CMENRL, sub. DR69, attachment, p. 10)

### Box 11.6      **The public benefit test**

In addition to having a charitable purpose, charities registered with the Australian Charities and Not-for-profits Commission (ACNC) must operate for the public benefit. The explanatory memorandum to the Charities Bill 2013 (Parliament of the Commonwealth of Australia 2013, p. 15) explained that there are two aspects to the public benefit test:

- there must be a purpose, the achievement of which is of public benefit
- the benefit from the purpose must be broadly available to a sufficient section of the public.

The second of these does not apply to organisations that receive, manage or hold benefits relating to native title or land rights — such organisations are considered for the public benefit even though their members or beneficiaries may be related to each other (*Charities Act 2013* (Cth), s. 9(2)). The introduction of this provision in the Charities Act resolved longstanding concerns that organisations receiving native title benefits were not able to be charities because members of a family or clan were not obviously ‘sufficient sections of the public’.

In 2013, the ACNC released its *Commissioner’s Interpretation Statement on Indigenous Charities*, which set out its understanding of how the public benefit test applied to Indigenous charities. It clarified that:

- where a charity addresses Indigenous disadvantage by relieving poverty, there is no need to meet the public benefit test
- where a charity addresses Indigenous disadvantage by relieving impotence, there is a presumption of meeting the public benefit test. The contemporary meaning of the term ‘impotence’ was explained as ‘... beyond sickness and disability, the underprivileged, the vulnerable, the dependent and those without family’ (ACNC 2013, p. 2).

It also confirmed that organisations whose membership or beneficiaries were defined in terms of family relationships because they were for native title or traditional owners groups would be considered to be benefitting a sufficient section of the public.

In *Northern Land Council v Commissioner of Taxes* [2002] NTCA 11 [75], the Northern Territory Court of Appeal found that direct assistance provided to Indigenous people by the Northern Land Council satisfied the public benefit test, despite this being the outcome of the Northern Land Council performing its statutory functions.



---

Inability to meet the common law definition of charity would not only jeopardise access to state and territory tax concessions for charities, but would also bring into question their fundamental validity, since charitable trusts are established through state and territory legislation.

However, this does not appear to be a significant issue. For example, the WA Office of the Attorney-General (sub. DR98, p. 1) stated that this issue has not been argued in any of the legal proceedings to which the Attorney-General has been a party, and that the Attorney-General would be satisfied that a trust was charitable if it was intended to benefit a native title group and was otherwise charitable. Further, in *Groote Eylandt Aboriginal Trust Inc & Anor v Deloitte, Touche Tohmatsu & Ors [No 2]*<sup>45</sup>, the Northern Territory Supreme Court considered that the Groote Eylandt Aboriginal Trust was a valid charitable trust. The trust received royalty revenues from two mining companies and described its beneficiaries as ‘all Aboriginal people who are members of the traditional clans of and permanently resident on Groote Eylandt or Bickerton Island and their successor generations’ [13].

In substance, the Trust was designed to benefit the particular section of the public which was thought to have traditional rights and interests in the land affected by the mining operations. It just so happens that those people are the members of groups, described as clans, which have held those interests from time immemorial. [226]

### Can charitable trusts pursue economic development?

The key limitation of using charitable trusts to manage native title funds, as perceived by native title holders, is that funds from charitable trusts are not always clearly allowed to be used for economic development, including commercial activities. For example, Langton (2015, p. 54) said that:

... the situation for most Indigenous parties involved in agreements is that the land-related payments are trapped in the charity and not-for-profit (NFP) sector by legal limitations on directly releasing these funds for commercial activities. ...

The legal definition of ‘charitable purposes’ is the primary limitation to the ways in which funding can be invested. This can pose difficulty for native title arrangements to participate in initiatives of a commercial nature and many community development and capacity building programs.

A salient example is the provision of finance by a charity to an Indigenous business, which may simultaneously address Indigenous disadvantage (UWA CMENRL, sub. DR69, attachment, p. 16). In this context, the key question is whether the activity can be said to satisfy the public benefit test, notwithstanding the private benefits that may accrue to the business involved.

The specific economic activities that charities may undertake is an area of genuine legal ambiguity. Although recent case law has begun to clarify the issue (box 11.7), whether or

---

<sup>45</sup> [2017] NTSC 4.

---

not particular activities can be said to be for the public benefit is highly context specific. Given the breadth of activities that native title holders may wish to undertake, relevant case law is unlikely to exist in all cases and ambiguity is likely to remain.

**Box 11.7      Commercial activities, charitable purposes and the public benefit test**

Case law provides some examples of commercial activities that have been deemed to have a valid charitable purpose and to be for the public benefit. For example, in *Tasmania Electronic Commerce Centre Pty Ltd v Federal Commissioner of Taxation* [2005] FCA 439, Tasmania Electronic Commerce Centre (TECC) was a company limited by shares. It was reliant on funding by the Australian Government, industry and investors. TECC's purpose was to increase the competitiveness of Tasmanian business and industry by raising awareness of e-commerce and IT through a media presence and presentations at industry events, rural towns and primary schools. It also provided targeted funding for IT projects in competitive businesses.

The Court held TECC to be a charitable institution. It found that:

... assistance to business and industry can provide a public benefit of the kind which the law recognises as charitable ...

In a capitalist economy like Australia's, a prosperous and productive private sector generates profits and creates employment which in turn raises incomes which individuals can either spend, creating demand, or save, creating capital for further investment. Either way, people can make a better life for themselves and their families. In a prosperous economy, more money can be raised by taxes to improve education, health and other essential public services. [56, 58]

Further supporting evidence included that Tasmania was viewed as relatively disadvantaged compared to other States due to its declining population, persistently low employment and income levels and distance from markets.

Similarly, in *Commissioner of Taxation v Triton Foundation* [2005] FCA 1319, Triton was a company limited by guarantee, funded by two States and an individual. Triton's main objective was to promote innovation and entrepreneurial activities among the Australian public. It focussed its efforts on providing commercial advice to inventors and access to a panel assessment by experienced volunteers. Its activities included media events, running an innovation competition and supporting a national award program for inventions.

The Federal Court found that the activities of Triton were able to be considered charitable because it promoted commercial activities that had been accepted as charitable in previous cases. These included developing and investing in new ideas with commercial applications. Triton's efforts were also targeted towards the young, with programs in public school education.

The Court also held that Triton provided public benefits because its inventor assistance and guidance was open to anyone. Although the panel assessment was limited to high-performing inventors, the Court held that this was rational due to the resource-intensive nature of the activity. It was also consistent with the organisation's purpose, since it enabled Triton to promote case studies of successful inventors and inventions. However, the Court cautioned that:

If Triton were significantly to change its operations by, for example, charging market rates for most of its services, then it might be liable to lose its charitable status for another period of inquiry under the Act. [38]

---

Native title holders can be reluctant to take risks regarding the charitable status of activities, since failure could result in revocation of their registration as a charity with the ACNC. That said, the ACNC's regulatory approach involves educating and supporting charities to prevent problems and working collaboratively with charities to address concerns, and registration as a charity is only revoked in the most serious cases where charities have significantly and persistently failed to fulfil their obligations (ACNC 2019, pp. 6, 10).

### The ACNC could help provide clarity

For the purposes of registration and compliance, the ACNC can engage in confidential discussions with charities about the commercial activities they wish to undertake. However, the advice given by the ACNC during these discussions is not binding on it, and, as the discussions are confidential, they cannot help other charities gain knowledge on the types of activities that might be permissible.

Greater certainty could be provided to charities if the ACNC could make private rulings about the economic activities that charities wish to undertake, similar to the private rulings made by the Australian Tax Office in relation to taxation matters. Private rulings would be binding on the ACNC, and thus indemnify a charity against regulatory action when the activities it undertakes aligns with those described in the private ruling. The Commission considers that there would be merit in the ACNC having the ability to make private rulings.

In addition, giving the ACNC the ability to publish de-identified summaries of private rulings that contain key facts and considerations taken into account in the ruling would inform other charities which are not the subject of the ruling. Other charities would be able to make judgments about the extent to which their activities and circumstances align with those in the ruling, and assess the likelihood of regulatory action by the ACNC. Over time, an accumulated body of information would be available to inform such judgements.

These changes would help clarify the scope of permissible economic development activities that charities could undertake. However, it would not change the underlying requirement for charities to conduct or support only activities that have a charitable purpose and are for the public benefit. As noted above, charities (including charitable trusts) may not be the most appropriate type of entity with which to manage native title funds to achieve all goals of native title groups.

#### FINDING 11.5

There is legal ambiguity about the scope of permissible economic activities that charities can undertake. Some Indigenous organisations interpret the requirement for charities to operate for a charitable purpose and for the public benefit as limiting their ability to invest money for long-term economic development.

---

#### RECOMMENDATION 11.1

The Australian Government should amend the *Australian Charities and Not-for-profits Commission Act 2012* to give the Australian Charities and Not-for-profits Commission (ACNC) the power and capacity to make private rulings about whether particular activities that a charity wishes to undertake are considered charitable, and to publish de-identified summaries of private rulings.

### The PBC Economic Vehicle Status

To address the issues associated with current benefit management structures, the NNTC, MCA and Professor Ian Murray of the University of Western Australia have been developing a proposal called the PBC EVS (box 11.8). They consider that the proposal is required to achieve the clarity sought in relation to the issues with using charitable trusts, because, among other things:

- inherent uncertainties in charity law mean that guidance provided by the ACNC is limited in clarity
- the ACNC's guidance is not binding on it
- state and territory Attorney-General's Departments, which also regulate charitable trusts, would also need to issue guidance in addition to the ACNC
- individual test cases in the courts would be time consuming and expensive (NNTC 2020a, pp. 26–27).

The Commission's recommendation to allow the ACNC to make binding private rulings (recommendation 11.1) addresses some of these issues.

Beyond clarifying issues with charity law, the PBC EVS model is also intended to address:

- the high administrative costs and the potential for poor governance which arise from the use of complex benefit management structures comprising multiple entities (such as charitable trusts, discretionary trusts and corporations) and involving multiple regulators — this was also highlighted as an issue by ORIC (sub. DR86, p. 4)
- limitations associated with Australian Taxation Office's policies regarding the accumulation of funds by charities, which can limit the ability of native title groups to apply funds for intergenerational benefit (NNTC 2020a, pp. 26–27).

---

## Box 11.8 The PBC EVS proposal

The origins of the PBC EVS lie in an earlier proposal to develop a tax-designated entity known as the Indigenous Community Development Corporation (ICDC). The ICDC was endorsed by the Taxation of Native Title and Traditional Owner Benefits and Governance Working Group in 2013 (Treasury 2013b). The PBC EVS refines the ICDC proposal in light of legislative amendments and other developments since that time, and has been narrowed to apply only to PBCs. (The ICDC was proposed to be applicable to a range of entities, including corporations incorporated under the *Corporations (Aboriginal and Torres Strait Islander) Act 2006* (CATSI Act), companies limited by guarantee under the *Corporations Act 2001*, and trusts).

Details of the PBC EVS proposal are included in the National Native Title Council's submission to the current review of the CATSI Act (NNTC 2020a). In summary, the proposal would allow PBCs to elect to hold Economic Vehicle Status, which would require them to:

- be not-for-profit, with funds held by the PBC to be used for a 'First Nations community development (economic, social and cultural) purpose' (NNTC 2020a, p. 28)
- adhere to a range of additional governance requirements beyond those currently required of CATSI Act corporations — oversight of these arrangements would be provided by the Office of the Registrar of Indigenous Corporations.

In addition, PBC EVS entities would have access to the tax concessions associated with charities. This is intended to address issues with charitable trusts outlined above, and allow PBC EVS entities to undertake a broader range of economic development activities than is currently clearly permitted by charity law.

The authors of the proposal envision that the PBC EVS proposal could be included as part of reform processes associated with the current CATSI Act review.

### Would the PBC EVS proposal achieve its aims?

The PBC EVS proposal has merit to the extent that it provides a clear structure to allow traditional owners to achieve community development goals with less administrative complexity and stronger governance and accountability measures. However, it does not address all the issues related to charity law discussed above, because not all community development activities will be charitable, and hence would be unlikely to be entitled to the tax concessions associated with charities.

With respect to income tax exemptions, for example, the general policy principle for eligibility appears to be that of public benefit (Treasury 2013a, p. 3). Where PBC EVS entities can demonstrate that their activities have a public benefit, they may be eligible to receive the same income tax exemptions as charities. However, where benefits are considered mainly private, income tax exemptions would likely not apply. Whether or not PBC EVS entities are eligible for other charity tax concessions, such as the fringe benefits tax exemption or rebate, would similarly depend on whether they meet the relevant tax policy principles for eligibility.

---

Where only a portion of a PBC EVS entity's activities satisfies the relevant criteria, record keeping may be required to ensure that only those activities enjoy tax concessions. This increased administrative burden may somewhat erode the benefits of the PBC EVS model for some native title groups.

### What about funds already in charitable trusts?

A final feature of the PBC EVS proposal is that it would allow funds already in native title charitable trusts to be rolled into a newly formed PBC EVS. Enabling this would require legislative amendment to state and territory charitable trust Acts, as there is currently no legal mechanism to move funds from charitable trusts into organisations with a different purpose. The ACNC (sub. DR78, p. 3) explained that, currently:

If a charitable trust winds up, the trust property must be applied to the same charitable purpose for which the property was initially held on trust.

However, a more fundamental question is whether funds from charitable trusts *should* be allowed to be transferred into PBC EVS entities. In this respect, several considerations apply.

- Allowing funds to be removed from charitable trusts for community development purposes may be justifiable if funds were originally intended for non-charitable purposes, but were put into charitable trusts because native title groups did not fully understand the implications of doing so, or were pressured to accept the use of charitable trusts by resources companies during negotiations. However, proving the original intention for native title funds would be difficult, if not impossible.
- Funds in charitable trusts enjoy income tax exemptions that have enabled them to accumulate at a faster rate than funds held in non-charitable entities. If these funds were to be removed and used for non-charitable purposes, there is a question about whether income tax that would otherwise have been owed would need to be repaid, and if so, how this amount would be calculated.

If governments were to contemplate allowing funds to be removed from native title charitable trusts for community development purposes, they would need to formulate policy on these issues based on what they consider to be 'fair', rather than on economic principles (which provide no useful guide). The implications for non-Indigenous parties wanting to remove funds from (non-Indigenous) charitable trusts would also need to be considered.

## Protecting native title benefits

Another aspect of the management of native title benefits relates to protections to ensure that benefits flow to their rightful recipients. Two related issues bear discussion:

- the duties of native title applicants towards claim groups and common law holders
- the duties of private agents.

---

## The duties of native title applicants

Before a determination of native title has been made, applicants typically represent native title interests in ILUAs and future act agreements. Reports have surfaced of applicants diverting funds from these agreements for their own benefit, calling into question whether they are sufficiently regulated in performing their roles. For example, the Taxation of Native Title and Traditional Owner Benefits and Governance Working Group said that it was:

... aware of instances where individuals have diverted for their own benefit the proceeds (or significant portions of them) from native title-related ‘future act’ agreements that were intended by the Native Title Act or the terms of an agreement to be enjoyed by an entire community. (Treasury 2013b, p. 17)

The Commission also came across examples where native title applicants used private agents, such as lawyers acting as trustees of native title trusts, as a means of diverting funds for their own benefit. Private agents are discussed in more detail below.

The duties of native title applicants in making agreements are not always clear. While applicants do have some duties under common law, these are not always well defined. And the Native Title Act does not impose any statutory duties on applicants with respect to receiving and managing native title funds. These are longstanding issues which have been raised in various reviews, but which have not been fully resolved.

### *Applicants’ duties under common law*

In *Gebadi (No. 2)*,<sup>46</sup> the Federal Court established that applicants owed certain fiduciary duties towards their claim groups when entering into native title agreements. These were:

- an obligation not to place themselves in a position where their private or personal interests came into conflict with the interests of the members of the claim group
- an obligation not to pursue and secure a personal benefit
- an obligation not to make a profit from their position of trust unless expressly permitted to do so with the informed consent of the claim group
- an obligation not to place themselves in a position where their personal interests or duties conflicted with duties owed to the native title claim group.

This is consistent with the Court’s earlier view in *Mandandanji*<sup>47</sup> that the authorisation of applicants by claim groups under s. 251B of the Native Title Act (to make native title applications and deal with all matters arising in relation to it) ‘had hallmarks of a fiduciary relationship’. While in this case the Court stated its view in principle, it did not set out any specific duties.

---

<sup>46</sup> *Gebadi v Woosup (No.2)* [2017] FCA 1467.

<sup>47</sup> *Weribone on behalf of the Mandandanji People v State of Queensland (No. 2)* [2013] FCA 485.

---

### *A duty towards common law holders?*

*Gebadi (No. 2)* established that applicants have fiduciary duties towards claim groups. However, it did not address the relationship between applicants and common law native title holders (who may not be part of the claim group). Whether or not applicants owe duties towards common law holders depends on whether common law holders, rather than claim groups, are considered to be the true owners of native title funds. The Native Title Act does not explicitly confer ownership of native title funds on either claim groups or common law native title holders.

*Mandandanji* considered that common law holders were the true owners of funds arising from native title agreements. The Court said that:

It can hardly have been the intention of the Parliament that persons who were simply claimants be able to use their mere and contestable status to enrich themselves to a substantive and permanent extent at the expense of the true native title holders. [45]

As such, it suggested that applicants may have fiduciary duties towards common law holders, in addition to claim groups. However, it did not set out what these duties might be. Ambiguity therefore remains as to the specific nature of the relationship between applicants and common law native title holders, and the duties owed by applicants towards this group.

### *Statutory duties on native title applicants*

There have been longstanding calls for the Native Title Act to impose statutory duties relating to agreement making on native title applicants, including by clarifying and incorporating the outcomes of case law. For example:

- the Taxation of Native Title and Traditional Owner Benefits and Governance Working Group recommended that the Government take urgent steps to amend the Native Title Act to clarify that native title holders are the beneficial owner of funds generated by native title agreements, and that applicants are in a fiduciary relationship with native title holders (Treasury 2013b, p. 6)
- the Forrest Review of Indigenous Training and Employment, which considered how to empower Indigenous people in remote communities to end disparity with non-Indigenous people, supported the recommendation of the Taxation of Native Title and Traditional Owner Benefits and Governance Working Group (Forrest 2014, p. 60)
- the 2014 *Review of the Roles and Functions of Native Title Organisations* (DAE 2014, pp. 40, 44) supported proposals to clarify, through amendments to the Native Title Act, any fiduciary duties of applicants and claim groups towards native title holding groups. The report noted broad agreement among submissions to the review that such obligations should exist
- the 2015 review of the Native Title Act by the Australian Law Reform Commission (2015, p. 32) recommended that the Act be amended to provide that a member of the applicant must not obtain an advantage or benefit at the expense of common law native title holders.



---

In essence, these reviews favoured duties on applicants towards common law holders, rather than merely claim groups (although the 2014 *Review of the Roles and Functions of Native Title Organisations* also sought clarification on the relationship between *claim groups* and native title holders). The Australian Law Reform Commission (2015, p. 316) explained that it favoured a duty on applicants towards common law holders rather than claim groups, because:

... it is their interests that are at risk of being harmed by an applicant that acts inappropriately ... a person who is in the claim group, but who does not in fact hold native title rights and interests at common law, does not have any interests to be protected by a statutory duty.

But duties towards common law native title holders may be more difficult to define than those towards claim groups. Members of claim groups (at a certain point in time) are relatively easy to identify, whereas common law holders are not identified until the Court determines that native title exists, which may be after an agreement is made. Moreover, native title holding groups generally exist in perpetuity, which could require applicants to consider the interests of individuals who are not yet born at the time an agreement is made or funds are received.

The Native Title Legislation Amendment Bill 2020 (Cth) includes a provision that clarifies that applicants' duties towards their claim group at common law apply in the context of the Native Title Act. This would make it clear that the result in *Gebadi (No. 2)* — that applicants owe fiduciary duties towards their claim group — applies to all applicants entering agreements, which may dissuade some who may otherwise be tempted to act purely in their own interests. However, it does not clarify the suggestion in *Mandandanji* that applicants may also owe fiduciary duties towards common law native title holders (which implies that these groups are the beneficial owners of funds), or define the nature of these duties. The Commission considers that, while clarification of this issue may be achieved through the courts over time, a review is likely to be more expeditious.

#### FINDING 11.6

Proposed amendments to the *Native Title Act 1993* (Cth) make it clear that native title applicants owe fiduciary duties to their claim group when entering into native title agreements. However, they would not address questions of whether funds arising from native title agreements entered into before a native title determination belong to the claim group or common law native title holders, and whether applicants and/or claim groups have any duties towards this group.

#### RECOMMENDATION 11.2

The Australian Government should review whether native title claim groups or common law holders are entitled to funds arising from native title agreements made before a native title determination, and, if common law holders are considered to be entitled to these funds, whether applicants and/or claim groups have any duties towards them in receiving and managing funds for their benefit.

---

## The duties of private agents

Concerns have also surfaced of private agents (such as legal practitioners) acting on behalf of native title groups and misusing native title funds, either for their own benefit, or for the benefit of certain members of the applicant or claim group at the expense of others (ALRC 2015, p. 312; QSNTS 2014).

The potential for this to occur appears to stem, at least in part, from the fact that private agents do not have the same obligations as NTRBs and NTSPs, which are required to ‘consult with, and have regard to the interests of, any registered native title bodies corporate, native title holders or persons who may hold native title who are affected by the matter’ (Native Title Act, s. 203BC). Private agents in some cases appear to consult only with their client — that is, the applicant (or portion thereof) engaging their services — rather than all those who may be affected by their action (O’Gorman 2013, p. 19).

Private agents offering native title services should presumably be aware of the representative structures within the native title system — namely that applicants are selected as a group to represent the interests of a claim group, and that claim groups do not necessarily encompass all common law native title holders. Thus, it should be obvious that good practice would involve ensuring that all applicants (rather than only a subset thereof) support the private agent’s actions, that applicants’ instructions have the support of their claim groups, and that private agents’ actions do not harm the interests of common law holders (although, as noted in the discussion above, the legal relationship between applicants or claim groups and common law holders remains unresolved). The lack of requirements on private agents to consider claim groups’ and common law holders’ interests, in contrast to requirements on NTRBs and NTSPs, thus appear to allow private agents to avoid accountability for their actions.

Roy Hill (sub. DR60, p. 5) and the MPI (sub. DR72, p. 13) supported private agents having statutory obligations to act in the interests of the whole native title group.

### RECOMMENDATION 11.3

The Australian Government should amend the *Native Title Act 1993* (Cth) to impose statutory obligations on private agents representing native title parties that are equivalent to those imposed on native title representative bodies and native title service providers. In particular, private agents should be required to have regard to the interests of the broader native title group affected by their actions, rather than just the native title applicant or claim group engaging their services.

---

## 12 Improving regulator governance, conduct and performance

### Key points

- Broader application of leading-practice regulatory foundations and approaches would facilitate investment and activity in the resources sector and deliver more robust and transparent regulated outcomes. Many of the identified leading practices could be implemented reasonably quickly and help support the COVID-19 recovery, as well as provide a strong platform for further reform.
- Maintaining leading-practice regulatory systems requires ongoing effort and innovation. There would be merit in Resources Ministers establishing a forum where regulators involved in the resources sector periodically meet to discuss leading regulatory practices.
- Elected governments have ultimate responsibility for establishing the pre-conditions for robust regulatory systems. Without them, reforms elsewhere in the system will be less likely to succeed. These pre-conditions include:
  - establishing clear regulatory objectives and providing unambiguous guidance to regulators on governments' expectations of them in pursuing these objectives, complemented by regular independent review and evaluation to maintain fit-for-purpose regulatory systems
  - ensuring regulators are funded to implement leading-practice regulation, and considering the potential role for greater use of cost recovery to achieve this
  - institutional and governance arrangements that hold regulators accountable for their decisions and performance, and foster trust in the system.
- Regulators face capability challenges and can lack transparency, which diminishes the quality of their decisions, imposes unnecessary costs and risks undermining public confidence in regulatory efforts. Leading-practice improvements include:
  - developing staff expertise through training to enhance technical skills, and greater knowledge sharing between agencies and knowledge transfer from industry (such as through secondments and site visits)
  - regulators' senior management fostering a culture which emphasises ongoing capability development. Strategies include appointing a regulatory champion within an agency, rewarding staff performance and engaging with broader networks
  - adopting a more strategic approach to information use overall, and applying data and technology to improve regulator efficiency and communication with industry and the broader community
  - building public understanding of regulatory processes, including through sharing accessible information about general regulator functions and specific project details, and proactive regulator engagement with communities.

---

This report has highlighted a range of issues that impede investment and robust regulatory outcomes in Australia’s resources sector. Many of these issues cut across different aspects of resources sector regulation, and have been raised previously by the Commission and others.

Enduring improvement requires the foundations for a sound regulatory system to be in place, and this ultimately is the responsibility of elected governments. Necessary foundations include clear objectives, adequately resourced institutions and effective governance and accountability arrangements. There are also opportunities for improving the performance of regulators themselves, including through capability development, better use of data and technology, and more information sharing and community engagement.

These issues and a set of leading practices and recommendations that address them are discussed in this chapter.

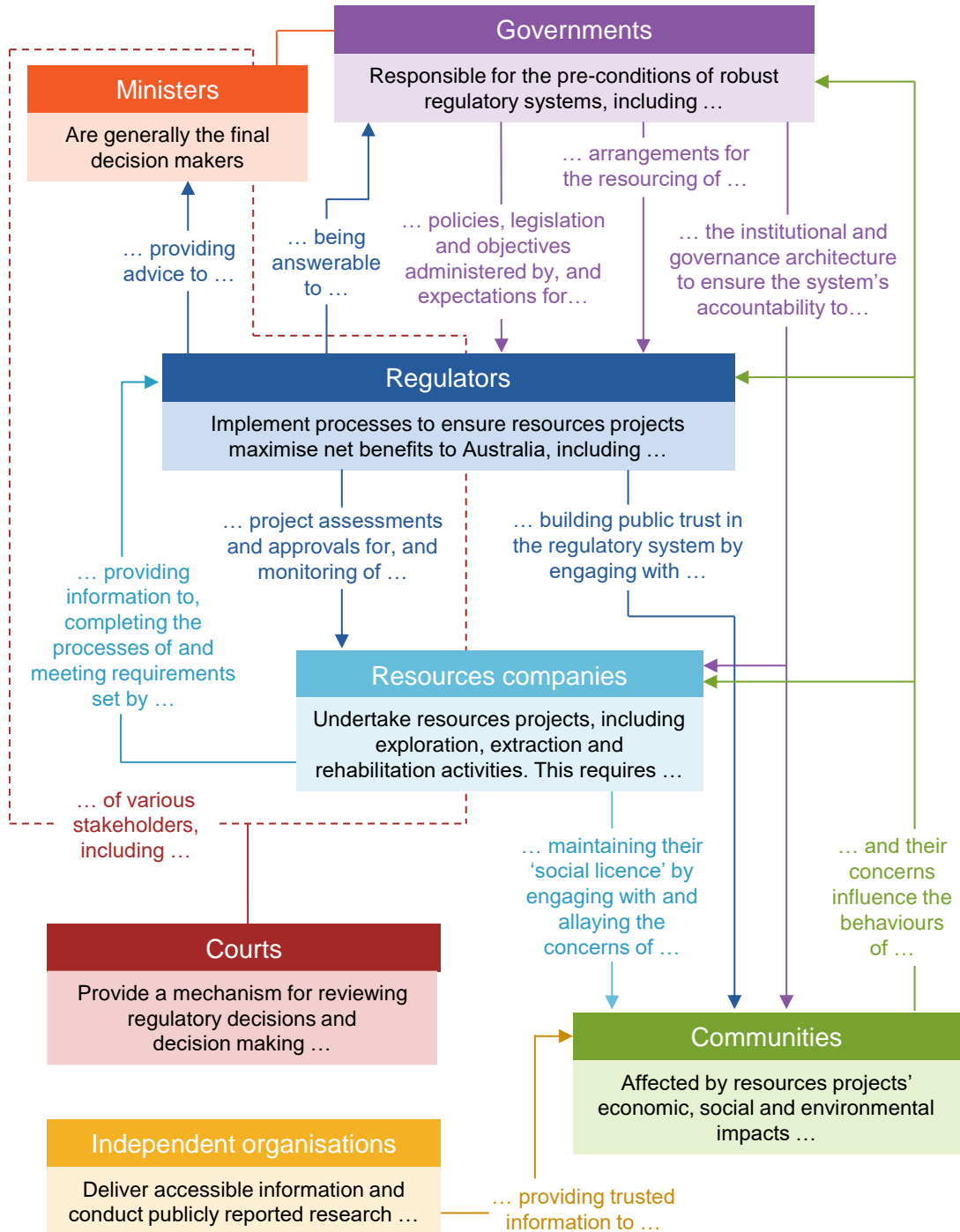
## **12.1 Governments are responsible for the foundations of robust regulatory systems**

### **Pre-conditions for leading-practice regulation need strengthening**

The pre-conditions for leading-practice regulatory systems ultimately rest with elected officials. Governments set policies and related regulatory objectives, establish the institutional and governance architecture, set expectations of regulators, provide or make arrangements for the resourcing of regulators and are often the final decision makers (figure 12.1).

In response to many previous reviews, reforms of one type or another have recently been introduced or are being progressed in every jurisdiction (box 12.1).

**Figure 12.1 Roles and responsibilities in the resources regulatory system**  
 Governments' pivotal role in setting pre-conditions for the regulatory system



---

## Box 12.1 Resources regulation has been an active reform area

Jurisdictions have recently introduced or are progressing reforms in many areas of regulatory effort. Selected examples include:

- Amendments to the *Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009* (Cth) to improve consultation and transparency requirements for offshore petroleum activities. And the Australian Government's Deregulation Taskforce has resulted in a partnership with Western Australia to develop an online portal that will enable project proponents to apply for Western Australian and Commonwealth environmental approvals via a single application, and track its progress. A database of biodiversity studies will also be established.
- New South Wales has developed a Minerals Strategy with initiatives including a new titles management system to increase efficiency, transparency and accountability. Other reforms include a more flexible approach to offsets and improved compliance and reporting requirements for rehabilitation.
- Victoria has amended its *Mineral Resources (Sustainable Development) Act 1990* to support a transition to risk-based work plans and establish a Mine Land Rehabilitation Authority. And the *Environment Protection Amendment Act 2018* is due to take effect from 1 July 2021 with a focus on risk-based regulatory oversight and strengthened compliance and enforcement powers.
- Queensland has introduced reforms to improve site rehabilitation and financial assurance outcomes, as well as operational policies and guidance to provide greater detail on legislative requirements. A risk-based approach to environmental regulation is being implemented.
- South Australia's updated *Mining Act 1971* includes, among other changes, a commitment to increased transparency — all inputs to government decision making will now be made public. And a regular review and amendment process will test whether regulation remains fit-for-purpose.
- Western Australia has a commitment to monitoring, reporting and improving the performance of the resources regulator and reforms to regulation are being driven through a Streamline WA program. Resources-related environmental approvals are the first key area of reform.
- Tasmania has amended its *Mineral Resources Development Act 1995* with the aim of clarifying the Act's intent, removing duplication and streamlining processes.
- Reforms to the Northern Territory's environmental protection system focus environmental assessment on projects' significant impacts and increase transparency.

Some jurisdictions are also intending to fast track regulatory reforms applicable to the resources sector as part of the COVID-19 economic recovery. For example, Western Australia will amend its resources regulations to reduce timeframes for assessing exploration applications (Western Australian Government 2020e, p. 33).

Notwithstanding these measures, interested parties have continued to identify scope for improvement. Frequent and/or abrupt changes to government objectives, a lack of consistent long-term policy direction and inconsistent application of existing policies can increase investors' perception of regulatory risk and impede investment (chapter 9). Some participants have also raised concerns that regulatory objectives are not sufficiently clear, and in some cases are inconsistent (box 12.2).

---

## Box 12.2 Participants' views on the clarity of regulatory objectives

A number of participants raised concerns that regulatory objectives in the resources sector are not sufficiently clear, and in some cases are inconsistent. For example, Peabody Australia Coal (sub. 33, p. 4) commented that:

When regulatory objectives are not clearly defined from the outset, regulators and independent panels are left to interpret requirements inconsistently and potentially change scope and expectations for the regulatory entity.

Chandler (sub. 19, p. 3) noted that:

This is not assisted by [Australia's] economic policy objectives for its natural resources like petroleum being cast in broad terms such as 'increasing national prosperity', or 'giving an appropriate return to the community'. The lack of precision in these expressions and the lack of objectives in the system have been subject to criticism going back to at least 2000 ...

The MCA (sub. 11, p. 11) provided an example of the water trigger.

The regulatory outcomes sought by the trigger — to improve environmental outcomes and enhance community confidence — were poorly defined, being broad and difficult to measure.

Many participants have also raised concerns that a number of regulators face resource constraints, limiting the staff they can allocate to various aspects of the regulatory process. In some jurisdictions, inadequate funding is a consequence of budget cuts and efficiency dividends introduced by governments over a number of years; in others, staffing has not increased commensurately with workloads.

- The number of staff working on assessments relating to Parts 7–10 of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) at the Australian Department of Agriculture, Water and the Environment (DAWE) declined from 119.1 full-time equivalent staff in August 2012 to 55.3 in February 2019 (unpublished data from DAWE).
  - To address this, the 2019-20 Mid-year Economic and Fiscal Outlook provided \$25 million to the department over two years from 2019-20, to enable it to 'work through the backlog of environmental approval applications' (Australian Government 2019, p. 216) and reduce unnecessary delays in environmental assessments. This has supported a significant increase in staffing for assessments. The department hired more than 100 additional staff in 2020 to assist with reducing approval timelines, and as at June 2020, there were 126 staff working directly on assessments relating to Parts 7–10 of the EPBC Act (unpublished data from DAWE). To continue to improve the timeliness of environmental assessments (including reduced timeframes for 15 major infrastructure and resources projects identified as priorities), the 2020-21 Budget has allocated a further \$21.2 million to DAWE over two years from 2020-21 (Australian Government 2020, p. 51).
- The Victorian Auditor-General's Office noted that a lack of staffing is a significant impediment to the Victorian regulator administering its rehabilitation responsibilities, and that staffing has not increased despite an increase in workload. It found that only one staff member is responsible for rehabilitation liability assessments, and that the regulator

---

requires an ‘additional 25.1 full-time equivalents ... to address resourcing gaps in regulating rehabilitation’ (VAGO 2020, p. 11).

- A range of submissions highlighted that resourcing constraints are affecting regulators’ ability to make timely decisions (for example, Woodside Energy Ltd, sub. 18, p. 9; Rio Tinto, sub. 26, p. 6; ACF, sub. 32, p. 9). In particular, Rio Tinto (sub. 26, p. 10) emphasised the importance of ‘ensur[ing] policy is aligned with sufficient resourcing within government’.

More broadly, elected officials play a significant role in creating and supporting a regulatory system that is transparent, follows due process and draws on evidence and analysis that is robust and publicly available (Banks 2009). Failure to do this undermines the regulatory process, detracts from accountability and can damage confidence in the overall regulatory system. Governments should have transparent relationships with regulators, to ensure that elected officials are not able to unduly influence regulated outcomes in opaque ways.

Ultimately, decisions about resources projects come down to the judgment of elected officials (or their delegates) and the way that they weigh up different considerations. This is an important part of a democratic system. However, over the course of this study, the Commission has heard examples of complex and protracted regulatory processes being used for political objectives. In some cases, regulators may be pressured to alter their regulatory approach; for example, to go beyond standard requirements, leading to drawn-out assessment and approval processes for controversial projects. In others, there may be pressure to expedite approval.

For example, CCAA (sub. 36, p. 7) described the process that one proponent, Boral, went through to receive an operating permit for a new quarry on the Gold Coast, commenting that the company:

... had an [Environmental Impact Statement] approved in 2013 by the then Queensland Coordinator-General and Deputy Premier and Minister for State Development and Trade. ... Further approvals were subsequently received from the Federal Environment Minister under the Environmental Protection and Biodiversity Conservation Act (EPBC) and the Queensland Department of Environment & Heritage in 2014. These approvals then led Boral to submit a formal development application with the Gold Coast City Council. In July 2014, the Council rejected the development application, despite Council planning staff recommending its approval.

Further, regarding the EPBC Act, the ACF (sub. 32, p. 14) noted ‘the potential for conflicts of interest in relation to the independent assessment of projects and avenues of direct political interference in regulatory decisions’. The Australian National Audit Office’s (ANAO’s) performance audit of DAWE’s administration of the EPBC Act reported that ‘conflicts of interest [in the department] are not managed’ (ANAO 2020, p. 29), and found no evidence that identified risks relating to potential conflicts had been addressed by DAWE over recent years.



---

This study has highlighted several specific examples of ways in which the political context can adversely affect regulatory processes and investment, including:

- governments making changes to policy in response to concerns raised by industry or the community but without fully assessing the costs and benefits. For example, chapter 4 outlines instances where bans and moratoria have been imposed on unconventional gas projects without comprehensive consideration of the costs and benefits
- regulatory risk associated with uncertainty in long-term policy direction. For example, chapter 9 highlights how uncertainty and inconsistency in Australian and State Government policies on energy supply and climate change can act as an impediment to resources investment.

**FINDING 12.1**

Many of the regulatory issues presented to the Commission through the course of this study have been examined previously. Implementing enduring improvement requires that governments ensure the pre-conditions for leading-practice regulatory systems are in place; in particular, clear regulatory objectives, adequately resourced institutions and effective governance and accountability arrangements.

## **Governments must set clear regulatory objectives**

Objectives can be set out in the relevant legislation, or documents that support legislation, such as explanatory memoranda and second reading speeches. However, the nature of the regulatory system, comprising a range of individual legislative instruments, can make it difficult to give a broad sense of the government's objectives. In such cases, governments can look to other vehicles, such as policy statements and white and green paper processes, to articulate their objectives clearly. The Australian Government's National Resources Statement — which is underpinned by the Resources 2030 Taskforce Report — is one example of this latter type of policy process (DIIS 2019a).

In addition, a clear understanding of governments' expectations, including the relative priority and weighting that regulators should give to different (sometimes competing) objectives, assists regulators to implement regulation effectively and consistently. Well-defined government objectives can also enable the identification and resolution of inconsistencies and/or duplication in the regulatory processes of different agencies and jurisdictions (chapter 6).

A Ministerial Statement of Expectations can clarify how a government expects a regulator will operate (including the appetite for risk) and how performance against these expectations will be measured. Such a statement is important for aligning regulator incentives with the policy objectives of governments and, in particular, reducing 'grey' areas and ambiguity that create scope for inconsistent decision making and excessive risk aversion. In essence, clear

---

statements of expectations both empower and authorise regulators to make decisions and make them more accountable. The Commonwealth Treasury (nd) has noted that:

Through issuing a Statement of Expectations, Ministers are able to provide greater clarity about government policies and objectives relevant to a statutory authority, including the policies and priorities it is expected to observe in conducting its operations.

Some jurisdictions have adopted this approach to provide guidance to regulators in the resources sector and related areas (box 12.3).

### **Box 12.3      Examples of Statements of Expectations**

In Victoria, the Minister for Resources issued a Statement of Expectations for Earth Resources Regulation over the period 2018–20 (Minister for Resources, Tim Pallas, MP 2018). The Statement sets out 14 specific expectations across several areas where there are opportunities for Earth Resources Regulation to improve regulatory practice: streamlining approvals pathways; developing guidance, processes and procedures; staff training; and information and communications technology systems. Expectations have been assigned target completion dates to improve accountability, and the Minister also specified that progress against performance targets must be published in standard annual reporting.

The Commonwealth Minister's Statement of Expectations for the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA), released in October 2019, sets out how the agency is expected to exercise its legislated functions by regulating petroleum activities in a manner that reflects international leading practice (NOPSEMA 2019a, p. 1; chapter 6). In addition to a set of guiding principles, the Statement includes specific expectations on NOPSEMA's regulatory activities in relation to providing effective and efficient regulation; regulatory change; stakeholder engagement, consultation and transparency; reducing regulatory burden; decommissioning; meeting future industry challenges; and operational matters.

In New South Wales, the Minister for Planning issued a Statement of Expectations for the Independent Planning Commission (IPC) over the period May 2020–June 2021 (Minister for Planning and Public Spaces 2020). The document describes the IPC's objectives, functions and roles, and outlines the Minister's expectations on the timeframes that should be met for various types of planning decisions — including state-significant developments, gateway and rezoning reviews, and mining and petroleum gateway certificates. The IPC is required to report on these performance indicators in its annual report.

#### **LEADING PRACTICE 12.1**

Statements of Expectations from Ministers to regulators are an effective way for governments to clearly set out their objectives for the regulatory system. Examples include the Statements to Earth Resources Regulation in Victoria, the National Offshore Petroleum Safety and Environmental Management Authority at the Commonwealth level, and the Independent Planning Commission in New South Wales.

---

## Periodic independent reviews are critical

Periodic independent review and evaluation of the regulatory framework, objectives and performance are key features of a leading-practice regulatory system (chapter 3). The Independent Review of the NSW Regulatory Policy Framework, for example, highlighted a ‘life cycle’ and ‘whole of system’ approach for developing and managing regulation, as is used in Canada and New Zealand, to assist in maintaining fit-for-purpose regulatory frameworks over time. In particular, the Review (Greiner, McCluskey and Stewart-Weeks 2017, p. 20) stated that:

Regulatory stewardship requires government to treat regulation as they would any public service or public asset. ... The duty to persistently manage regulation over its whole lifecycle is a defining characteristic of stewardship.

Managing the stock and flow of regulation requires active monitoring on a continuous basis under regulatory stewardship to ensure that they produce the outcomes required.

As noted earlier, all jurisdictions have recently undertaken or are progressing reforms of their regulatory frameworks. Reviews are a key part of this process. The ANAO (2020, p. 70) highlighted that where government policies or regulatory approaches have changed over time, ‘periodic review and evaluation of these policies is necessary to determine if they are effective in achieving their aims’.

- Victoria’s *Environment Protection Amendment Act 2018* — which is due to take effect from 1 July 2021 and focuses on risk-based regulatory oversight — is based on recommendations from an inquiry into its Environmental Protection Authority (EPA Inquiry Ministerial Advisory Committee 2016). The commencement of the new Act has been delayed by one year to enable the Victorian Government to focus on its COVID-19 response (EPA Vic 2020).
- The National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) is subject to an ‘independent operational review of its regulatory performance and its performance as the sole environment regulator for offshore petroleum activities in Commonwealth waters’ every five years (NOPSEMA 2019c, p. 4). The 2020 review of NOPSEMA’s operations is currently underway (DISER 2020d).
- The ANAO published its audit of DAWE’s effectiveness in administering referrals, assessments and approvals of controlled actions under the EPBC Act in June 2020, having previously examined the department’s performance in this area in 2003. The audit reported that DAWE’s administration of the EPBC Act is not effective across all elements of the regulatory process, including in undertaking referrals and assessments, setting appropriate conditions for approvals, and measuring its performance in relation to the Act’s objectives (ANAO 2020). The findings from the ANAO’s performance audit are discussed in further detail in chapters 6 and 7.

There are many institutions that are well placed to undertake reviews and facilitate better regulation, and more generally, jurisdictions have pursued institutional change to improve

---

oversight of the regulatory system. For example, several jurisdictions have established offices akin to the Commonwealth Office of Best Practice Regulation and formed state-specific Productivity Commissions (in New South Wales in 2018, Queensland in 2015 and South Australia in 2018). The Victorian Government has appointed a Better Regulation and Red Tape Commissioner. And jurisdictions have drawn upon Auditor-General reporting to inform change. Further, jurisdictions have undertaken a range of broader initiatives to assess the prevalence of redundant and duplicative regulation, including through the Australian Government's Deregulation Taskforce, the Streamline WA initiative and numerous Productivity Commission reviews (PC 2011b, 2012, 2013a; Treasury 2019; Western Australian Government 2020d).

---

#### LEADING PRACTICE 12.2

Regular independent review and evaluation of regulatory frameworks, objectives and performance drive continuous improvement. Victoria, for example, following an inquiry into its Environmental Protection Authority, is clarifying the Authority's objectives, principles and functions and developing a legislative framework that embeds a risk-based regulatory approach. The Independent Review of the New South Wales Regulatory Policy Framework has highlighted that a 'life cycle' approach for managing regulation over time assists in maintaining fit-for-purpose regulatory frameworks.

---

## Regulators need to be appropriately resourced

Governments, regulators and resources companies all have an interest in ensuring that regulators receive appropriate funding. Ultimately, however, it is governments that are responsible for funding their regulators, whether through budgetary appropriations or in setting cost recovery parameters. Regulators cannot be expected to process higher volumes of, and more complex, applications under time constraints when budgets and staffing levels have been reduced. Digital technologies have the potential to expedite processing times, although these technologies typically require upfront investment in information systems (discussed below).

Risk- and outcomes-based approaches to regulation were identified as leading practice in chapter 6. Their effective implementation relies on proficient regulators and hence adequate funding.

Acknowledging government budget constraints, there may be scope for some regulators to adopt greater cost recovery (chapter 3). If implemented appropriately, cost recovery can allow regulators to process applications more efficiently and improve the delivery of other services, such as guidance materials. Directly recovering these costs from industry also recognises that there are private benefits that accrue to resources companies from the faster processing of applications. An additional benefit for governments from more efficient application processes is the potential for earlier access to royalty and tax revenue streams.

---

For example, NOPSEMA operates with full cost recovery for its activities through levies and fees collected from industry (NOPSEMA 2018a, p. 14). These revenues accrue to the agency rather than going into consolidated revenue, meaning NOPSEMA is not subject to the same budgetary pressures as other agencies. When the workflow increases, NOPSEMA's revenue also increases and the agency can take on additional staff to meet demand. The National Offshore Petroleum Titles Administrator also fully cost recovers, while reporting strong stakeholder satisfaction (NOPTA 2019, p. 1). And South Australia's Department for Energy and Mining (SA DEM) shares cost-recovered funding to assist agencies with maintaining resourcing requirements proportional to anticipated workloads from SA DEM (SA DEM, pers. comm., 5 March 2020).

Different agencies are bound by different rules regarding how their cost recovery revenues may be spent. These rules may constrain or enhance regulators' ability to use these funds to attract staff with required expertise and scale staff numbers up or down in line with workloads.

Industry stakeholders have highlighted that poorly designed or implemented cost recovery regimes can lead to additional financial burdens on resources companies without necessarily improving the capacity of regulators. One such example was highlighted by the NSWMC (sub. DR83, p. 18).

The NSW Mining and Petroleum Administrative Levy was introduced in 2012 without any industry consultation ... to provide supplementary funding to deliver improved regulation ... levy revenue has increased from \$13 million in 2012 to \$31 million per annum. And rather than providing supplementary funding as intended, it now appears to be the primary funding mechanism for the regulators of exploration and mining in NSW.

In the industry's view, the significant amounts of industry funding have not delivered anywhere near corresponding improvements in the regulatory and administrative framework, while details around levy expenditure have been opaque.

At the same time, participants to this study acknowledged that there may be legitimate opportunities for governments to consider cost recovery, in order to link adequate funding to service delivery (MCA, sub. DR97, p. 15; NSWMC, sub. DR83, p. 18; QRC, sub. DR81, p. 32). SACOME (sub. 37, p. 11) commented that 'a fee for service arrangement is supported where it can reduce the time associated with securing regulatory approvals'.

Any government assessment of the scope to enhance the role of cost recovery should be done in consultation with industry to ensure that potential cost recovery models would lead to demonstrably improved regulatory outcomes. Study participants suggested that this consultation should include clearly articulating the purpose of cost recovery levies, as well as explaining how regulatory processes and service delivery would be directly improved with the funds (NSWMC, sub. DR83, p. 18; QRC, sub. DR81, p. 33).

In addition, a robust cost recovery framework requires transparency and accountability measures, so that stakeholders can be confident that the collected funds are being used effectively to improve regulatory outcomes. For example, NOPSEMA (2020a) publishes

---

annual statements on the cost effectiveness of its operations. Greater transparency can also assist in reducing perceptions of regulatory capture that may arise from the interpretation that resources companies are directly paying for the costs of administering regulation. The QRC (sub. DR81, p. 33) highlighted that ‘cost recovery should not, nor be seen to, compromise the objectivity of decision making by the assessor’.

While appropriate funding for agencies is a necessary condition for a leading-practice regulatory system, it is not a sufficient one. Other factors must also be in place for regulators to adopt leading practice, such as having a strong regulatory culture — discussed below.

RECOMMENDATION 12.1

Governments in each jurisdiction should assess:

- whether regulators of resources-sector activity are appropriately funded to enable timely processing of applications and effective adoption of a risk-based regulatory system
- opportunities for enhancing regulators’ cost recovery processes, in consultation with industry stakeholders about potential cost recovery models and their impacts on regulatory outcomes, and with the appropriate accountability measures in place.

## **Governance and institutional arrangements that promote accountability and public trust**

Perceptions of undue political influence in regulatory decisions, or interference by other vested interests, can undermine public confidence in the regulatory system (as discussed above). As a result, strong governance and institutional arrangements that minimise the risk of undue influence, and hold regulators accountable for their activities and decisions, are vital for confidence in the system. Institutional separation between policy-making government departments and regulatory agencies is one such arrangement — although other elements of regulator governance remain important.

### **Some jurisdictions have independent regulators**

Governments establish the institutional arrangements that underpin resources sector policy and regulatory functions in their jurisdictions, and this includes whether a particular function sits within government (that is, whether it is part of a government department that is subject to ministerial direction) or is independent. Institutional arrangements may also vary based on which functions are administered independently — for example, there could be complete separation of regulatory and policy functions, or it may be that only some regulatory activities are undertaken independently.

A number of jurisdictions have separated regulatory and policy responsibilities relating to resources activities. For example, in Western Australia, the Northern Territory, South

---

Australia and Victoria, the Environment Protection Authority (EPA) is independent — it is not subject to the direction of the Minister. In fact, the recent review of EPA Victoria (EPA Inquiry Ministerial Advisory Committee 2016, p. xiv) commented that:

We recommend the EPA play a greater role in regulating the mining sector. ... This will also assist in addressing concerns about the potential conflict of interest of having the primary mining regulator — Earth Resources Regulation — in the same department that seeks to develop the industry.

NOPSEMA (2020b) was established as an independent statutory regulator of the offshore oil and gas sector, ‘to ensure that decisions ... are made independently of economic, commercial and political factors and the workings of government’. And in New South Wales, the Independent Planning Commission (IPC) is the independent planning decision maker on state-significant developments, including resources projects.

However, in some jurisdictions, regulatory processes are conducted within the broader policy department. For example, environmental assessments and compliance related to the EPBC Act are primarily undertaken by DAWE. In Queensland, environmental regulation is administered by the Department of Environment and Science (Qld DES). And the National Offshore Petroleum Titles Administrator remains part of the Department of Industry, Science, Energy and Resources.

### Independence can reduce political interference and improve trust

Establishing and operating an independent regulator offers a number of advantages. The Commission has previously commented that institutional independence separating regulatory and policy functions is desirable because it can ‘limit opportunities for “bureaucratic drift” away from the legislative mandate, improving credibility, stability and consistency in regulatory decisions’ (PC 2009, p. 232). It can also reduce the scope for, and perceptions of, political interference in regulatory decision making — for example, a recent review of the NSW IPC found that it ‘strengthens the planning system by minimising the risk of corruption or undue political influence’ (NSW PC 2019, p. 1).

The Commission (2013a, p. 169) has formerly recommended that:

Where not already the case, the Australian and State and Territory Governments should institutionally separate regulatory assessment and enforcement functions from environmental policy functions, provided that the expected benefits exceed the costs.

Several participants in this study argued that establishing an independent national environmental protection agency would increase public confidence in regulatory decisions (ACF, sub. 32, p. 14; Birdlife Australia, sub. 39, p. 4; Mineral Policy Institute, sub. DR72, p. 47). For example, the EDO (sub. 40, p. 4) noted that:

A new National EPA can greatly assist in effectively addressing challenges through acting as a trusted institution capable of undertaking independent assessment and enforcement, as well as providing independent advice to decision-makers on, and oversight of, national resource

---

regulation outcomes. An independent National EPA can operate at arm's-length from government to remove the risks of corruption or conflicts of interest and to ensure regulations are implemented efficiently, in a non-biased, non-political way.

The interim report of the Independent Review of the EPBC Act proposed a delineation of regulatory responsibilities at the national level. It recommended that compliance and enforcement functions be performed by an independent regulator, while environmental assessments and approvals would continue to be undertaken by the department (or state and territory authorities accredited by the Commonwealth) (Samuel 2020, pp. 8–9, 15). The report stated that such a model would improve public trust in the system, as under current arrangements, there are community concerns that 'compliance actions may be subject to political interference' (Samuel 2020, p. 94). However, the Australian Government has not supported this recommendation (Ley 2020c).

While an independent environment regulator could have benefits in reducing the risk and perceptions of undue political interference, there may also be costs. These include the financial costs associated with the agency's establishment and transition (where the agency does not already exist) — although, as the Commission (2013a, p. 168) has previously observed, 'some of these costs could be met through a transfer of staff from relevant environment departments'. And the NSWMC (sub. DR83, p. 15) stated that the institutional separation of regulatory and policy functions can lead to additional complexity and confusion if there are unclear divisions of responsibility and separate information systems across agencies. This can be addressed through establishing appropriate governance arrangements for the independent regulator, as discussed below.

### Strong governance arrangements are essential

Independence, in and of itself, is no guarantee that a regulator will be effective or accountable — other governance arrangements are also essential, such as clearly defined objectives, roles and responsibilities, as well as transparent decision-making processes. As previously highlighted, governments can establish these through Statements of Expectations, although regulator conduct in implementing transparent processes is also critical (discussed later in this chapter). Several study participants noted that these elements of strong governance are more important prerequisites than having institutional separation of regulatory and policy functions. Anglo American (sub. 42, p. 6) commented that:

There is considerable evidence available that the concept that regulators should be 'independent' has tended to be inconsistent with the more important requirement that regulators should be 'accountable'.

The Queensland Law Society (sub. 41, p. 5) highlighted that:

The primary consideration, regardless of which entity within the executive branch of government holds decision making power, is that the process for decision making is clearly defined by legislation, exercised in a timely and transparent manner, and subject to appropriate checks and balances, including judicial review.



---

The Commission has previously observed that where both policy and regulatory functions sit within a government department, the risk of capture by vested interests can be mitigated through appropriate governance arrangements. In particular, this includes ensuring the department has ‘a clear mandate, clear regulatory responsibilities, good processes to engage with other relevant agencies, and checks and balances that apply in high risk situations’ (PC 2009, p. 286). As part of setting expectations and instructions for their departments that administer regulatory functions, governments should ensure that robust processes, policies and checks are in place — such as conflict of interest management policies and review mechanisms where required. And where these policies and processes have been established, public trust in the regulatory system also relies on governments holding departments accountable for actually implementing them in a manner consistent with their broader mandates and responsibilities.

Distinct from the issues of institutional structure and governance arrangements, factors relating to a regulator’s conduct such as its culture, capabilities and engagement with communities also contribute to improving accountability and public confidence in the regulatory system. These elements of regulator conduct are discussed in the following section.

**FINDING 12.2**

Governments are responsible for establishing governance and institutional arrangements that minimise the risks of interference in regulatory decisions and promote regulator accountability, to build public trust in the system. Institutional independence for regulatory and policy functions can be one mechanism for promoting this. Strong governance arrangements such as clearly defined objectives, roles and responsibilities, as well as transparent and accountable decision-making processes, are also essential.

## **Improving these pre-conditions would support the COVID-19 recovery**

The proposed changes to improve the foundations of the regulatory system are particularly relevant in the current climate, as jurisdictions seek to develop reform agendas to boost economic activity as part of the COVID-19 recovery.

Many of the initiatives canvassed above could be implemented by governments in relatively short timeframes, and at relatively low cost. For example, setting clear expectations of regulators and improving their accountability and capacity can be put in place reasonably quickly and would yield immediate benefits, including by underpinning risk-based regulation. They represent opportunities for jurisdictions to expedite industry activity to support the economic recovery, while also providing the systemic foundations required to strengthen the effectiveness of and build confidence in the regulatory system, thereby facilitating efficient growth in Australia’s resources sector in the longer term.

---

#### FINDING 12.3

The pre-conditions for leading-practice regulatory systems are particularly relevant in the current climate, as jurisdictions seek to boost their economic activity as part of the COVID-19 recovery. Clear Statements of Expectations of regulators and improved accountability and capacity would help expedite industry activity.

## 12.2 Regulator performance is also key to outcomes

### Regulators face capability challenges and their decisions can lack transparency

Limited technical expertise leads to regulatory delays

Regulation is only as good as the agency that implements it. A diverse set of capabilities is required for regulators to operate effectively, including among individual staff (such as technical knowledge and expertise) and at the organisational level (for example, having suitable information systems and management capacity) (Howlett and Ramesh 2015). However, the Commission has heard from many participants that resources regulators face a range of challenges related to their skills and expertise that affect their ability to engage with resources companies, process applications and approvals and ensure that robust regulatory outcomes are achieved (box 12.4).

The Commission has specifically heard that agencies lack adequate scientific and technical expertise, and rely on generalist staff with limited knowledge of or experience in the sector. Staff may not understand the technical details associated with an application, be up to date with technological progress or be able to match an appropriate regulatory response to the risks associated with a project. Woodside Energy Ltd (sub. 18, p. 4) commented that:

Delays in regulators fulfilling their obligations can appear, at times, to be driven by resourcing constraints within agencies. The matter of adequate resourcing is not just about personnel numbers but equally applies to the availability of suitable technical expertise and lived industry experience within the regulator.

And the Auditor-General's assessment of mine rehabilitation regulation in Victoria reported comments from the Latrobe Valley Mining Rehabilitation Commissioner (now the Mine Land Rehabilitation Authority) that 'the technical competencies of [Earth Resources Regulation] site inspectors vary and that some do not have the required technical capability to effectively inspect and assess sites' (VAGO 2020, p. 72).

---

## Box 12.4 Participants' views of regulatory expertise

Regulators' capability was a focus for many participants. For example:

... in 2016, Northern Territory Department of Primary Industries and Resources advised proponents planning to establish a rare earth mine and processing facility that waste rock with a low level of radioactivity needed to be disposed of in line with a set of environmental guidelines it provided to the proponent. The proponents recognised that guideline values were not consistent with industry practice and upon further scrutiny the proponents discovered that the department had in fact provided guidelines for the disposal of radioactive medical waste. (MCA, sub. 11, p. 19)

We recognise [regulator capability] to be a major challenge — especially the attraction and retention of high-end, industry-relevant technical skills in an environment which appears, from the outside, to prefer to move staff around rather than retain and grow sector specific expertise. It also struggles with a mechanism to compete with industry salaries. (Garnett, sub. 24, p. 5)

There has undoubtedly been an increase in cost associated with ... officers of Resources Regulator lacking in experience and understanding of the exploration sector. Or the expertise of the regulator is often not relevant to the present project or the issue being dealt with — issues arise where a person undertaking an inspection has expertise in an area and incorrectly makes recommendations based on this expertise, even if not relevant to the present context of the situation. (NSWMC, sub. 28, pp. 36–37)

... many issues and current blockages ... [are] exacerbated by the lack of experienced and suitably qualified staff to deal with some of the complexities, idiosyncrasies and specialised nature of some projects ... (AMEC, sub. 31, p. 10)

Industry has observed some significant differences in the capability and consequent resourcing of agencies and regulators as they relate to the petroleum industry. ... This point is highlighted when comparing the administration of the EPBC Act by NOPSEMA in Commonwealth Offshore areas in comparison to the administration of this Act in non-Commonwealth areas by [the Department of the Environment and Energy]. These differences in capabilities is typically expressed as disparities in timeliness of approvals, which has resulted in project approval delays and timing uncertainty for industry. (APPEA, sub. 44, p. 18)

Limited technical capabilities may reflect inadequate training programs for agency staff members. For example, the ANAO's performance audit of DAWE's administration of the EPBC Act found that while the department had committed to develop a formal capability framework in 2016, 'the regulatory professional capability framework was not completed ... [and therefore] the department is not well positioned to design and target its training programs in a way that best meets its needs' (ANAO 2020, p. 42). The audit noted that general departmental training, systems training and legal training had been available to assessment staff in 2016. However, the absence of a comprehensive capability framework means that training programs may not best meet the technical needs of the department's assessment officers.

Industry participants have also reported that some regulators have high staff turnover, affecting the extent to which there is continuity across an application and assessment (which, as described in chapter 6, can often take a number of years). For example, the MCA (sub. 11, p. 18) noted that:

Staffing turnover is also a key issue, affecting the consistency in which the way regulation and policy is interpreted and applied. This is particularly problematic for the long assessment processes typical of minerals projects and can result in constant re-learning by assessment officers and repeated requests for further information over the course of an assessment.

---

Continuity in assessments can also be negatively impacted by staff reductions at regulators over time, as in the case of the declining number of staff working on environmental approvals at DAWE between 2012 and 2019 (discussed above).

A lack of technical expertise can lead to delays in the processing of applications. It can also lead to higher upfront costs for the project proponent, as regulators may request more information than is necessary to assess the project adequately (issues discussed in chapter 6). Furthermore, it can deter proponents from adopting more efficient and cost-effective technologies if the regulator does not understand new and more innovative practices. And it can impair monitoring of compliance with, and enforcement of, regulatory requirements — putting robust regulatory outcomes at risk (chapter 7).

Not all reports of regulators' technical expertise have been negative. For example, the Australian Government's Chief Scientist recently found NOPSEMA to be extremely technically competent, with 'the diverse experience, backgrounds and capabilities of the technical staff cover[ing] all the disciplines needed to assess environment plans' (Finkel 2019, p. 33). The offshore oil and gas industry is also generally positive about the regulator's capabilities — APPEA (sub. 44, p. 18) commented that 'industry views NOPSEMA as a skilled regulator'. NOPSEMA (2018b, p. 14) has stated that its independence and cost-recovery framework (discussed above) enable it to employ staff with the required technical skills.

NOPSEMA's independent, cost recovered framework allows the authority to continue to attract and retain highly skilled specialist staff that is comparable to leading industry practice. As a statutory authority, NOPSEMA has greater freedom to offer competitive salaries and adjust expenditure according to industry activity and regulatory need.

However, while the adoption of a cost-recovery framework brings benefits, it is questionable whether the full NOPSEMA model could apply to the broader, more diverse resources sector. For example, as discussed in chapter 6, bringing all approvals required at a given level of government under a single regulator would probably be infeasible, and project approvals processes also apply to non-resources projects.

## Data and technology are not used as effectively as they could be

In addition to the technical expertise of staff, regulatory capability is also influenced by an agency's use of data and technology in conducting regulatory processes. Participants have highlighted that regulators could make better use of the available data and information to improve the approach they take to regulation, including in areas such as native title and biodiversity (NSWMC, sub. DR83, p. 17).

For example, the EPBC Act proponent data project analysed 20 cases referred to the then Department of the Environment and Energy (DoEE) for approval. It identified references to 416 fauna and flora datasets in these cases, but found that the underlying data were often not provided to DoEE, nor were they released for the use of other resources companies, researchers and the general public (Box, Hansen and Bradsworth 2018, pp. 4, 21). This limits

---

the potential value that may otherwise be gained from using the data for environmental impact assessment, approval and monitoring under the EPBC Act.

More generally, the interim report of the Independent Review of the EPBC Act found that the fragmented and often inaccessible nature of environmental data is resulting in ‘suboptimal decision-making, inefficiency and additional cost for business, and poor transparency to the community’ (Samuel 2020, p. 71). It highlighted a range of factors that inhibit the availability of high quality data, information and science about the environment, including that: historical data can be stored in paper reports or PDF form, the collected data are not shared for further use, and there are many disparate information sources that are produced and managed by different organisations to suit their own needs.

In some cases, inadequate technology and information systems are contributing to limitations in regulators’ capabilities, reducing their ability to manage and analyse large volumes of data and information as part of the regulatory process (box 12.5).

**Box 12.5      Inadequate technology systems can limit regulators’ ability to use data effectively**

The Regulatory Maturity Project — which assessed the ability of the then Australian Department of the Environment and Energy’s Environment Protection Group to fulfil its regulatory functions — found that ‘the current business and IT systems are inadequate to meet the Department’s requirements’ (Woodward 2016, p. 10). It recommended that an end-to-end IT system be developed to manage projects from pre-referral to compliance stages.

The performance audit of the Department of Agriculture, Water and the Environment’s administration of the *Environment Protection and Biodiversity Act 1999* (Cth) has recently highlighted a range of shortcomings in the department’s use of technology to manage its data, which limits its ability to effectively undertake environmental impact assessment, approval and monitoring. The identified issues included a reliance on manual data collection, incomplete data migration from previous technology systems and inconsistent data that differ across records (ANAO 2020, p. 42).

The Report of the Digital Environmental Impact Assessment Working Group in Western Australia noted that ‘current approaches for undertaking environmental assessment are largely based on a history of paper-based documents’ (WABSI 2020, p. 10). A separate report on environmental approvals in mining prepared as part of the Streamline WA initiative to improve statewide regulatory practice also found that ‘IT systems and processes are not capable of consistently meeting user demands’ (Nous Group 2019, p. 14).

### A lack of regulator transparency inhibits accountability

Finally, no matter how robust a regulatory system might be, confidence in it can be undermined by a lack of transparency. Transparency ensures that regulators can be held accountable for delivering the objectives that are commonly understood to be their remit by project proponents and the broader community. While governments can promote regulator transparency and accountability by establishing appropriate institutional and governance

---

arrangements (discussed above), ultimately the achievement of transparent regulatory processes and decisions depends on the conduct of regulators themselves.

Regulators have sought to improve accountability and transparency around their processes and decisions over time. For example, all jurisdictions now publish reports outlining their environmental assessments (these include EPA WA nd; NT EPA nd; SA DPC 2018). However, participants have raised a range of concerns, including:

- a lack of clear and transparent assessment policies to guide proponents (NSWMC, sub. 28, p. 20; chapter 6)
- significant delays to approvals, without justification, and lack of reporting on whether timeframes are achieved (for example, Roy Hill, sub. 7, p. 6; MCA, sub. 11, p. 4; BCA, sub. 43, p. 5; chapter 6)
- little accountability or transparency in the post-approvals process (chapter 6)
- a lack of transparency around offsets (chapter 7). For example, the ACF (sub. 32, p. 12) noted that:

... there are systemic issues with how biodiversity offsets are tracked and disclosed under the EPBC Act. This lack of data capture and transparency creates issues with offset delivery and compliance with offset obligations. Whilst this is challenging for business, it presents a serious risk to environmental outcomes ...
- a lack of accessible reporting on regulators' monitoring and compliance actions (chapter 7)
- differences in the nature, extent, quality, regularity, terminology and processes associated with performance data reporting, which does not create an environment that allows for jurisdictional benchmarking and performance comparison (AMEC, sub. 31, p. 12).

#### FINDING 12.4

The ability for regulators to operate effectively and efficiently is often constrained by capability challenges, including limited technical expertise and inadequate use of data and technology. In addition, a lack of regulator transparency inhibits accountability for their performance in achieving regulatory objectives, leads to unnecessary costs for industry and risks a loss of public confidence in the regulatory system. Not least, regulators collect a wealth of data but relatively little is made available to the public.

### **Training and knowledge sharing would help to develop expertise**

A range of initiatives can be implemented by regulatory agencies to develop relevant technical skills and other expertise amongst their staff. Leading-practice approaches include:

- secondments to other regulators, with the goal of sharing leading practice across agencies and learning new approaches. For example, in 2017, the NT EPA entered into an agreement with the WA Department of Water and Environmental Regulation for an

---

officer exchange program. The aim of this program is to ‘enhance [the] skills and capability of environmental officers, share learnings and improve collaborative and consistent environmental regulation’ (NT EPA 2018, p. 27)

- supporting senior executives to continue to develop their leadership potential. For example, in 2017-18, the Tasmanian Department of State Growth supported a number of senior executive staff to undertake leadership training through the Australia and New Zealand School of Government and the Tasmanian State Service (Tas DSG 2018, p. 8)
- supporting all staff to undertake formal training on effective regulatory practices. For example, NOPSEMA enables all of its inspectors to undertake a Certificate IV in Government (Statutory Compliance) and a Certificate IV in Government (Investigations) (DIS 2015, p. G1). The NSW EPA, in partnership with registered training organisations, offers a range of training courses to Australian, State and Territory and local government organisations (NSW EPA 2020). The EPA’s programs are specifically designed to provide regulatory staff with the specialist skills and knowledge they require
- targeting the specific skills — in particular, technical expertise — that are lacking and developing a strategy for how to obtain them. For example, EPA Victoria has developed an Applied Science Strategy with the intention of attracting, developing and retaining applied science specialists, expanding knowledge and better understanding environmental technologies (EPA Vic 2018)
- drawing on the communities of practice and organisations that provide support and training for regulators, such as the Australasian Environmental Law Enforcement and Regulators Network’s Better Regulation Working Group. This working group aims to develop products and tools to assist its members to implement leading-practice regulation, and to provide a platform for members to share experiences and ideas related to regulatory practice (AELERT 2020)
- supporting regulatory staff to improve their cultural capability and understanding of issues relevant to Aboriginal and Torres Strait Islander communities. This is particularly applicable for agencies that administer regulations relating to Indigenous heritage (chapter 8) and agreements with traditional owners (chapter 11). Cultural capability development could involve direct engagement with Indigenous organisations and peak bodies, as well as resources regulators undertaking visits to Aboriginal and Torres Strait Islander communities. An example of leading practice has not been identified
- industry site visits that allow regulatory staff to develop a better understanding of a particular project and contribute to their knowledge of resources activities more generally. In Victoria, Earth Resources Regulation has committed to a program of quarterly site visits so that all staff visit a mine and quarry annually, noting that preference should be given to new starters (Cronin 2019b, p. 4). And the NSWMC (sub. DR83, p. 16) has facilitated site visits by staff from New South Wales and Commonwealth regulatory agencies, which has helped to ‘build a real world understanding of ... the value that ecological mine rehabilitation can provide’.

---

To pursue the last of these options — site visits — regulators should work with industry to develop a program of visits. Regulators could liaise with industry associations (as in the New South Wales example above, or nationally with the Minerals Council of Australia and the Australian Petroleum Production and Exploration Association) in the first instance to discuss the types of visits that would be of particular benefit. The program of site visits could then be established on an ongoing basis, potentially as part of an induction program for those that are new to the regulator.

Some participants to this study have suggested that regulator and industry collaboration on site visits could lead to increased risks or perceptions of regulatory capture (APPEA, sub. DR91, p. 12; EDO, sub. DR62, p. 67). A high level of openness in planning and undertaking site visits is therefore required to minimise perceived and actual risks, both between the regulator and industry (so that companies' concerns about potential risks can be addressed), and with the general public (to promote an understanding of how these visits support improved outcomes through the development of regulator capability). However, limited information is published about site visits currently undertaken by resources regulators for training purposes.

There may be circumstances where a regulator requires expertise that cannot be found internally. Where this is the case, a short-term contract with an appropriate expert may fill the identified gap. Yet the process of contracting external parties has the potential to slow down the regulatory process. Regulators could consider whether there are alternative options, including maintaining a pre-approved panel of experts (with skills varied enough to suit different scenarios) on hand and/or a fast-tracked procurement process.

As with cultural change (discussed below), enhancing the skills of regulatory officers is the responsibility of senior management. Training opportunities are an important investment in agency capability that can improve performance and productivity outcomes, and lead to greater job satisfaction and staff retention.



---

#### LEADING PRACTICE 12.3

Approaches to improving staff capability and technical expertise include:

- secondments — such as the officer exchange program between the Northern Territory Environment Protection Authority and Western Australia’s Department of Water and Environmental Regulation
- training programs — akin to those offered in Tasmania for senior management and in the National Offshore Petroleum Safety and Environmental Management Authority for all staff regarding regulatory practices
- developing strategies to target skills gaps, including technical expertise — as used by the Environment Protection Authority Victoria
- communities of practice — as in the case of the Australasian Environmental Law Enforcement and Regulators Network’s Better Regulation Working Group, which enables members to share experiences and ideas related to regulatory practice
- building cultural understanding through engaging with Indigenous organisations and visiting Aboriginal and Torres Strait Islander communities (an example of leading practice has not been identified)
- industry site visits — as have been undertaken in both Victoria and New South Wales.

#### RECOMMENDATION 12.2

Regulators in each jurisdiction should consult with industry, including peak bodies (such as the Minerals Council of Australia and the Australian Petroleum Production and Exploration Association), on developing programs of site visits to enhance technical expertise. These programs should be ongoing and part of induction training provided to new staff.

### **A strong culture promotes the adoption of leading practice, and underpins capability**

A regulator’s culture embodies the implicit rules, beliefs and expectations of behaviour under which regulatory officers operate. It determines ‘the way the regulator exercises discretion in assessment of risks, responds to non-compliance, and uses enforcement tools’ (PC 2013c, p. 8). A leading-practice regulator fosters a culture that supports the adoption and promotion of modern regulatory practices and that develops the capabilities required to pursue these outcomes.

There is no single formula for doing this and agencies need to find the approach that works best. That said, a key determinant of regulator culture is the leadership of senior management. Senior management can champion the adoption of good regulatory conduct, including through emphasising the importance of ongoing capability development to ensure that staff have the technical expertise and access to technology required to implement leading

---

practice. Giving prominence to the theory and practice of good regulation and how it applies to resources projects, the agency's functions and how staff perform these functions signals that it is a priority.

One approach to promoting good regulatory practices and cultural change is for a senior member of staff to take on this responsibility — akin to a 'principal regulatory officer' or a 'regulatory champion'. It is their role to ensure that the agency has the necessary policies, procedures and capabilities for implementing leading-practice regulatory conduct. For example, in 2018, the then Department of Agriculture established the position of Principal Regulatory Officer (DAWE 2019, p. 3). The aim of this role is to promote a professional regulator culture amongst staff working to regulate live animal exports.

Few regulators operating in the environmental and resources space currently appear to have established such a role. But there are a range of other (and complementary) approaches that jurisdictions have taken to develop a strong regulatory culture that underpins ongoing capability development among staff. These include:

- rewarding activities or outcomes that are consistent with the desired culture, including drawing upon incentives to recognise and promote the right behaviours. For example, in Queensland, the then Department of Natural Resources, Mines and Energy (now the Department of Resources) developed CUDOS, an online reward and recognition system. It provides staff with the ability to easily recognise the accomplishments and performance of their colleagues and enables management to reward team and individual performance (Qld DNRME 2018b, p. 34)
- developing an internal working group to identify cultural issues and propose initiatives to promote positive cultural change. For example, NOPSEMA has established an Organisational Culture Group, which contributes to building a 'collegiate and transparent culture' (NOPSEMA 2019d, p. 83). Engaging with broader external networks, such as the Australasian Environmental Law Enforcement and Regulators Network's Better Regulation Working Group (discussed above), can also provide a forum for discussing the cultural changes required to promote leading practices
- reporting on regulator performance, including successes. Reporting can not only improve culture, it can also foster confidence in the regulatory system by improving transparency regarding regulatory activities, successes and learnings from any failures. For example, SA DEM releases a mineral resources regulation report on an annual basis that sets out the work the department has undertaken to uphold the state's resources laws (SA DEM 2017). In Western Australia, the Department of Mines, Industry Regulation and Safety (WA DMIRS) reports its target timeframes and its performance against achieving these targets, including how long an application spends with WA DMIRS, other agencies, on native title processes and with the proponent (WA DMIRS 2019b).

---

#### LEADING PRACTICE 12.4

Senior management has a key role in fostering a culture that supports ongoing capability development and adoption of modern regulatory practices. Leading practice approaches to promoting this type of culture include:

- appointment of a regulatory champion, akin to that established at the then Australian Department of Agriculture
- recognising and incentivising good staff performance, as occurs in Queensland's Department of Resources
- working groups to assess and promote cultural change, both internally as occurs at the National Offshore Petroleum Safety and Environmental Management Authority, and externally as with the Australasian Environmental Law Enforcement and Regulators Network's Better Regulation Working Group
- reporting on successes and learnings from failures, as occurs in South Australia's Department for Energy and Mining and Western Australia's Department of Mines, Industry Regulation and Safety.

### **Data strategies and technological solutions can improve efficiency and transparency**

There is a significant volume of data that regulators could use to improve their processes and decision making. Better use of data can enhance regulators' capabilities in implementing risk-based approaches to environmental assessment, which are widely regarded as leading practice (discussed in chapter 6). Other potential uses include assessing a project's risks or monitoring compliance (chapter 7), informing the pre-competitive data provided by governments (chapter 4), or as part of a regulator's broader analysis of risks and emerging issues.

A number of regulators have already recognised the role that data and other information can play in efficiently carrying out their tasks and have sought to adopt a more strategic approach to data and information use.

- DoEE (now DAWE) developed its *Technology and Information Strategy 2019–2023* to guide how it will leverage the opportunities presented by advances in technology and information (DoEE 2019e).
- Both the Queensland Department of Resources and Qld DES have committed to providing open data through the State's Open Data Strategy. Through this strategy, Qld DES has committed to data-related principles such as 'open by default', 'timely and comprehensive' and 'for improved governance and citizen engagement' (Qld DES 2019d, p. 4).
- WA DMIRS has adopted as one of its priorities in its Strategic Plan (to 2024) that it will 'improve the use of government data and information to deliver better outcomes' (WA DMIRS 2019d, p. 1).

---

As part of the National Resources Statement, Council of Australian Governments Energy Ministers committed to developing a Resources Data Strategy (DIIS 2019a, p. 37).

The government sees benefit in a holistic long-term Resources Data Strategy for the sector. A clear strategy will improve the scope and curation of key data sets, such as geoscience, environment, biodiversity and heritage. This would not only reduce the risk of exploration investment but would also help governments make more informed decisions and better coordinate and prioritise research efforts. It would also enhance environmental management practices and outcomes, and improve information transparency to build community trust.

Adopting a strategic approach to the collection, storage and use of data, as the examples above point to, helps jurisdictions leverage the maximum value from the data they collect from industry. It can also lead to the adoption of more innovative practices by regulators, which will ultimately enhance the efficiency of the system and facilitate investment. Furthermore, better use of data can lead to increased regulator transparency and provide the foundations for more informed consultation between regulators and communities (discussed below). However, the Commission has little further information on the effectiveness of the above strategies given their early stages of adoption.

#### LEADING PRACTICE 12.5

Strategies for managing information and data help promote routine use of data in regulator decision making. Examples include strategies recently developed by the (then) Australian Department of Environment and Energy, the Department of Environment and Science in Queensland and the Department of Mines, Industry Regulation and Safety in Western Australia.

The application of new data management and technological practices also provides regulators with opportunities to improve their productivity by working ‘smarter’. This has the potential to alleviate resourcing pressures to some degree.

Some of the toughest operational challenges facing regulators — resource constraints, backlogs, massive volumes of public comments — also offer some of the biggest opportunities for new technologies and techniques. (Eggers, Turley and Kishnani 2019, p. 10)

Technology will not replace all of a regulator’s activities. Regulators will always be required to make judgments throughout the regulatory process, and these should be made by appropriately skilled and trained staff, as discussed above. However, there are elements of the regulatory process that can be automated through greater use of technology. The Commission (2020c, p. 11) has highlighted that technology may be particularly beneficial in enabling more effective or efficient administration of regulation where:

- regulated parties face complex or onerous regulatory requirements
- there is scope to undertake more risk-based approaches to regulation
- technology can help to better monitor activity, including by overcoming constraints related to physical presence

- 
- technology can safely unlock more uses of data to meet compliance goals.

For example, technology can reduce waiting times and allow staff to focus their efforts on areas where they can provide greater value. Regulators in Australia and other parts of the world have started to use robotic process automation, which mimics the steps staff would take to complete tasks, such as filling out forms, transferring data between spreadsheets or accessing multiple databases (Eggers, Turley and Kishnani 2019, p. 6).

New technologies are also enabling agencies to gain a more granular and real-time understanding of regulated outcomes. For instance, EPA Victoria has used unmanned aerial vehicles to capture video evidence of illegal dumping (D'Ambrosio 2016). The inquiry into EPA Victoria highlighted that combining several monitoring technologies — such as unmanned aerial vehicles, sensors and GPS — ‘may reduce the costs of collecting large amounts of accurate data from difficult to reach places that can be analysed to identify possible risks of harm’ (EPA Inquiry Ministerial Advisory Committee 2016, p. 351).

A number of regulators are looking to the opportunities offered by technological solutions. For example:

- the WA EPA has formed a working group to investigate ways in which digital technologies could be used to streamline the capture, supply and interpretation of data in the environmental impact assessment process. The NT EPA and NOPSEMA are also involved in this work as members of the working group (WABSI 2020, p. 3)
- as noted above, DoEE has developed a *Technology and Information Strategy 2019–23*, which seeks to strengthen the department’s capability to achieve its business objectives through better use of technology and information (DoEE 2019e)
- the Commonwealth and WA Governments are partnering to develop a biodiversity database and online portal for environmental assessment and approval processes, in order to provide greater data access and facilitate efficiency improvements (box 12.6)
- Garnett (sub. 24, p. 5) noted that the Queensland Office of Groundwater Impact Assessment is a ‘most important innovation’, commenting that ‘the State government has built significant, internal technical expertise (at a world level) in large-scale, groundwater impact modelling’.

---

**Box 12.6 Commonwealth and Western Australian measures to improve efficiency**

The Australian Government announced on 21 November 2019, as part of its deregulation agenda, that it was partnering with the WA Government to develop an online platform for environmental assessment and approval processes, supported by a database of biodiversity information, as the first step towards a nationally consistent approach to a digital system for environmental approvals.

The Environment Online platform will allow project proponents to submit a single application addressing both Commonwealth and Western Australian regulatory requirements via an online portal and to track its progress through this portal. The WA Department of Water and Environmental Regulation is currently developing the platform, which is expected to be available as a first release in July 2021 (with subsequent releases in the following three years).

The database of biodiversity studies will store and share information provided by project proponents. This initiative has been jointly funded by the Commonwealth and WA Governments, and is being overseen by the newly established Biodiversity Information Office in the WA Department of Biodiversity, Conservation and Attractions.

The WA Government anticipates that these two projects will reduce the timeframe taken for the State and Commonwealth assessment process by 6–12 months.

*Sources:* Australian Government (2019), Morrison (2019), Government of Western Australia (2020; Western Australian Government 2020f).

Furthermore, the interim report of the Independent Review of the EPBC Act recommended an overhaul of DAWE’s environmental information management systems and technologies. This would involve developing a ‘modern interface for interactions on the EPBC Act’ (Samuel 2020, p. 78) to support the collection and sharing of data relating to assessments, approvals, compliance and enforcement. The new systems would underpin the Review’s proposal for a national information supply chain — ‘an easily accessible “single source of truth” on which the public, proponents and governments can rely’ (Samuel 2020, p. 12).

The Review noted that significant upfront investment would be required to develop new information systems, and that ‘proponents should be required to pay the efficient cost of the share of information, knowledge and systems required to underpin the regulation of their activities’ (Samuel 2020, p. 79). However, the MCA (sub. DR97, p. 16) emphasised that ‘government should adequately fund any data improvement initiatives’.

Resourcing constraints can also limit the ability of regulators to implement more targeted technological solutions. For example, due to fewer opportunities to realise economies of scale, some smaller agencies may find it hard to capture the benefits presented by data and technology. In this regard, cross-agency co-operation — as demonstrated in the WA EPA example above — can help to spread upfront costs and enable the creation of technologies that can be used across jurisdictions. Standard reporting and data requirements would assist industry as well, allowing companies with resources projects in multiple jurisdictions to provide similar types of information to agencies across these jurisdictions.

---

#### LEADING PRACTICE 12.6

Digital technology and data management systems have the potential to improve the efficiency and effectiveness of regulatory processes significantly, while also leading to increased transparency and providing the foundations for more informed consultation. Leading-practice approaches include:

- developing a working group to investigate options for technologies to improve the use of data, as has occurred in the Environmental Protection Authority of Western Australia
- developing a strategy for improving the capabilities required to deploy information and technology, as has occurred at the Australian Department of Agriculture, Water and the Environment
- improving the interface between regulators and resources companies through online portals and databases, as will occur in a Commonwealth pilot with Western Australia
- developing modelling capabilities to support analysis and decision making, as has occurred at the Queensland Office of Groundwater Impact Assessment.

### **Information sharing and regulator engagement with communities build confidence**

Information and data sharing by regulators can be valuable both for resources companies and the community. The importance of providing guidance on regulatory processes and sharing information with project proponents has been discussed in chapter 6. More broadly, the benefits of public consultation in the context of reducing investors' perception of regulatory risk have been highlighted in chapter 9, and engagement between resources companies and the community is discussed in chapter 10. This section focuses on leading practices related to regulators sharing information with communities, to improve transparency and build public understanding and confidence in the regulatory system.

Improving confidence in the system requires a multi-layered approach. Key to this is having regulations that are designed and implemented well, as outlined throughout this report. In addition, confidence comes from the public understanding regulatory processes and those processes being transparent. Communities can gain this understanding through information published by regulators, as well as ongoing engagement between regulators and the public. The MCA (sub. DR97, p. 16) highlighted that an integrated approach to information sharing and public consultation is required to improve community understanding, and that this could include:

... developing plain English information on assessment processes, access to national environmental data, early regulator engagement and establishing an online platform to track project approvals and clarify opportunities for community engagement.

Information availability plays a key role in fostering the community's understanding of resources activities and helping to clarify regulatory objectives and whether they are being met. In cases where there is tension in communities around resources activities, information provision can help, over time, to abate that tension.



---

In some cases, confidence in the regulatory approach in Australia is unnecessarily undermined by jurisdictions' systems not being well understood. This can lead to the community questioning whether regulation is capable of achieving the government's (community's) objectives. A range of factors likely contribute to this, including that systems are complex, jurisdictions can take divergent approaches and sometimes regulatory outcomes are not clear.

It is not necessary for the general community to understand all the intricacies of the regulatory system. But regulators should be able to clearly explain their systems' key components, overall aims and the opportunities for public engagement (discussed below). In particular, there is a role for regulators to explain how the regulatory system deals with risks to the environment and communities.

There are some instances where information has been used effectively and has led to greater public understanding of, and confidence in, the regulatory system. Over the course of this study, a number of participants identified examples within the sector that are leading to greater accessibility of information for the general public.

- Regulators that publish accessible information — information that is simple and in plain English — contribute to a better public understanding of the overall regulatory process. An example is NOPSEMA's (2019e) *Introducing NOPSEMA* brochure, which sets out the regulator's purpose, functions and stakeholder engagement processes.
- Western Australia has a public register of planned and existing offsets that includes information such as biodiversity value, location, date of approval and completion status (chapter 7).
- Other independent bodies can support regulators in delivering more accessible data and information to the general public. For example, the GasFields Commission in Queensland is an independent statutory body that publishes data that can be accessed by the whole community, while the Gas Industry Social and Environmental Research Alliance is a government and industry collaboration established to undertake publicly reported research informed by and of benefit to the community (chapter 4).

---

#### LEADING PRACTICE 12.7

The provision of publicly accessible information and data by regulators can promote community confidence in the regulatory system and the sector. Examples include the National Offshore Petroleum Safety and Environmental Management Authority's website and Western Australia's offsets register. Regulators can be supported by the data and information published by other independent bodies, such as Queensland's GasFields Commission and the Gas Industry Social and Environmental Research Alliance.

---

In addition to publishing information about regulatory activities, agencies that proactively engage with the public about the regulatory system can enhance public understanding. This engagement can take several forms:



- 
- engagement with the public on specific projects, throughout the life of that project. Many regulators already have public consultation periods as part of the regulatory process. One approach where there has been less uptake in Australia, and for which there would be merit, is for the regulator to consult with the public in the initial scoping stage of a project (outlined in chapter 6). This would enable the regulator to outline the regulatory process, answer questions and provide guidance to those seeking more information. Consultation at this early stage is a key part of the impact assessment processes recently introduced in Canada (Government of Canada 2019)
  - engagement with the public at a broader level, to understand their expectations around acceptable risks and regulatory objectives. This information can also be provided to policy makers and governments so that they can seek to improve the responsiveness of the regulatory system. Some jurisdictions have these processes in place, including dedicated teams for liaising with the community. For example, the Community Engagement Team within the NSW Department of Planning and Environment works closely with stakeholders through face-to-face meetings, workshops and public information sessions, and Community Consultative Committees (NSW RR 2017).

---

#### LEADING PRACTICE 12.8

Regulators can improve the public's understanding of regulatory objectives and processes by:

- engaging with local communities on the regulatory process throughout the life cycle of a resources project, including in the initial scoping stage, as occurs in Canada
- conducting broader consultation on an ongoing basis to understand community expectations and provide this feedback to policy makers and the government, as occurs in New South Wales.

## Opportunities abound for jurisdictions to learn from each other

This study has identified a range of leading-practice approaches to designing, administering and enforcing regulation in Australia's resources sector. These leading practices span a diverse set of resources activities and include regulator governance and conduct across the life cycle of a resources project.

As the resources landscape is continually evolving, maintaining a leading-practice regulatory system will require ongoing effort and innovation. This will ensure that regulatory policies, frameworks and activities remain fit for purpose — a 'set and forget' approach to regulation would deliver inferior outcomes for all stakeholders in the sector over time.

In this context, there would be merit in Resources Ministers establishing a forum whereby regulators involved in the resources sector periodically meet to discuss leading regulatory practices, including sharing learnings from initiatives implemented in their jurisdictions.

---

RECOMMENDATION 12.3

Resources Ministers should establish a forum for regulators to share leading-practice initiatives from their jurisdictions, including those implemented to develop the capabilities and expertise of their agencies.

---

## A Conduct of the study

In keeping with its standard practice, the Productivity Commission has actively encouraged public participation in this study. This appendix describes the stakeholder consultation process undertaken and lists the organisations and individuals that have participated.

The terms of reference for the study, reproduced in the preliminary pages of this report, was received from the Treasurer on 6 August 2019. An initial circular advertising the study was distributed to relevant organisations and individuals, and the study was advertised in *The Australian* and *Australian Financial Review* newspapers.

Fifty-three public submissions were received following the release of the issues paper on 17 September 2019. A further 45 submissions were received in response to the draft report released on 20 March 2020 (table A.1). Two brief comments were also received. All public submissions are available on the study website at [www.pc.gov.au/inquiries/current/resources/submissions](http://www.pc.gov.au/inquiries/current/resources/submissions).

Consultations were held with representatives from major stakeholders in the resources sector (table A.2). Given the COVID-19 pandemic, face-to-face meetings and roundtables to receive feedback on the draft report were not possible, and web-based meetings were held with participants instead.

The final study report was delivered to the Australian Government on 30 November 2020. The Commission thanks all parties who have contributed to this inquiry.

---

**Table A.1 Submissions**

<i>Participant</i>	<i>Submission number</i>
Adani Mining Pty Ltd	38 *
Alcoa	45
Anderson, John	21
Anglo American	42
Association of Mining and Exploration Companies (AMEC)	31, 90
Aurizon Network	30
Australian Charities and Not-for-Profits Commission (ACNC)	78
Australian Conservation Foundation (ACF)	32, 94
Australian Environment and Planning Law Group of the Law Council of Australia (AEPLG)	29, 63 #
Australian Petroleum Production and Exploration Association (APPEA)	44, 91 #
Australian Small Business and Family Enterprise Ombudsman (ASBFEO)	23
Birdlife Australia	39
Brown, Jason	20
Burnett, Peter	15
Business Council of Australia (BCA)	43, 88
Business Council for Sustainable Development Australia (BCSCA)	89
Campin, David	49
Cement Concrete and Aggregates Australia (CCAA)	36
Cement Industry Federation (CIF)	58
Central Land Council and Northern Land Council (CLC and NLC)	79
Chandler, John	19
City of Karratha	84
Construction, Forestry, Maritime, Mining and Energy Union (CFMEU)	16, 77
Dobes, Alex	2
Doctors for the Environment Australia (DEA)	73
Ellis, Fraser MP	57
Environmental Defenders Office (EDO)	40, 62
ExxonMobil	52 #*
First Nations Legal and Research Services (FNLRS)	87
Fortescue Metals Group (FMG)	92
Garnett, Andrew	24
Glazebrook, Peter	17
Holmes, Sharon	59
Hunter Business Chamber	10
INPEX	34 # *
Institute of Public Affairs (IPA)	5
International Association of Geophysical Contractors (IAGC)	56
Isaac Regional Council (IRC)	48
Jenkins, Brian	4 #
Local Government Association of Queensland (LGAQ)	50 #
Mineral Policy Institute (MPI)	72

(continued next page)

---

**Table A.1** (continued)

<i>Participant</i>	<i>Submission number</i>
Minerals Council of Australia (MCA)	11, 97 #
Murray, Ian and Fardin, Joe	55
National Farmers Federation	14
National Indigenous Australians Agency (NIAA)	68
National Native Title Council (NNTC)	70
National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA)	13, 67
New South Wales Aboriginal Land Council (NSWALC)	47
New South Wales Business Chamber	3
New South Wales Minerals Council (NSWMC)	28, 83
Noonan, David	1 #
Northern Territory Chamber of Commerce and Industry	35
Office of the Registrar of Indigenous Corporation (ORIC)	86
Origin	8
Peabody Australia Coal Pty Ltd	33
Pye, Catherine	66
Queensland Department of Natural Resources Mines and Energy (QDNRME)	95
Queensland Law Society (QLS)	41
Queensland Resources Council (QRC)	27, 81
Regulatory Institute	61
Resources Law Network (RLN)	22, 76 # *
Rio Tinto	26 # *
Roy Hill	7, 60 # *
Shell Australia	53 # *
Sonter, Laura; Simmonds Jeremy and Martine Maron – Centre for Biodiversity and Conservation Science, University of Queensland	64
South Australian Chamber of Mines and Energy (SACOME)	37, 75
South Australian Government	25
South Australian Minister for Energy and Mining	96
Sydney Marine Sand Pty Limited (SMS)	6
The Chamber of Minerals and Energy of Western Australia (CMEWA)	74
The Fairbane Group	80
The Wilderness Society (TWS)	9
Townsville City Mayor	51
Transparency International Australia (TIA)	12, 85
Tasmanian Minerals, Manufacturing and Energy Council (TMEC)	46
Unger, Corrine	71 #
University of Western Australia Centre for Mining Energy and Natural Resources Law (UWA CMENRL)	69

(continued next page)

---

**Table A.1** (continued)

<i>Participant</i>	<i>Submission number</i>
Ward Keller	65
West Coast Council	54
Western Australian Office of the Attorney-General	98
Woodside Energy Limited	18, 82
World Wildlife Fund (WWF)	93

<sup>a</sup> An asterisk (\*) indicates that the submission contains confidential material NOT available to the public. A hash (#) indicates that the submission includes attachments.

---

## Table A.2 Consultations

---

### **ACT**

Adani  
Attorney-General's Department (AGD)  
Australian National Audit Office  
Australian Trade and Investment Commission (Austrade)  
Australian Petroleum Production and Exploration Association (APPEA)  
Department of Agriculture, Water and Environment  
Department of Industry, Science, Energy and Resources  
Department of Infrastructure, Transport, Cities and Regional Development  
Department of Prime Minister and Cabinet  
Deregulation Taskforce  
Geoscience Australia (GA)  
German-Australian Chamber of Industry & Commerce  
Independent Review of the EPBC Act  
Indigenous Land and Sea Corporation (LSC)  
MacIntosh, Andrew  
Minerals Council of Australia (MCA)  
National Indigenous Australians Agency (NIAA)  
Office of the Registrar of Indigenous Corporations (ORIC)  
The Treasury  
Verdant Minerals  
Woodside Energy Limited

### **New South Wales**

Australian Human Rights Commission (AHRC)  
Cement Concrete & Aggregates Australia (CCAA)  
Construction, Forestry, Maritime, Mining and Energy Union (CFMEU)  
Department of Planning, Industry and Environment (DPIE)  
NSW Aboriginal Land Council (NSWALC)  
NSW Biodiversity Conservation Trust (NSW BCT)  
NSW Environment Protection Authority (NSW EPA)  
NSW Independent Planning Commission (NSW IPC)  
NSW Resources Regulator (NSW RR)  
NSW Minerals Council (NSWMC)  
Swords, Kimberley  
World Wildlife Fund (WWF)

(continued next page)

---

---

**Table A.2** (continued)

---

***Northern Territory***

Aboriginal Areas Protection Authority (AAPA)  
Arafura Resources Limited  
Central Land Council  
Department of Environment and Natural Resources  
Department of Primary Industries and Resources (DIPR)  
EcOz Environmental Consultants  
Environmental Defenders Office (EDO NT)  
GHD Consultants  
Glencore McArthur Mine  
Kirkland Lake Gold  
Minerals Council of Australia, Northern Territory Division (MCA NT)  
Newmont Goldcorp Australia  
Northern Land Council  
Northern Territory Chamber of Commerce  
Vista Gold

***Queensland***

AgForce  
BHP  
Bowie Law  
Christie, Daniel  
CQG Consulting  
Department of Aboriginal and Torres Strait Islander Partnerships (Qld DATSIP)  
Department of Environment and Science (Qld DES)  
Department of Natural Resources, Mines and Energy (Qld DNRME)  
Department of Premier and Cabinet  
Environmental Defenders Office (EDO)  
Garnett, Andrew  
GasFields Commission  
GHD Townsville  
Gas Industry Social & Environment Research Alliance (GISERA)  
Geological Survey of Queensland  
Glencore  
Hill, Jenny (Mayor of Townsville)  
Isaac Regional Council  
Local Government Association of Queensland (LGAQ)  
Maron, Martine

(continued next page)

---



---

**Table A.2** (continued)

---

McCullough Robertson  
Mitsubishi Development  
National Native Title Tribunal  
O'Faircheallaigh, Ciaran  
O'Gorman, Dan  
Office of the Coordinator General  
Peabody Energy  
Perpetual  
Queensland Resources Council (QRC)  
Queensland South Native Title Services (QSNTS)  
Rio Tinto  
Simmonds, Jeremy  
Sonter, Laura  
Townsville Chamber  
Townsville Enterprise Limited  
Western Downs Regional Council

***South Australia***

Department of Energy and Mining (SA DEM)  
Department of Premier and Cabinet (SA DPC) and Commissioner for Aboriginal Engagement  
Grain Producers SA and Primary Producers SA  
Santos  
South Australian Chamber of Mines and Energy (SACOME)  
South Australian Department of Environment and Water  
South Australian Native Title Services (SANTS)

***Tasmania***

Australian Taxation Office  
Department of State Growth  
Environment Protection Authority Tasmania  
Tasmanian Minerals, Manufacturing and Energy Council  
West Coast Council

***Victoria***

Adani  
Allens

(continued next page)

---

---

**Table A.2** (continued)

---

Arnold Bloch Leibler  
Australian Charities and Not-for-profits Commission (ACNC)  
Australian Conservation Foundation (ACF)  
Australian Law Reform Commission  
Better Regulation Victoria  
BHP  
Business Council of Australia (BCA)  
Chapman, Hilary  
Clayton Utz  
Department of Jobs, Precincts and Regions (DJPR)  
Department of Justice and Community Safety (Vic DJCS)  
EnergyAustralia  
Exxon Mobil  
First Nations Legal and Research Services  
Langton, Professor Marcia  
Minter Ellison  
Mine Land Rehabilitation Authority  
National Indigenous Australians Agency (NIAA)  
National Offshore Petroleum Titles Administrator (NOPTA)  
National Native Title Council (NNTC)  
Origin  
PwC Australia  
South32  
The Nature Conservancy  
Victorian Aboriginal Heritage Council  
Woodside Energy

***Western Australia***

Alcoa of Australia Ltd  
AngloGold Ashanti Australia Ltd  
Association of Mining and Exploration Companies (AMEC)  
BHP  
Department of Jobs, Tourism, Science and Innovation (WA DJTSI)  
Department of Mines, Industry Regulation and Safety (WA DMIRS)  
Department of Planning, Lands and Heritage (WA DPLH)  
Department of Treasury  
Gold Fields Australia Pty Ltd

(continued next page)

---

---

**Table A.2** (continued)

---

Iluka Resources Limited

Karratha City Council

Levin, Adam

Mineral Resources Limited

Murray, Ian

National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA)

Pilbara Development Commission

Rio Tinto Iron Ore

Roy Hill Holdings

The Chamber of Minerals and Energy of Western Australia

Western Australian Office of the Attorney-General

Woodside Energy Limited

Yamatji Marlpa Aboriginal Corporation

Yara Pilbara

***INTERNATIONAL***

**Canada**

Mining Association of Canada

Impact Assessment Agency of Canada

**France**

International Energy Agency

**Norway**

Ministry of Petroleum and Energy

---



## B Regulatory arrangements across jurisdictions

Table B.1 Regulatory arrangements in New South Wales

Category	Approach
<i>Land access regime</i>	
Agreement with a private landholder	A written land access arrangement must be negotiated prior to any exploration activity ( <i>Mining Act 1992</i> (NSW), s. 140; <i>Petroleum (Onshore) Act 1991</i> (NSW), s. 69C). (Also applies to public holders.)
Terms and conditions	Access arrangements may include provisions relating to: the times the titleholder is allowed access to the land, which parts of the land the titleholder may work on, the kinds of exploration activities which may be undertaken on the land, the compensation payable by the titleholder (can be monetary or in-kind), the manner of varying the arrangement and resolving any disputes relating to the arrangement, notification requirements, and any other conditions and requirements agreed to by the landholder and the titleholder ( <i>Mining Act 1992</i> (NSW), s. 141; <i>Petroleum (Onshore) Act 1991</i> (NSW), s. 69D).
<i>Native title arrangements</i>	
	Exemptions from the application of the 'right to negotiate' with reference to: <ul style="list-style-type: none"> <li>• s. 26A of the <i>Native Title Act 1993</i> (Cth): replacement of the right to negotiate provisions for an approved exploration etc. act with a right to be consulted about ways of minimising the impact of the grant (mining and petroleum)</li> <li>• s. 26C of the <i>Native Title Act</i>: exemption from the right to negotiate for certain opal or gem mining on land that has previously been mined.</li> </ul>
<i>Institutional arrangements</i>	
Environment regulator	NSW Environment Protection Authority, Department of Planning, Industry and Environment, Department of Regional NSW
Resources regulator	Department of Regional NSW, including the NSW Resources Regulator
Heritage regulator	Heritage NSW, Aboriginal Cultural Heritage Advisory Committee, Heritage Council of NSW
Other arrangements	The Independent Planning Commission (IPC) is the consent authority for certain state significant development (SSD) proposals in NSW.
<i>Coordination mechanisms</i>	
Lead agency	Department of Planning, Industry and Environment (for development approval)
Major projects coordination	Department of Planning, Industry and Environment (for development approval)

(continued next page)

Table B.1 (continued)

Category	Approach
<i>Decision-maker</i>	
Minister	Approval to explore or mine: The Deputy Premier and Minister for Regional NSW, Industry and Trade (or nominated delegate). Development approval: The consent authority for SSD proposals is either the Minister for Planning and Public Spaces or the IPC.
Other decision-makers	Development approval: The consent authority for regionally significant development is the relevant planning panel for the area. Otherwise, the consent authority is the council for the area in which the development is to be carried out.
<i>Review and appeals</i>	
Merits review	Development approval: In some cases, applicants and third-party objectors may appeal to the NSW Land and Environment Court against the merits of a determination ( <i>Environmental Planning and Assessment Act 1979</i> (NSW), Division 8.3). Where the IPC is the consent authority, no merits review is available if the IPC has held a public hearing.
Judicial review	Development approval: Under section 9.45 of the <i>Environmental Planning and Assessment Act 1979</i> (NSW), any person may commence proceedings in the NSW Land and Environment Court to seek an order to remedy or restrain a break of the Act, including any decision on a SSD development application.
<i>Offsets</i>	
Fund/pay-in-lieu option	Yes
Public register	Partial — register of offset credit transactions for market purposes does not include information on the project requiring the offset.
<i>Rehabilitation arrangements</i>	The consent authority for the development determines the acceptability of the rehabilitation proposal, including proposed post-mining land uses and landforms. If approved, the development consent includes conditions to define the post-mining land use that the operator must achieve and otherwise regulates rehabilitation, including progressive rehabilitation. Under the mining or petroleum production lease, the operator must then prepare more detailed rehabilitation plans, objectives and completion criteria and report annually against them. The operator must also lodge a rehabilitation security deposit before the project starts to cover the full potential cost of rehabilitation.

**Table B.2 Regulatory arrangements in Victoria**

<b>Category</b>	<b>Approach</b>
<i>Land access regime</i>	
Agreement with a private landholder	Victoria requires a negotiated agreement before a proponent can enter or access privately owned land. However, 'informed verbal consent' is sufficient to begin 'low impact exploration', which is activity that does not require the use of equipment, chemical treatment, explosives or the removal of certain amounts and types of vegetation.
Terms and conditions	The Commercial Consent Agreement for Access to Private Land in Victoria is currently being trialled in part of the state and provides a voluntary set of terms for land access for exploration — covering access to the land, conditions of access, compensation and dispute resolution — and can be tailored to suit personal needs.
<i>Native title arrangements</i>	
	The <i>Traditional Owner Settlement Act 2010 (Vic)</i> (TOSA) allows the Victorian Government and traditional owners to reach settlements over traditional owner land. Traditional owners agree not to pursue a native title claim under Commonwealth law if a settlement is in place. TOSA settlements also allow traditional owners to establish land-use activity agreements, which set out the terms on which resources exploration and development on relevant land may take place.
<i>Institutional arrangements</i>	
Environment regulator	Environment Protection Authority Victoria
Resources regulator	Earth Resources Regulation, Department of Jobs, Precincts and Regions
Heritage regulators	Heritage Victoria, Victorian Aboriginal Heritage Council and Aboriginal Victoria
Other arrangements	Memoranda of Understanding with other regulators and government entities to clarify regulatory roles and processes.
<i>Coordination mechanisms</i>	
Lead agency	Earth Resources Regulation, Department of Jobs, Precincts and Regions
Major projects coordination	Department of Jobs, Precincts and Regions
<i>Decision-maker</i>	
Minister	The Minister for Resources grants resources-related licences and extractive industry authorities. The Minister for Planning provides recommendations for projects that have the potential for 'significant environmental effects' under the Environment Effects Statement process.
Other decision-makers	The Department Head of the Department of Jobs, Precincts and Regions approves or refuses work plans, which are required for extractive and mineral exploration and mining that is over a certain risk threshold.

(continued next page)

Table B.2 (continued)

Category	Approach
<i>Review and appeals</i>	
Merits review	<p>The <i>Mineral Resources (Sustainable Development) Act 1990 (Vic)</i> (MRSD Act) provides mineral licensees and extractive industry authority holders with external review through the Victorian Civil and Administrative Tribunal for decisions regarding work plans and work plan variations, and conditions set by the Minister for Resources for extractive industry authority holders only.</p> <p>Under the MRSD Act and in relation to minerals licences only, the Mining Warden is empowered to resolve disputes through alternative dispute resolution methods such as mediation and arbitration.</p>
Judicial review	Judicial review under the <i>Administrative Law Act 1978 (Vic)</i> may be available for Ministerial decisions on licensing and other matters under the MRSD Act for which merits review is not available.
<i>Offsets</i>	
Fund/pay-in-lieu option	No
Public register	Partial — register of offset credit transactions for market purposes. Does not include information on the project requiring the offset.
<i>Rehabilitation arrangements</i>	<p>All mines and quarries must be rehabilitated. Exploration and retention licence holders and some extractive industry authority holders must rehabilitate in accordance with the licence/work authority (where a work plan is not required). Mining or prospecting licensees and extractive industry work authority holders must rehabilitate land in accordance with a rehabilitation plan, which forms part of the work plan. From 1 July 2020, any new or varied rehabilitation plans must demonstrate how the licensee will achieve a safe, stable and sustainable landform, supported by closure criteria and progressive rehabilitation milestones. Similar requirements will apply to extractive industry work authority holders from 1 July 2021. Rehabilitation bonds are collected to mitigate risk to the state, covering the full expected rehabilitation liability.</p>



**Table B.3 Regulatory arrangements in Queensland**

<b>Category</b>	<b>Approach</b>
<i>Land access regime</i>	
Agreement with a private landholder	A resource company cannot enter private land to undertake advanced activities unless they have negotiated a legally binding agreement with the landholder, are parties to an arbitration process or have applied to the Land Court for a determination. Legally binding agreements can be a Conduct and Compensation agreement, a deferral agreement or an opt-out agreement. The land access regime does not apply to prospecting permits, mining claims and mining leases. A negotiated agreement is not required for preliminary activities, but a resource company must give at least 10 business days' written notice prior to entry for such activities.
Terms and conditions	Mandatory conditions and best-practice guidelines are set out in the Queensland Land Access Code. Resource companies and landholders must comply with the Code with the exception of prospecting permits, mining claims and mining lease holders. A Conduct and Compensation agreement may also include additional terms in relation to what conduct is and is not permitted on the land, to the extent that it is consistent with the conditions of the resource authority and the relevant Resource Acts.
<i>Native title arrangements</i>	
	<p>If there is land subject to native title within the boundary of the resource authority application, the resource company will be asked to nominate a native title process. Depending on the type of resource authority, this may include an Indigenous land use agreement, right to negotiate, expedited procedure, or in specific circumstances, a combination of processes.</p> <p>An Indigenous land use agreement and right to negotiate exists for all resource authorities, including mineral exploration permits or coal and mineral development licences causing major ground disturbance.</p> <p>The expedited procedure occurs when the State asserts that the activities under the resource authority will have minimal effect on native title rights and interests. It is only available for mineral exploration permits or coal and mineral development licences that will not cause major ground disturbance. It is not available for a mining claim, mining lease, prospecting permit and authority to prospect, petroleum lease or other permits.</p>
<i>Institutional arrangements</i>	
Environment regulator	Department of Environment and Science (DES)
Resources regulator	Department of Resources
Heritage regulators	DES, Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships
Other arrangements	<ul style="list-style-type: none"> <li>• Department of Regional Development, Manufacturing and Water — administers the <i>Water Act 2000</i> (Qld)</li> <li>• Office of the Coordinator-General (CG), Department of State Development, Infrastructure, Local Government and Planning — leads the project assessment process for declared coordinated projects</li> <li>• Queensland Treasury — administers the Financial Provisioning Scheme</li> <li>• GasFields Commission — manages and improves the coexistence of landholders, regional communities and the onshore gas industry</li> <li>• Land Access Ombudsman — investigates and facilitates resolution of disputes between landholders and resources companies</li> <li>• Office of Groundwater Impact Assessment — assesses and manages the impacts of groundwater extraction from resource operations in cumulative management areas</li> <li>• Resources Safety and Health Queensland — regulates worker safety in the mining, quarrying, petroleum, gas and explosives industries.</li> </ul>

(continued next page)

Table B.3 (continued)

Category	Approach
<i>Coordination mechanisms</i>	
Lead agency	Department of Resources
Major projects coordination	Office of the Coordinator-General
<i>Decision-maker</i>	
Minister	Decision maker
Other decision-makers	DES is the decision maker as the administering authority under the <i>Environmental Protection Act 1994</i> (Qld) for environmental authorities for resource activities. Where the CG declares a coordinated project, the coordinated project process may go through a streamlined assessment report process or an environmental impact statement under the <i>State Development and Public Works Organisation Act 1971</i> (Qld).
<i>Review and appeals</i>	
Merits review	The <i>Environmental Protection Act 1994</i> (Qld) and the Resources Acts confer jurisdiction to the Land Court to hear and determine matters relating to natural resource issues, including appeals against decisions concerning the grant of mining tenures and other state land interests. Different review processes exist under the <i>Environmental Protection Act 1994</i> (Qld) and each of the Resources Acts. Dependent on the applicable legislation, the review processes available may include internal review, appeals review and external review.
Judicial review	Under the <i>Judicial Review Act 1991</i> (Qld), a person whose interests would be adversely affected by a decision made by the Department of Resources or DES has the right to request a statement of reasons explaining a decision, and apply to the Supreme Court for a review of a decision if they are not satisfied with the statement of reasons for that decision.
<i>Offsets</i>	
Fund/pay-in-lieu option	Yes
Public register	Yes
<i>Rehabilitation arrangements</i>	Resource operators are required to rehabilitate land as per requirements of their environmental authority. Holders of an environmental authority issued for a site-specific application for a mining lease are required to have a progressive rehabilitation and closure plan. It is a condition of all environmental authorities issued for a resource activity that the holder must not carry out the activity unless an Estimated Rehabilitation Cost decision is in effect and the holder has paid assurance and complied with the requirements of the <i>Mineral and Energy Resources (Financial Provisioning) Act 2018</i> (Qld). Most pay a proportion of their expected rehabilitation liabilities into a pooled fund each year. Higher-risk and very small companies are required to provide financial surety, and companies with liabilities over a threshold must provide some surety on top of a capped payment into the pool. A Rehabilitation Commissioner, supported by a dedicated office, is enabled to be established under the <i>Environmental Protection Act 1994</i> (Qld) to work collaboratively with government, industry, environmental and scientific groups, and the community to provide advice on rehabilitation practices, outcomes and policy implementation, public interest evaluation processes, and rehabilitation performance and trends.

**Table B.4 Regulatory arrangements in South Australia**

<b>Category</b>	<b>Approach</b>
<i>Land access regime</i>	
Agreement with a private landholder	To access land for exploration, the resources company must either effectively consult with the landholder and provide a notice of entry, or negotiate an agreement. Additional requirements apply at later stages of the project cycle.
Terms and conditions	A <i>Mining and Resources Industry Land Access Dispute Resolution Code</i> provides a series of dispute resolution methods for landholders and resource companies. The Landowner Advisory Service is a free, independent advisory service to landholders about their rights, responsibilities and any other information they require in relation to the resources Acts.
<i>Native title arrangements</i>	
	Section 58 and Part 9B of the <i>Mining Act 1971 (SA)</i> is the State's alternative 'right to negotiate' scheme. Part 9B includes requirements for exploration and the grant of production tenements on native title land. The holder of an exploration licence does not have any right to carry out activities that affect native title without: (a) an agreement with the relevant native title group; or (b) a determination from the Environment, Resources and Development Court.  The Native Title Act applies to tenements granted under the <i>Petroleum and Geothermal Energy Act 2000 (SA)</i> , where a combination of Indigenous land use agreements and 'right to negotiate' agreements are used.
<i>Institutional arrangements</i>	
Environment regulators	Department for Energy and Mining, SA Environment Protection Authority, Department for Environment and Water
Resources regulator	Department for Energy and Mining
Heritage regulators	Department for Environment and Water, Aboriginal Affairs and Reconciliation (Department of the Premier and Cabinet)
Other arrangements	SafeWork SA, Department of Planning, Transport and Infrastructure
<i>Coordination mechanisms</i>	
Lead agency	Department for Energy and Mining
Major projects coordination	Department for Energy and Mining
<i>Decision-maker</i>	
Minister	Minister for Energy and Mining makes approval decisions on mining and petroleum licences/tenements and programs for environment protection and rehabilitation (mining) or statements of environmental objectives (petroleum).
Other decision-makers	Minister for Planning (Environmental Impact Statements for major developments or projects under the <i>Development Act 1993 (SA)</i> )

(continued next page)

**Table B.4** (continued)

<b>Category</b>	<b>Approach</b>
<i>Review and appeals</i>	
Merits review	Merits review is only available to proponents if the decision maker rejects or has requested alterations to a program for environmental protection and rehabilitation or mine operations plan.
Judicial review	Yes. Judicial review is available for approval decisions on mining leases and programs for environment protection and rehabilitation. An administrative appeal process is available for decisions that affect petroleum licensees and/or applicants — that is, any decision to grant or not to grant a licence, to suspend or cancel a licence or to impose licence conditions (including the nature of such conditions).
<i>Offsets</i>	
Fund/pay-in-lieu option	Yes
Public register	Partial — separate registers of land-clearing proposals and offset credits. Does not link approved land clearing to associated offset.
<i>Rehabilitation arrangements</i>	Tenement holders must prepare a program for environment protection and rehabilitation before commencing regulated activities. Government policy requires a rehabilitation bond to be provided covering the full potential cost of rehabilitation for mines. For petroleum, a risk-based approach is used to determine the level of bond based on the financial health of the tenement holder and the potential cost of outstanding rehabilitation.  For quarries, progressive rehabilitation is required to be undertaken. However, where a tenement holder does not have the financial capacity to meet their rehabilitation obligations, and all other enforcement measures have been exhausted, the extractive areas rehabilitation fund can be used to rehabilitate land disturbed by the operations.

**Table B.5 Regulatory arrangements in Western Australia**

<b>Category</b>	<b>Approach</b>
<i>Land access regime</i>	
Agreement with a private landholder	<p>Mining and petroleum titles may be granted over private land.</p> <p>For minerals, landholder consent is required for the top 30 metres of 'protected' private land to be included into a tenement. Private land is protected where it is, for example, an orchard, garden or plantation, used for agricultural purposes or as substantial improvement, or is a parcel of land not exceeding 2000 square metres. Compensation must be agreed or determined prior to the commencement of operations. Landholder's consent is not required for the issue of a 'Permit to Enter' (to search for minerals and mark out a tenement); however, the landholder must be notified prior to entry.</p> <p>For petroleum/geothermal resources, titles are granted over private land without landholder consent. A landholder is notified when the proponent wishes to enter the land to undertake an activity, after the title is granted. Written consent of a landholder is only required for a limited category of land (such as land not exceeding 2000 square metres and land close to burial grounds, reservoirs or any substantial improvement). Compensation must be agreed/determined prior to the commencement of operations.</p>
Terms and conditions	The Australian Petroleum Production and Exploration Association has produced a template agreement for WA landholders and petroleum explorers.
<i>Native title arrangements</i>	
No unique arrangements.	
<i>Institutional arrangements</i>	
Environment regulators	Western Australian Environmental Protection Authority (WA EPA), Department of Water and Environmental Regulation (DWER), Department of Mines, Industry Regulation and Safety (DMIRS), Department of Biodiversity, Conservation and Attractions
Resources regulator	DMIRS
Heritage regulator	Department of Planning, Lands and Heritage (DPLH)
Other arrangements	'State agreements' between proponents and the WA Government (and ratified by Acts of Parliament) specify terms and conditions of project development (including royalties), which are regulated by Department of Jobs, Tourism, Science and Innovation (DJTSI).
<i>Coordination mechanisms</i>	
Lead agencies	DMIRS, DJTSI and DPLH, or Department of Primary Resources and Regional Development
Major projects coordination	DJTSI
<i>Decision-maker</i>	
Minister	For projects that are likely to have a significant impact on the environment and have been assessed by the WA EPA under Part IV of the <i>Environmental Protection Act 1986 (WA)</i> , the Minister for Environment determines whether or not environmental approval will be granted and under what conditions, informed by the EPA. For all other projects, environmental approval is granted by Delegated Officers within DMIRS and DWER.

(continued next page)

Table B.5 (continued)

Category	Approach
Other decision-makers	<p>The WA EPA decides whether proposals, if implemented, are likely to have a significant environmental impact and therefore need assessment under Part IV of the <i>Environmental Protection Act 1986</i> (WA), and makes recommendations to the Minister for Environment on whether projects should proceed and under what conditions.</p> <p>DMIRS determines programmes of work (exploration and prospecting), mining proposals and mine closure plans under the <i>Mining Act 1978</i> (WA), environment plans and oil spill contingency plans under WA petroleum legislation, and native vegetation clearing permits under delegated powers under Part V of the <i>Environmental Protection Act 1986</i> (WA).</p> <p>DWER determines approvals and licences for 'prescribed premises' (emissions and discharges licensing) under Part V of the <i>Environmental Protection Act 1986</i> (WA). DWER also determines approvals for taking groundwater or surface water from gazetted 'water management areas' under the <i>Rights in Water and Irrigation Act 1914</i> (WA).</p> <p>The Minister for Mines and Petroleum determines the grant or refusal of applications for exploration and retention licences and mining leases. The Mining Registrar or Mining Warden determines the grant of applications for prospecting and miscellaneous licences. Under section 111A of the <i>Mining Act 1978</i> (WA), the Minister may terminate or refuse any application for a mining tenement where the Minister is satisfied on reasonable grounds that it is in the public interest that the land not be disturbed or the application not granted.</p>
<i>Review and appeals</i>	
Merits review	<p>Under the <i>Environmental Protection Act 1986</i> (WA), the decision of the WA EPA not to assess a proposal is appealable, except when the decision includes a recommendation that the proposal be dealt with under Part V Division 2 (Clearing). Any person may lodge an appeal against the EPA's report, recommendations or implementation conditions applying to a proposal under section 45(5). Appeals are not available against decisions to assess or refuse a proposal.</p> <p>Appeals can be lodged against works approval, licence and native vegetation clearing permit decisions and conditions under Part V of the <i>Environmental Protection Act 1986</i> (WA). Appeals are reviewed by the Appeals Convenor, who makes recommendations to the Minister for Environment.</p>
Judicial review	No unique arrangements for applications for judicial review. Public interest standing may be granted.
<i>Offsets</i>	
Fund/pay-in-lieu option	Yes (no other option) for projects in the Pilbara region.
Public register	Yes
<i>Rehabilitation arrangements</i>	<p>Companies must develop mine closure plans as part of a mining proposal. Mining tenement holders that report a Rehabilitation Liability Estimate (a statutory term that calculates the area of disturbance of different activity types multiplied by scheduled unit rates per hectare) of over \$50 000 must contribute to the Mining Rehabilitation Fund (MRF) each year (this does not apply to tenements granted or held pursuant to State Agreement Acts). The principal of the MRF can be used to rehabilitate abandoned mines; the interest generated on the fund is available to rehabilitate legacy sites. Additional security for rehabilitation can be imposed under the <i>Mining Act 1978</i> (WA) (for example, unconditional performance bonds).</p>

**Table B.6 Regulatory arrangements in Tasmania**

<b>Category</b>	<b>Approach</b>
<i>Land access regime</i>	
Agreement with a private landholder	Once an exploration licence is granted, the licensee can explore on private land after providing 14 days' notice, except within 100 metres of a body of water or dwelling on the land. Before a mining lease can be granted, the lease applicant must enter a compensation agreement with the owner of any private land in the lease area. Prospecting licences (rather than exploration licences) can only be used on private land with the consent of the owner or occupier.
Terms and conditions	No standard set of terms and conditions provided.
<i>Native title arrangements</i>	
	No unique arrangements.
<i>Institutional arrangements</i>	
Environment regulator	Environment Protection Authority Tasmania (EPA Tas), or Local Government Authority (LGA) for smaller projects
Resources regulator	Mineral Resources Tasmania (MRT), within the Department of State Growth
Heritage regulators	Heritage Tasmania, Aboriginal Heritage Tasmania
<i>Coordination mechanisms</i>	
Lead agency	MRT for exploration licences, and MRT, EPA Tas or LGA for mining leases (depending on the scale and nature of the project).
Major projects coordination	Tasmanian Planning Commission for Projects of State Significance. The Office of the Coordinator-General also provides coordination but is not responsible for assessment or approvals.
<i>Decision-maker</i>	
Minister	The Minister for Resources is responsible for granting mining leases and exploration licences.
Other decision-makers	Mining leases or exploration licences cannot be granted in respect of Aboriginal land without the agreement of the Aboriginal Land Council of Tasmania. LGAs issue land use permits that are also required for mining activity to occur. EPA Tas has a role in assessment and providing advice to LGAs and MRT on mining developments. It also assesses larger proposals, with its Board recommending conditions that should be imposed if the development is approved.
<i>Review and appeals</i>	
Merits review	Appeals on EPA Tas determinations can be brought to the Resource Management and Planning Appeal Tribunal.
Judicial review	Judicial review can be sought under the <i>Judicial Review Act 2000</i> (Tas).
<i>Offsets</i>	
Fund/pay-in-lieu option	No
Public register	No
<i>Rehabilitation arrangements</i>	
	Rehabilitation bonds are required to cover the cost of the potential rehabilitation liability.

**Table B.7 Regulatory arrangements in the Northern Territory**

<b>Category</b>	<b>Approach</b>
<i>Land access regime</i>	
Agreement with a private landholder	Under mining legislation, negotiated agreement is required for substantial disturbance activities such as land clearing, earthworks and drilling. For lesser activity, 14 days' notice must be provided. Land access agreements are required as part of the department's policy regarding the land access assessment panel. Further provisions are proposed to the <i>Petroleum Act 1984</i> (NT) to formalise the land access agreement process.
Terms and conditions	No standard terms and conditions are provided.
<i>Indigenous land arrangements</i>	
	The <i>Aboriginal Land Rights (Northern Territory) Act 1976</i> (Cth) covers nearly 50 per cent of the land mass of the Northern Territory, and has unique provisions relating to resources development (chapter 5). The Northern Land Council, Central Land Council, Tiwi Land Council and Anindilyakwa Land Council represent the interests of traditional owners.
<i>Institutional arrangements</i>	
Environment regulators	Northern Territory Environment Protection Authority (NT EPA) and Department of Environment, Parks and Water Security
Resources regulator	Department of Industry, Tourism and Trade
Heritage regulators	Heritage Conservation Branch within the Department of Territory Families, Housing and Communities; Heritage Council
Other arrangements	Aboriginal Areas Protection Authority
<i>Coordination mechanisms</i>	
Lead agency	Department of Industry, Tourism and Trade
Major projects coordination	Department of Industry, Tourism and Trade
<i>Decision-maker</i>	
Ministers	The Minister for Mining and Industry is the decision maker for resource tenure and extraction and production approvals. The Minister for Environment makes environmental approval decisions, supported by advice from the NT EPA.
Other decision-makers	Recommendations from the NT EPA will be used as the decision instrument if the Minister does not make a decision within statutory timeframes.
<i>Review and appeals</i>	
Merits review	For environmental approval decisions, merits review is available for some decisions made by the CEO or an environmental officer. Additional merits review avenues are planned for introduction to resources legislation.
Judicial review	In relation to environmental approval decisions, extended standing for people who have made a genuine and valid submission during the environmental impact assessment process. Some decisions under the <i>Petroleum Act 1984</i> (NT) are also subject to judicial review with similar standing provisions.

(continued next page)



---

Table B.7 (continued)

<b>Category</b>	<b>Approach</b>
<i>Offsets</i>	
Fund/pay-in-lieu option	No
Public register	Yes (under development as part of newly legislated offsets framework)
<i>Rehabilitation arrangements</i>	Security bonds are required to cover the cost of the potential rehabilitation liability. Mining operators are charged 1 per cent of their estimated rehabilitation liability each year, payable as a levy on mining projects. The proceeds are used to rehabilitate legacy abandoned mines.

---

**Table B.8 Regulatory arrangements for Commonwealth waters, and Commonwealth protected matters under the EPBC Act**

<b>Category</b>	<b>Approach</b>
<i>Land access regime</i>	Any project approved under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth) (EPBC Act) taking place on Commonwealth land could be subject to conditions in relation to land access.
<i>Native title arrangements</i>	The Native Title Act 1993 applies to all developments on Commonwealth land or in Commonwealth waters.
<i>Institutional arrangements</i>	
Environment regulators	Australian Department of Agriculture, Water and the Environment (DAWE), National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA)
Resources regulator	NOPSEMA
Heritage regulator	DAWE
Other arrangements	DAWE is also responsible for administering the: <i>Environment Protection (Alligator Rivers Region) Act 1978</i> (Cth); <i>Environment Protection (Sea Dumping) Act 1981</i> (Cth); <i>Great Barrier Marine Park Act 1975</i> (Cth); <i>Underwater Cultural Heritage Act 2018</i> (Cth) and Commonwealth fisheries legislation. Other Commonwealth agencies may have a regulatory role where activities take place on Commonwealth defence land or airports.
<i>Coordination mechanisms</i>	
Lead agency	None, with the exception of offshore petroleum, for which NOPSEMA is the single regulator and the National Offshore Petroleum Titles Administrator is the single titles administrator.
Major projects coordination	Major Projects Facilitation Agency, Department of Industry, Innovation and Science
<i>Decision-maker</i>	
Minister	The Environment Minister is responsible for approval decisions under the EPBC Act, except for those that come under NOPSEMA's jurisdiction.
Other decision-makers	Since 28 February 2014, NOPSEMA has been an independent regulator and makes decisions without the direct involvement of Ministers.
<i>Review and appeals</i>	
Merits review	A limited set of decisions made by a delegate under the EPBC Act may be subject to merits review at the Administrative Appeals Tribunal — for example, decisions relating to wildlife trade permits or conservation orders. Decisions relating to the referral, assessment and approval of actions under the EPBC Act are not subject to merits review. A limited set of decisions made by the Minister or the Titles Administrator may be reviewed by the Administrative Appeals Tribunal under the <i>Offshore Petroleum and Greenhouse Gas Storage Act 2006</i> (Cth) (OPGGS Act).
Judicial review	There are extended standing provisions in the EPBC Act, but none under the OPGGS Act.

(continued next page)

Table B.8 (continued)

Category	Approach
<i>Offsets</i>	
Fund/pay-in-lieu option	No
Public register	No
<i>Rehabilitation arrangements</i>	<p>No specific rehabilitation requirements under the EPBC Act; however, it may be required as a condition of approval or as part of an enforcement action under the EPBC Act.</p> <p>The base case for decommissioning offshore oil and gas infrastructure is complete removal, although other options can be considered. Some offshore decommissioning options may require a permit under the <i>Environment Protection (Sea Dumping) Act 1981</i> (Cth). Surety is required for extraordinary costs such as those incurred in an oil spill, but not for the cost of decommissioning.</p>



---

## References

- ABC News 2016, 'ERA radioactive slurry spill: NT Government won't lay charges against miner', *ABC News*, 12 February, <https://www.abc.net.au/news/2016-02-12/era-avoids-charges-over-radioactive-slurry-spill/7163560> (accessed 6 March 2020).
- Abdel Sabour, S.A. and Poulin, R. 2010, 'Mine expansion decisions under uncertainty', *International Journal of Mining, Reclamation and Environment*, vol. 24, no. 4, pp. 340–349.
- Aboriginal Victoria 2020, *Submission to the Joint Standing Committee on Northern Australia Inquiry into the Destruction of 46,000 Year Old Caves at the Juukan Gorge in the Pilbara Region of Western Australia*, Melbourne.
- ABS (Australian Bureau of Statistics) 1998, *Balance of Payments and International Investment Position, Australia: Concepts, Sources and Methods*, cat. No. 5331.
- 2001, *Special Article - The Australian Mining Industry: From Settlement to 2000 (Oct 2000)*, <https://www.abs.gov.au/ausstats/abs%40.nsf/94713ad445ff1425ca25682000192af2/93136e734ff62aa2ca2569de00271b10!OpenDocument> (accessed 9 October 2019).
- 2013, *Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 2.0)*, June, Cat. no. 1292.0.
- 2018, *International Investment Position, Australia: Supplementary Statistics, 2017*, May, Cat. no. 5352.0.
- 2020a, *Australian Industry, 2018-19*, May, Cat. no. 8155.0.
- 2020b, *Australian National Accounts: National Income, Expenditure and Product*, September, Cat. no. 5206.0.
- 2020c, *Counts of Australian Businesses, including Entries and Exits*, February, Cat. no. 8165.0.
- 2020d, *International Investment Position, Australia: Supplementary Statistics*, May, Cat. no. 5352.0.
- 2020e, *Labour Force, Australia, Detailed*, September, Cat. no. 6291.0.
- 2020f, *Private New Capital Expenditure and Expected Expenditure, Australia*, August, Cat. no. 5625.0.
- ACCC (Australian Competition and Consumer Commission) 2020, *Gas inquiry 2017-2025 Interim Report*, July, <https://www.accc.gov.au/system/files/Gas%20inquiry%20July%202020%20interim%20report.pdf> (accessed 3 November 2020).

---

ACCR (Australian Centre for Corporate Responsibility) 2020, *Rio Tinto takes the first step to recovery*, <https://accr.org.au/news/rio-tinto-takes-the-first-step-to-recovery/> (accessed 20 November 2020).

ACIL Tasman 2012, *Review of Australia's Offshore Petroleum Exploration Policy: Area-Release, Tenement Conditions, Permit Allocation, Taxation, and Information Provision*, report prepared for the Department of Resources, Energy and Tourism, [https://acilallen.com.au/uploads/files/projects/51/ACIL\\_OffshorePetroleum\\_2012.pdf](https://acilallen.com.au/uploads/files/projects/51/ACIL_OffshorePetroleum_2012.pdf) (accessed 3 November 2020).

ACNC (Australian Charities and Not-for-profits Commission) 2013, *Commissioner's Interpretation Statement: Indigenous Charities*, <https://www.acnc.gov.au/tools/guidance/commissioners-interpretation-statements/indigenous-charities> (accessed 18 February 2020).

— 2014, *Commissioner's Policy Statement: Revocation by the ACNC*, <https://www.acnc.gov.au/sites/default/files/Download%20Commissioner%27s%20Policy%20Statement%20-%20Revocation%20by%20the%20ACNC%20%5BPDF%20120KB%5D.pdf> (accessed 11 February 2020).

— 2019, *Australian Charities and Not-For-Profits Commission Regulatory Approach Statement*, <https://www.acnc.gov.au/raise-concern/regulating-charities/regulatory-approach-statement> (accessed 18 February 2020).

Adani 2015, *Social Impact Assessment*, Carmichael Coal Mine and Rail Project Volume 1 Chapter 3, <http://eisdocs.dsdp.qld.gov.au/Carmichael%20Coal%20Mine%20and%20Rail/EIS/EIS/Project%20Wide/03-social-impact-assessment-project-wide.pdf> (accessed 21 January 2020).

Administrative Review Council 1999, *What Decisions Should Be Subject to Merit Review?*, <https://www.arc.ag.gov.au/Publications/Reports/Pages/Downloads/Whatdecisionsshouldbesubjectto meritreview1999.aspx> (accessed 29 August 2018).

AELERT (Australasian Environmental Law Enforcement and Regulators Network) 2020, *Better Regulation Working Group*, <https://www.aelert.net/about-aelert/cluster-groups/better-regulation-cluster> (accessed 30 January 2020).

AGD (Attorney-General's Department) 2019, *Attracting Major Infrastructure, Resources and Energy Projects to Increase Employment — Project Life Greenfields Agreements*, <https://www.ag.gov.au/Consultations/Pages/industrial-relations-consultation-greenfields-agreements.aspx> (accessed 5 December 2019).

— 2020, *International human rights system*, <https://www.ag.gov.au/rights-and-protections/human-rights-and-anti-discrimination/international-human-rights-system> (accessed 28 September 2019).

— nd, *Human Rights Communications*, <https://www.ag.gov.au/rights-and-protections/human-rights-and-anti-discrimination/human-rights-communications> (accessed 23 September 2020).

- 
- AHRC (Australian Human Rights Commission) 2000, *Native Title Report 2000: Chapter 4: Indigenous heritage* / Australian Human Rights Commission, <https://humanrights.gov.au/our-work/native-title-report-2000-chapter-4-indigenous-heritage#ch4.100> (accessed 6 October 2020).
- 2009, *Native Title Report 2009*, [https://humanrights.gov.au/sites/default/files/content/social\\_justice/nt\\_report/ntreport09/pdf/ntr2009.pdf](https://humanrights.gov.au/sites/default/files/content/social_justice/nt_report/ntreport09/pdf/ntr2009.pdf) (accessed 3 November 2020).
- 2016, *Social Justice and Native Title Report 2016*, Sydney, [https://www.humanrights.gov.au/sites/default/files/document/publication/AHRC\\_SJNT\\_R\\_2016.pdf](https://www.humanrights.gov.au/sites/default/files/document/publication/AHRC_SJNT_R_2016.pdf) (accessed 19 February 2020).
- Albemarle nd, *Greenbushes, Western Australia*, <https://www.albemarle.com/businesses/lithium/locations/western-australia/greenbushes-western-australia> (accessed 6 March 2020).
- ALRC (Australian Law Reform Commission) 2008, *Australian Privacy Law and Practice (ALRC Report 108), Volume 1*.
- 2015, *Connection to Country: Review of the Native Title Act 1993 (Cth)*, [https://www.alrc.gov.au/wp-content/uploads/2019/08/alrc\\_126\\_final\\_report.pdf](https://www.alrc.gov.au/wp-content/uploads/2019/08/alrc_126_final_report.pdf) (accessed 8 October 2019).
- AMEC (Association of Mining and Exploration Companies) 2020, *AMEC COVID 19 UPDATE Current Stimulus Assistance*, 10 June, <https://secureservercdn.net/198.71.233.51/0h5.0cf.myftpupload.com/wp-content/uploads/2020/06/Financial-Matrix-COVID-as-of-10-June.pdf> (accessed 3 November 2020).
- ANAO (Australian National Audit Office) 2003, *Referrals, Assessments and Approvals under the Environment Protection and Biodiversity Conservation Act 1999*, Canberra, [https://www.anao.gov.au/sites/default/files/anao\\_report\\_2002-2003\\_38.pdf](https://www.anao.gov.au/sites/default/files/anao_report_2002-2003_38.pdf) (accessed 27 November 2019).
- 2017a, *Indigenous Advancement Strategy*, ANAO Report, 35, Canberra.
- 2017b, *Monitoring Compliance with Environment Protection and Biodiversity Conservation Act 1999 Conditions of Approval: Follow-on Audit*, No.36 2016–17, Canberra.
- 2020, *Referrals, Assessments and Approvals of Controlled Actions Under the Environment Protection and Biodiversity Conservation Act 1999*, 25 June, No. 47 2019–20, Canberra, <https://www.anao.gov.au/work/performance-audit/referrals-assessments-and-approvals-controlled-actions-under-the-epbc-act> (accessed 24 February 2020).
- Anaya, J. 2009, *Report of the Special Rapporteur on the Situation of Human Rights and Fundamental Freedoms of Indigenous People*, James Anaya, 15 July, A/HRC/12/34, United Nations Human Rights Council, <https://documents-dds-ny.un.org/doc/UNDOC/GEN/G09/145/82/PDF/G0914582.pdf?OpenElement> (accessed 14 October 2020).
- Anglo American 2020, *Community Investment*, <https://web.archive.org/web/20180913094930/http://australia.angloamerican.com/our-difference/community-investment> (accessed 26 February 2020).

- 
- AONSW (Audit Office of New South Wales) 2017, *Mining Rehabilitation Security Deposits: Department of Planning and Environment, Performance Audit*, <https://www.parliament.nsw.gov.au/tp/files/70941/Mining%20Rehabilitation%20Security%20Deposits%20Final%20Report.pdf> (accessed 27 February 2020).
- APPEA (Australian Petroleum Production and Exploration Association) 2020, *Key Statistics*, <https://appea.com.au/wp-content/uploads/2020/05/APPEA-Key-Statistics-2020.pdf> (accessed 3 November 2020).
- Arafura Resources Limited 2019, 'Emerging as Australia's Next NdPr Producer', [https://www.arultd.com/images/201054\\_-\\_The\\_New\\_World\\_Metals\\_Conference\\_Presentation.pdf](https://www.arultd.com/images/201054_-_The_New_World_Metals_Conference_Presentation.pdf) (accessed 21 January 2020).
- and GHD 2016, *Regulatory Context*, Nolans Environmental Impact Statement: Volume 1, Chapter 2, [https://www.arultd.com/images/EIS/DOCUMENTS/Volume1/Nolans\\_EIS\\_Chapter\\_2\\_LOW\\_RES\\_web.pdf](https://www.arultd.com/images/EIS/DOCUMENTS/Volume1/Nolans_EIS_Chapter_2_LOW_RES_web.pdf) (accessed 11 November 2020).
- Arnost, M. 2013, 'Miner ordered to pay \$70,000 diesel spill fine', *ABC News*, 23 August, <https://www.abc.net.au/news/2013-08-23/mcarthur-river-mine-court-diesel-spill-fine-darwin-magistrates-/4908176> (accessed 10 March 2020).
- ARPANSA (Australian Radiation Protection and Nuclear Safety Agency) 2020, *Submission to the EPBC Act Review*, Canberra.
- ASX (Australian Securities Exchange) 2017, *Metals & Mining Sector Profile*, July, [https://www.asx.com.au/documents/resources/00180\\_MetalsMiningSector\\_FactSheet\\_web.pdf](https://www.asx.com.au/documents/resources/00180_MetalsMiningSector_FactSheet_web.pdf) (accessed 15 October 2019).
- 2020a, *BHP Group Limited*, <https://www.asx.com.au/asx/share-price-research/company/BHP> (accessed 25 November 2020).
- 2020b, *Rio Tinto Limited*, <https://www.asx.com.au/asx/share-price-research/company/rio> (accessed 25 November 2020).
- ATNS (Agreements, Treaties and Negotiated Settlements Project) 2020, *Jabiluka Long-Term Care and Maintenance Agreement*, <https://www.atns.net.au/agreement.asp?EntityID=1988> (accessed 23 September 2020).
- Australian Government 2016a, *Community Engagement and Development - Leading Practice Sustainable Development for the Mining Industry*, <https://www.industry.gov.au/sites/default/files/2019-04/lpsdp-community-engagement-and-development-handbook-english.pdf> (accessed 3 December 2019).
- 2016b, *Mine Rehabilitation: Leading Practice Sustainable Development Program for the Mining Industry*, <https://www.industry.gov.au/sites/default/files/2019-04/lpsdp-mine-rehabilitation-handbook-english.pdf> (accessed 26 February 2020).
- 2016c, *Preventing acid and metalliferous drainage - Leading Practice Sustainable Development of the Mining Industry*, <https://www.industry.gov.au/sites/default/files/2019-04/lpsdp-preventing-acid-and-metalliferous-drainage-handbook-english.pdf> (accessed 21 November 2020).



- 
- 2019, *Mid-Year Economic and Fiscal Outlook 2019-20*, Canberra, [https://budget.gov.au/2019-20/content/myefo/download/MYEFO\\_2019-20.pdf](https://budget.gov.au/2019-20/content/myefo/download/MYEFO_2019-20.pdf) (accessed 11 November 2020).
- 2020, *Budget 2020-21: Budget Paper No. 2*, 6 October, [https://budget.gov.au/2020-21/content/bp2/download/bp2\\_complete.pdf](https://budget.gov.au/2020-21/content/bp2/download/bp2_complete.pdf) (accessed 7 October 2020).
- nd, *Funding Options for PBCs*, [https://webarchive.nla.gov.au/awa/20190319165403/https://www.nativetitle.org.au/sites/default/files/docs/publications/psc\\_funding\\_options\\_-\\_brochure.pdf](https://webarchive.nla.gov.au/awa/20190319165403/https://www.nativetitle.org.au/sites/default/files/docs/publications/psc_funding_options_-_brochure.pdf) (accessed 19 December 2019).
- Australian Heritage Commission 2002, *Ask first: a guide to respecting Indigenous heritage places and values*, Canberra.
- Australian Parliament House 2020, *Australia's Oil and Gas Reserves*, [https://www.aph.gov.au/Parliamentary\\_Business/Committees/Senate/Economics/Australia\\_soilandgas](https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Economics/Australia_soilandgas) (accessed 23 September 2020).
- Ayres, I. and Braithwaite, J. 1992, *Responsive Regulation: Transcending the Deregulation Debate*, Oxford University Press, New York.
- Bakker, R., Burgers, H. and Chamberlin, A. 2015, *How to Design and Manage Successful Joint Ventures in the Exploration Space*, September, Australian Centre for Entrepreneurship Research, <https://eprints.qut.edu.au/84463/1/84463.pdf> (accessed 14 October 2019).
- Banjima Native Title Aboriginal Corporation 2016, *Banjima Yurlubajagu Strategic Plan*, [https://bntac.org.au/sites/bntac.org.au/files/docs/banjima\\_yurlubajagu\\_strategic\\_plan\\_-\\_2019\\_copy\\_1.pdf](https://bntac.org.au/sites/bntac.org.au/files/docs/banjima_yurlubajagu_strategic_plan_-_2019_copy_1.pdf) (accessed 15 September 2020).
- Banks, G. 2002, *Inter-State Bidding Wars: Calling A Truce*, Productivity Commission Chairman's Speech, Canberra.
- 2009, *Evidence-Based Policy-Making: What Is It? How Do We Get It?*, Productivity Commission Chairman's Speech, Canberra.
- Bardon, J. 2016, 'The race to avert disaster at the NT's McArthur River Mine', *ABC Radio National*, <https://www.abc.net.au/radionational/programs/backgroundbriefing/the-race-to-avert-disaster-at-the-nts-mcarthur-river-mine/7159504> (accessed 10 March 2020).
- 2019, 'Gas company Inpex fined \$12,600 for evaporating water containing PFAS over Darwin Harbour', *ABC News*, 14 August, <https://www.abc.net.au/news/2019-08-14/inpex-pfas-environment-animals-at-risk-darwin-harbour/11412180> (accessed 10 March 2020).
- Barelli, M. 2018, 'Chapter 9. Free, Prior and Informed Consent in the UNDRIP: Articles 10, 19, 29(2), and 32(2)', *The UN Declaration on the Rights of Indigenous Peoples: A Commentary*, Oxford University Press, <https://opil.ouplaw.com/view/10.1093/law/9780199673223.001.0001/law-9780199673223> (accessed 18 September 2020).
- Barnes, R.D. 2013, *Building an Implementation Framework for Agreements with Aboriginal Landowners: A Case Study of the Granites Mine*, University of Queensland.
- BCA (Business Council of Australia) 2014, *Submission to the Department of the Environment on the Draft Approval Bilateral Agreements between the Commonwealth, New South Wales*

---

and Queensland Governments, [https://d3n8a8pro7vmtx.cloudfront.net/bca/pages/3737/attachments/original/1531517139/Sub\\_to\\_Dept\\_Environment\\_DraftApprovalBilateral\\_Agreements\\_Clth\\_NSW\\_Qld\\_Govts\\_FINAL\\_13.6.2014.pdf?1531517139](https://d3n8a8pro7vmtx.cloudfront.net/bca/pages/3737/attachments/original/1531517139/Sub_to_Dept_Environment_DraftApprovalBilateral_Agreements_Clth_NSW_Qld_Govts_FINAL_13.6.2014.pdf?1531517139) (accessed 16 January 2020).

BHP 2019a, *BHP Annual Report 2019*, May, <https://www.bhp.com/-/media/documents/investors/annual-reports/2019/bhpannualreport2019.pdf> (accessed 13 January 2020).

— 2019b, *Indigenous Peoples Policy Statement*, [https://www.bhp.com/-/media/documents/ourapproach/operatingwithintegrity/indigenouspeoples/200619\\_indigenouspeoplespolicystatement\\_2019.pdf?la=en](https://www.bhp.com/-/media/documents/ourapproach/operatingwithintegrity/indigenouspeoples/200619_indigenouspeoplespolicystatement_2019.pdf?la=en) (accessed 5 February 2020).

— 2020a, *\$100 Million for Housing in Newman*, [https://www.bhp.com/community/community-news/2020/06/\\$100-million-for-housing-in-newman/](https://www.bhp.com/community/community-news/2020/06/$100-million-for-housing-in-newman/) (accessed 7 September 2020).

— 2020b, *BHP Operational Review for the Year Ended 30 June 2020*, 21 July, [https://www.bhp.com/-/media/documents/media/reports-and-presentations/2020/200721\\_bhpopperationalreviewfortheyearended30june2020.pdf?la=en](https://www.bhp.com/-/media/documents/media/reports-and-presentations/2020/200721_bhpopperationalreviewfortheyearended30june2020.pdf?la=en) (accessed 21 November 2020).

— 2020c, *Local Buying Program*, <https://c-res.com.au/> (accessed 26 February 2020).

— 2020d, *Olympic Dam*, <https://www.bhp.com/our-businesses/minerals-australia/olympic-dam> (accessed 27 February 2020).

— 2020e, *Submission to the Joint Standing Committee on Northern Australia Inquiry into the Destruction of 46,000 Year Old Caves at the Juukan Gorge in the Pilbara Region of Western Australia*, 8 July, Parliament House, Canberra.

BHP Billiton 2017, *BHP Billiton Iron Ore Strategic Assessment*, <https://www.bhp.com/-/media/bhp/regulatory-information-media/iron-ore/western-australia-iron-ore/0000/impact-assessment-report/bhp-billiton-iron-ore-pilbara-strategic-assessment-program.pdf?la=en> (accessed 9 January 2020).

Bice, S. 2013, 'No more sun shades, please: Experiences of corporate social responsibility in remote Australian mining communities', *Rural Society*, vol. 22, no. 2, pp. 138–152.

Bice, S. 2014, 'What Gives You a Social Licence? An Exploration of the Social Licence to Operate in the Australian Mining Industry', *Resources*, vol. 3, pp. 62–80.

Bills, K. 2020, *Statutory Review of the Work Health and Safety (Mines and Petroleum Sites) Act 2013 and Regulation*, October, [https://resourcesandgeoscience.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0005/1271714/WHS-Mines-and-Petroleum-Sites-Act-and-Regulation-Statutory-Review-Report-October-2020.PDF](https://resourcesandgeoscience.nsw.gov.au/__data/assets/pdf_file/0005/1271714/WHS-Mines-and-Petroleum-Sites-Act-and-Regulation-Statutory-Review-Report-October-2020.PDF) (accessed 18 November 2020).

Black, J. and Baldwin, R. 2010, 'Really responsive risk-based regulation', *Law & Policy*, vol. 32, no. 2, pp. 181–213.

BMNT (Austrian Federal Ministry of Sustainability and Tourism) 2019, *World Mining Data*, p. 42, <http://www.wmc.org.pl/sites/default/files/WMD%202019%20web.pdf> (accessed 12 August 2020).

- 
- Boutilier, R. 2014, 'Frequently asked questions about the social licence to operate', *Impact Assessment and Project Appraisal*, vol. 32, no. 4, pp. 263–272.
- , Black, L. and Thomson, I. 2012, 'From metaphor to management tool: How the social license to operate can stabilise the socio-political environment for business', presented at International Mine Management 2012, Melbourne, Australian Institute of Mining and Metallurgy, [https://www.researchgate.net/profile/Robert\\_Boutilier/publication/303061443\\_From\\_metaphor\\_to\\_management\\_tool\\_how\\_the\\_social\\_license\\_to\\_operate\\_can\\_stabilise\\_the\\_socio-political\\_environment\\_for\\_business/links/599c607a45851574f4af2972/From-metaphor-to-management-tool-how-the-social-license-to-operate-can-stabilise-the-socio-political-environment-for-business.pdf](https://www.researchgate.net/profile/Robert_Boutilier/publication/303061443_From_metaphor_to_management_tool_how_the_social_license_to_operate_can_stabilise_the_socio-political_environment_for_business/links/599c607a45851574f4af2972/From-metaphor-to-management-tool-how-the-social-license-to-operate-can-stabilise-the-socio-political-environment-for-business.pdf) (accessed 25 November 2019).
- and Thomson, I. 2011, *Modelling and Measuring the Social Licence to Operate: Fruits of a Dialogue Between Theory and Practice*, <https://sociallicense.com/publications/Modelling%20and%20Measuring%20the%20SLO.pdf> (accessed 25 November 2019).
- Box, P., Hansen, B. and Bradsworth, N. 2018, *An Evaluation of Proponent Environmental Data Under the EPBC Act*, CSIRO, <https://publications.csiro.au/rpr/download?pid=csiro:EP185018&dsid=DS1> (accessed 18 November 2019).
- Bradshaw, R. 2016, 'Mining access to Aboriginal freehold and native title land in SA', *Bulletin (Law Society of South Australia)*, vol. 38, no. 8, pp. 26–27, 44.
- Brady, S. 2019, *Review of all fatal accidents in Queensland mines and quarries from 2000 to 2019*, December, <https://www.parliament.qld.gov.au/documents/tableOffice/TabledPapers/2020/5620T197.pdf> (accessed 20 August 2020).
- Brannock, J. and Tweedale, D. 2012, *Planning for Mining Towns - Their Impacts and the Need for Intervention*, <https://www.planning.org.au/documents/item/4107> (accessed 25 November 2019).
- Brereton, D. and Everingham, J.-A. 2016, *Making and Implementing Agreements with Indigenous Communities: A case study of the Gulf Communities Agreement*, Centre for Social Responsibility in Mining, University of Queensland, <https://www.csr.m.uq.edu.au/media/docs/1424/lessons-of-the-gca-v12-finalsep16.pdf> (accessed 3 November 2020).
- Business Queensland 2019, *Office of Groundwater Impact Assessment*, <https://www.business.qld.gov.au/industries/mining-energy-water/resources/environment-water/ogia> (accessed 6 January 2020).
- 2020, *Collaborative exploration grants*, <https://www.business.qld.gov.au/industries/mining-energy-water/resources/geoscience-information/exploration-incentives/exploration-grants> (accessed 17 August 2020).
- Butterworth, K. and Margolis, Z. 2019, 'Former uranium mine now an Instagram hotspot for Queensland tourists', *ABC North West Qld*, 20 August, <https://www.abc.net.au/news/2019-08-20/former-uranium-mine-now-an-instagram-hotspot-for-tourists/11412040> (accessed 11 November 2020).

- 
- Campbell, C. 2016, 'Fears mine plan could hurt local wineries', *ABC News*, 8 October, <https://www.abc.net.au/news/2016-10-08/adelaide-hills-gold-mine-plan-worries-growers/7915456> (accessed 13 January 2020).
- Campbell, R., Linqvist, J., Browne, B., Swann, T. and Grudnoff, M. 2017, *Dark Side of the Boom: What We Do and Don't Know About Mine Closures and Rehabilitation*, <https://www.tai.org.au/sites/default/files/P192%20Dark%20side%20of%20the%20boom%20%5Bweb%5D.pdf> (accessed 27 February 2020).
- Canavan, M. 2018, 'The long mining boom', National Press Club, Canberra, <https://www.minister.industry.gov.au/ministers/canavan/speeches/speech-national-press-club-long-mining-boom> (accessed 28 October 2019).
- 2019, *EnergyQuest Report Highlights Success of Coalition Gas Policy*, <https://www.minister.industry.gov.au/ministers/canavan/media-releases/energyquest-report-highlights-success-coalition-gas-policy> (accessed 6 December 2019).
- Canter, L. and Clark, R. 1995, 'Scoping in the EIA process in the United States', presented at the *EIA Process Strengthening Workshop*, Canberra.
- CCAA (Cement Concrete & Aggregates Australia) nd, *Quarry Overview*, [https://www.ccaa.com.au/iMIS\\_Prod/CCAA/Industry/Quarry/CCAA/Public\\_Content/INDUSTRY/Quarry/Quarry\\_Overview.aspx?hkey=3e03adf1-686b-4a2c-bdf2-ac6e74ac3220](https://www.ccaa.com.au/iMIS_Prod/CCAA/Industry/Quarry/CCAA/Public_Content/INDUSTRY/Quarry/Quarry_Overview.aspx?hkey=3e03adf1-686b-4a2c-bdf2-ac6e74ac3220) (accessed 11 February 2020).
- Cham, S.T. and Stone, P. 2013, 'How can understanding community concerns about hydraulic fracturing help to address them?', in Jeffrey, R. (ed), *Effective and Sustainable Hydraulic Fracturing*, InTech, <http://www.intechopen.com/books/effective-and-sustainable-hydraulic-fracturing/how-can-understanding-community-concerns-about-hydraulic-fracturing-help-to-address-them-> (accessed 26 November 2019).
- Cheshire, L., Everingham, J.-A. and Lawrence, G. 2014, 'Governing the impacts of mining and the impacts of mining governance: Challenges for rural and regional local governments in Australia', *Journal of Rural Studies*, vol. 36, pp. 330–339.
- City of Karratha 2019, *City of Karratha and Rio Tinto Partnership*, <https://karratha.wa.gov.au/listing/city-karratha-and-rio-tinto-partnership> (accessed 26 February 2020).
- 2020, *Proposed City Housing Investment Program*, <https://karratha.wa.gov.au/blog/proposed-city-housing-investment-program-faq> (accessed 7 September 2020).
- Clarkson, C., Jacobs, Z., Marwick, B., Fullagar, R., Wallis, L., Smith, M., Roberts, R.G., Hayes, E., Lowe, K., Carah, X., Florin, S.A., McNeil, J., Cox, D., Arnold, L.J., Hua, Q., Huntley, J., Brand, H.E.A., Manne, T., Fairbairn, A., Shulmeister, J., Lyle, L., Salinas, M., Page, M., Connell, K., Park, G., Norman, K., Murphy, T. and Pardoe, C. 2017, 'Human occupation of northern Australia by 65,000 years ago', *Nature*, vol. 547, no. 7663, pp. 306–310.
- Claughton, D., Fowler, C. and Fitzgerald, D. 2020, 'Mining exploration and service companies hit by coronavirus restrictions', *ABC News*, <https://www.abc.net.au/news/rural/2020-04-07/covid19-mine-explorers-and-service-sector/12125518> (accessed 21 November 2020).

- 
- Clifford, D. and Roettgers, S. 2019, *The Land Access Ombudsman: A New Player in the Land Access Space in Queensland*, Corrs Chambers Westgarth, <https://corrs.com.au/insights/the-land-access-ombudsman-a-new-player-in-the-land-access-space-in-queensland> (accessed 13 January 2020).
- COAG (Council of Australian Governments) 2007, *Best Practice Regulation*, [https://www.pmc.gov.au/sites/default/files/publications/COAG\\_best\\_practice\\_guide\\_2007.pdf](https://www.pmc.gov.au/sites/default/files/publications/COAG_best_practice_guide_2007.pdf) (accessed 3 September 2019).
- COAG Energy Council 2016, *Better Practice Community Engagement Case Studies*, <http://www.coagenergycouncil.gov.au/sites/prod.energycouncil/files/publications/documents/Better%20Practice%20Community%20Engagement.pdf> (accessed 3 December 2019).
- 2018a, *National Principles for Managing Rehabilitation Financial Risks*, <http://coagenergycouncil.gov.au/sites/prod.energycouncil/files/publications/documents/National%20Principles%20for%20Managing%20Rehabilitation%20Financial%20Risks.pdf> (accessed 25 February 2020).
- 2018b, *Meeting Communique - Resources Roundtable*, 18 December, <http://www.coagenergycouncil.gov.au/sites/prod.energycouncil/files/publications/documents/Communique%20-%20Resources%20Roundtable%20-%2020181218.pdf> (accessed 5 March 2020).
- COAG SCER (COAG Standing Council on Energy and Resources) 2013, *Multiple Land Use Framework: Background Document*, December, <http://www.coagenergycouncil.gov.au/publications/multiple-land-use-framework-december-2013> (accessed 20 November 2019).
- Commonwealth of Australia 2014, *House of Representatives Standing Committee on the Environment: Official Hansard*, 19 June 2014, Canberra.
- Compare Your Footprint 2018, *What is the Difference Between Scope 1, 2 and 3 Emissions?*, <https://compareyourfootprint.com/difference-scope-1-2-3-emissions/> (accessed 28 October 2019).
- Constable, T. 2018, *Australia's Resources Sector Drives Record Exports in 2017-18*, <https://minerals.org.au/news/australia%E2%80%99s-resources-sector-drives-record-exports-2017-18> (accessed 4 March 2020).
- Craik, N. 2008, *The International Law of Environmental Impact Assessment: Process, Substance and Integration*, Cambridge University Press.
- Craik, W. 2018, *Review of Interactions Between the EPBC Act and the Agriculture Sector: Final Report*, Aither, <https://www.environment.gov.au/system/files/resources/0bb50a4d-b273-4a31-8fdb-dcde90edef3e/files/review-interactions-epbc-act-agriculture-final-report.pdf> (accessed 6 November 2019).
- Cripps, A. 2018, *Resources 2030 Taskforce, Australian Resources — Providing Prosperity for Future Generations*, <https://www.industry.gov.au/sites/default/files/September%202018/document/pdf/resources-2030-taskforce-report.pdf> (accessed 6 August 2019).
- Cronin, A. 2017, *Getting the Groundwork Right — Better Regulation of Mines and Quarries*, Commissioner for Better Regulation, <https://earthresources.vic.gov.au/legislation-and->

---

regulations/regulation-review-and-reform/commissioner-for-better-regulation-report (accessed 21 November 2020).

— 2019a, *Planning and Building Approvals Process Review: Discussion Paper*, Better Regulation Victoria.

— 2019b, *Second Six-Monthly Review of Progress to Implement the Getting the Groundwork Right Report*, [https://earthresources.vic.gov.au/\\_\\_data/assets/word\\_doc/0005/490271/Review-of-progress-getting-the-groundwork-right-implementation-2.docx](https://earthresources.vic.gov.au/__data/assets/word_doc/0005/490271/Review-of-progress-getting-the-groundwork-right-implementation-2.docx) (accessed 28 February 2020).

Crooke, P., Harvey, B. and Langton, M. 2006, 'Implementing and Monitoring Indigenous Land Use Agreements in the Minerals Industry: The Western Cape Communities Co-existence Agreement', in Langton, M., Odette, M., Palmer, L., Shain, K. and Tehan, M. (eds), *Settling with Indigenous People*, The Federation Press, Sydney.

CSIRO 2011, *What Is Coal Seam Gas?*, [http://www.clw.csiro.au/publications/waterforahealthycountry/MM110611\\_CLW\\_CSGFactsheet\\_WhatIsCSG\\_WEB\\_111031.pdf](http://www.clw.csiro.au/publications/waterforahealthycountry/MM110611_CLW_CSGFactsheet_WhatIsCSG_WEB_111031.pdf) (accessed 5 March 2020).

— 2019, *What Is Unconventional Gas?*, <https://www.csiro.au/en/Research/Energy/Hydraulic-fracturing/What-is-unconventional-gas> (accessed 9 January 2020).

— 2020a, *BHP Local Voices*, <https://research.csiro.au/bhplocalvoices/> (accessed 26 February 2020).

— 2020b, *Local Voices*, <https://research.csiro.au/localvoices/> (accessed 26 February 2020).

CSRM (Centre for Social Responsibility in Mining) 2012, *Local Government, Mining Companies and Resource Development in Regional Australia: Meeting the Governance Challenge*, [https://www.csrn.uq.edu.au/media/docs/247/local\\_government\\_mining\\_companies\\_resource\\_development\\_regional\\_australia.pdf](https://www.csrn.uq.edu.au/media/docs/247/local_government_mining_companies_resource_development_regional_australia.pdf) (accessed 25 November 2019).

DAE (Deloitte Access Economics) 2013, *Economic Impacts of a Domestic Gas Reservation*, October, <https://www.appea.com.au/wp-content/uploads/2013/10/DAE-Economic-impacts-of-gas-reservation-2.pdf> (accessed 6 November 2019).

— 2014, *Review of the Roles and Functions of Native Title Organisations*, <https://www2.deloitte.com/au/en/pages/economics/articles/review-of-the-roles-functions-native-title-organisations.html> (accessed 22 October 2019).

— 2020, *Estimates of Royalties and Company Tax Accrued in 2018-19*, [https://minerals.org.au/sites/default/files/Deloitte\\_Access\\_Economics-Royalties\\_and\\_Co%20\\_Tax\\_Estimates\\_Report\\_2018-19%20-%201%20Feb%202020.pdf](https://minerals.org.au/sites/default/files/Deloitte_Access_Economics-Royalties_and_Co%20_Tax_Estimates_Report_2018-19%20-%201%20Feb%202020.pdf) (accessed 12 October 2019).

D'Ambrosio, L. 2016, *EPA Drones Take Flight To Detect Illegal Dumping*, Premier of Victoria, 5 December, <https://www.premier.vic.gov.au/epa-drones-take-flight-to-detect-illegal-dumping/> (accessed 11 November 2019).

- 
- Davidson, H. 2017, *Thousands of tonnes of dangerous mining waste dumped in wrong place*, The Guardian, <https://www.theguardian.com/environment/2017/dec/21/thousands-of-tonnes-of-dangerous-mining-waste-dumped-in-wrong-place> (accessed 10 March 2020).
- DAWE (Department of Agriculture, Water and the Environment) 2019, *Review of the Regulatory Capability of the Department of Agriculture and Water Resources in the Regulation of Live Animal Exports: 2019 Implementation Progress Report*, October, Canberra, p. 25.
- 2020a, *Department of Agriculture, Water and the Environment Submission to the Inquiry into the Destruction of Caves at Juukan Gorge*, Canberra.
- 2020b, *EPBC Act Major Projects*, <http://www.environment.gov.au/epbc/major-projects> (accessed 9 July 2020).
- 2020c, *Quarterly assessment performance report*, <https://www.environment.gov.au/protection/environment-assessments/quarterly-performance-report> (accessed 11 February 2020).
- 2020d, *Submission to the Joint Standing Committee on Northern Australia Inquiry into the Destruction of 46,000 Year Old Caves at the Juukan Gorge in the Pilbara Region of Western Australia*, Melbourne.
- nd, *Closure and Rehabilitation of Ranger mine*, <https://www.environment.gov.au/science/supervising-scientist/ranger-mine/closure-rehabilitation> (accessed 6 November 2020a).
- nd, *Infringement Notice Register*, <https://www.environment.gov.au/epbc/compliance-and-enforcement/infringement-notice-register> (accessed 10 March 2020b).
- Debelle, G. 2019, *Climate Change and the Economy*, <https://www.rba.gov.au/speeches/2019/sp-dg-2019-03-12.html> (accessed 9 March 2019).
- Deloitte 2017, *Decommissioning: The Next Wave of Opportunity in Australian Oil and Gas*, <https://www2.deloitte.com/content/dam/Deloitte/au/Documents/energy-resources/deloitte-au-er-appea-2017-decommissioning-next-wave-opportunity-australian-oil-gas-310818.pdf> (accessed 27 February 2020).
- DFAT (Department of Foreign Affairs and Trade) 2018, *Economic Activity of Foreign-Owned Businesses in Australia 2014-15*, November, <https://www.dfat.gov.au/sites/default/files/economic-activity-of-foreign-owned-businesses-in-australia-2014-15.pdf> (accessed 14 October 2019).
- 2020a, *Australian Industries and Foreign Direct Investment*, <http://dfat.gov.au/trade/resources/investment-statistics/Pages/australian-industries-and-foreign-investment.aspx> (accessed 3 September 2019).
- 2020b, *Trade Statistical Pivot Tables*, <http://dfat.gov.au/about-us/publications/Pages/trade-statistical-pivot-tables.aspx> (accessed 13 March 2020).
- DHA (Department of Home Affairs) 2020, *Protecting Critical Infrastructure and Systems of National Significance - Consultation Paper*, August.

- 
- Dhawan, R. 2014, *Getting More Out of Social Investment in the Mining Sector*, KPMG, <https://assets.kpmg/content/dam/kpmg/pdf/2014/10/valuing-social-investment-mining-v3.pdf> (accessed 25 November 2019).
- DIIS (Department of Industry, Innovation and Science) 2014, *The Australian Government's Interim Response to the Productivity Commission Inquiry Report into Mineral and Energy Resource Exploration*, 28 May, <https://webarchive.nla.gov.au/awa/20160105024331/http://www.industry.gov.au/resource/Mining/Pages/PCInquiry.aspx> (accessed 26 February 2020).
- 2016a, *Resources and Energy Major Projects*, December.
- 2016b, *Working with Indigenous Communities*, September, Leading Practice Sustainable Development Program for the Mining Industry, Canberra.
- 2018, *Discussion Paper - Decommissioning Offshore Petroleum Infrastructure in Commonwealth Waters*, October, [https://consult.industry.gov.au/++preview++/offshore-resources-branch/decommissioning-discussion-paper/supporting\\_documents/Decommissioning%20Discussion%20Paper.pdf](https://consult.industry.gov.au/++preview++/offshore-resources-branch/decommissioning-discussion-paper/supporting_documents/Decommissioning%20Discussion%20Paper.pdf) (accessed 27 February 2020).
- 2019a, *Australia's National Resources Statement*, February, <https://www.industry.gov.au/sites/default/files/2019-02/national-resources-statement.pdf> (accessed 26 August 2019).
- 2019b, *Offshore Safety Review: Discussion Paper - A review of the offshore safety regulatory regime*, June, [https://consult.industry.gov.au/offshore-resources-branch/safety-review-discussion-paper/supporting\\_documents/offshoresafetyreviewdiscussionpaper.pdf](https://consult.industry.gov.au/offshore-resources-branch/safety-review-discussion-paper/supporting_documents/offshoresafetyreviewdiscussionpaper.pdf) (accessed 18 August 2020).
- 2019c, *Resources and Energy Quarterly December 2019*, December, <https://publications.industry.gov.au/publications/resourcesandenergyquarterlydecember2019/index.html> (accessed 14 October 2019).
- 2019d, *Resources and Energy Quarterly Historical Data*, December, <https://www.industry.gov.au/data-and-publications/resources-and-energy-quarterly-all> (accessed 9 March 2020).
- 2019e, *Resources and Energy Quarterly March 2019*, March, <https://publications.industry.gov.au/publications/resourcesandenergyquarterlymarch2019/index.html> (accessed 19 December 2019).
- DIS (Department of Industry and Science) 2015, *2015 Operational Review of the National Offshore Petroleum Safety and Environmental Management Authority*, Sydney, <https://www.industry.gov.au/sites/default/files/2019-05/nopsema-operational-review-2015.pdf> (accessed 30 January 2020).
- DISER (Department of Industry, Science, Energy and Resources) 2018, *Offshore Oil and Gas Decommissioning Framework Review*, <https://www.industry.gov.au/data-and-publications/offshore-oil-and-gas-decommissioning-framework-review> (accessed 24 February 2020).



- 
- 2020a, *Australian Domestic Gas Security Mechanism*, <https://www.industry.gov.au/regulations-and-standards/australian-domestic-gas-security-mechanism> (accessed 5 March 2020).
- 2020b, *Flexibility for offshore oil and gas explorers during COVID-19*, <https://www.industry.gov.au/news-media/covid-19-news/flexibility-for-offshore-oil-and-gas-explorers-during-covid-19> (accessed 18 September 2020).
- 2020c, *Gas reservation issues paper*, <https://consult.industry.gov.au/onshore-minerals/gas-options/> (accessed 27 October 2020).
- 2020d, *National Offshore Petroleum Safety and Environmental Management Authority reviews*, <https://www.industry.gov.au/data-and-publications/national-offshore-petroleum-safety-and-environmental-management-authority-reviews> (accessed 14 August 2020).
- 2020e, *Offshore Oil and Gas Safety Review Draft Policy Framework*, August.
- 2020f, *Resources and Energy Quarterly*, September, <https://publications.industry.gov.au/publications/resourcesandenergyquarterlyseptember2020/index.html> (accessed 10 November 2020).
- DLA Piper 2020, *Release of exposure draft legislation for major reforms to Australia's Foreign Investment Framework*, <https://www.dlapiper.com/en/us/insights/publications/2020/08/major-reforms-to-australias-foreign-investment-framework-b/> (accessed 29 August 2020).
- Dobbs, R., Oppenheim, J., Kendall, A., Thompson, F., Bratt, M. and van der Marel, F. 2013, *Reverse the Curse: Maximising the Potential of Resource-Driven Economies*, McKinsey Global Institute, [https://www.mckinsey.com/~media/McKinsey/Industries/Metals%20and%20Mining/Our%20Insights/Reverse%20the%20curse%20Maximizing%20the%20potential%20of%20resource%20driven%20economies/MGI\\_Reverse\\_the\\_curse\\_Full\\_report.ashx](https://www.mckinsey.com/~media/McKinsey/Industries/Metals%20and%20Mining/Our%20Insights/Reverse%20the%20curse%20Maximizing%20the%20potential%20of%20resource%20driven%20economies/MGI_Reverse_the_curse_Full_report.ashx) (accessed 26 February 2020).
- DoE (Department of the Environment) 2014a, *Environmental Management Plan Guidelines*, <https://www.environment.gov.au/system/files/resources/21b0925f-ea74-4b9e-942e-a097391a77fd/files/environmental-management-plan-guidelines.pdf> (accessed 14 January 2020).
- 2014b, *Regulatory Cost Savings Under the One-Stop Shop for Environmental Approvals*, <https://www.environment.gov.au/system/files/resources/c3954859-fca6-4728-a97b-c17f90f6142c/files/regulatory-cost-savings-oss.pdf> (accessed 16 January 2020).
- 2014c, *Review of the Environmental Assessment Bilateral Agreement Between the Commonwealth and Northern Territory: Review Report*, <https://www.environment.gov.au/system/files/pages/4aaf2c7e-3043-4b50-b0f9-9d7647ae51ca/files/nt-review-environmental-assessment-2014.pdf> (accessed 27 November 2019).
- 2014d, *Statement of Reasons for Approval under the Environment Protections and Biodiversity Conservation Act 1999 (Cth)*, January, Canberra, <http://www.environment.gov.au/epbc/notices/assessments/2012/6418/2012-6418-statement-of-reasons.pdf> (accessed 3 December 2019).

- 
- 2015, *EPBC Act 1999 Assessment Bilateral Agreement Draft Conditions Policy*, <https://www.environment.gov.au/system/files/pages/0221a5f9-3608-49e7-b13b-f25dac8c3376/files/assessment-bilateral-agreement-draft-conditions-policy.pdf> (accessed 9 January 2020).
- 2016a, *Engage early: Guidance for proponents on best practice Indigenous engagement for environmental assessments under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*, Commonwealth of Australia, Canberra.
- 2016b, *EPBC Act 1999 Condition-setting Policy*, <http://www.environment.gov.au/system/files/resources/bb7eaf1b-29d5-463b-8fa9-f08560534b7f/files/epbc-condition-setting-policy-2016.pdf> (accessed 12 December 2019).
- 2016c, *Independent Review of the Water Trigger Legislation: Submission by the Department of the Environment*, <http://www.environment.gov.au/submissions/water-trigger/100-response-departmentoftheenvironment.pdf> (accessed 13 December 2019).
- 2016d, *Outcomes-Based Conditions Policy*, <https://www.environment.gov.au/system/files/resources/4519549d-7496-4146-8dd4-58d55a7457cb/files/outcomes-based-conditions-policy.pdf> (accessed 12 September 2019).
- DoEE (Department of the Environment and Energy) 2016a, *Implementation of the Water Trigger under the Environment Protection and Biodiversity Conservation Amendment Act 2013*, Post Implementation Review, <https://www.environment.gov.au/system/files/resources/905b3199-4586-4f65-9c03-8182492f0641/files/water-trigger-review-appendix-3-pir.docx> (accessed 10 November 2020).
- 2016b, *Response to the Regulatory Maturity Project Final Report*, <https://www.environment.gov.au/system/files/resources/8acf7809-7992-4413-9a42-b9a54977a865/files/departmental-response-regulatory-maturity-project-final-report.pdf> (accessed 14 January 2020).
- 2019a, *Annual Report 2018–19*, <https://www.awe.gov.au/sites/default/files/2020-01/annual-report-2018-19-environment-and-energy.pdf> (accessed 24 November 2019).
- 2019b, *Australian Energy Update 2019*, September, Canberra, ACT, [https://www.energy.gov.au/sites/default/files/australian\\_energy\\_statistics\\_2019\\_energy\\_update\\_report\\_september.pdf](https://www.energy.gov.au/sites/default/files/australian_energy_statistics_2019_energy_update_report_september.pdf) (accessed 4 November 2019).
- 2019c, *FOI 190701 Document 1*, July, <http://www.environment.gov.au/system/files/190701.pdf> (accessed 10 March 2020).
- 2019d, *Regulator Performance Self-Assessment Report: 2017–18*, <https://www.environment.gov.au/system/files/resources/dcea27cc-041e-4d1d-bebd-072be3eaf689/files/regulator-performance-self-assessment-2017-18.pdf> (accessed 2 March 2020).
- 2019e, *Technology and Information Strategy 2019–2023*, <https://www.environment.gov.au/system/files/resources/99f273a5-2c4e-4f25-993a-8b49ea5a0d39/files/technology-information-strategy-2019-2023.pdf> (accessed 3 March 2020).
- DoEE Supervising Scientist (Department of the Environment and Energy Supervising Scientist) 2018, *Assessment Report: Ranger Mine Closure Plan*, September, Revision 0.18.0, Darwin,

- 
- <https://www.environment.gov.au/system/files/resources/109f9411-a217-44f3-9807-6a8ca3790708/files/assessment-report-ranger-closure-plan-2018.pdf> (accessed 11 November 2020).
- 2019, *Supervising Scientist Assessment Report of 2019 Ranger Mine Closure Plan*, December, Revision 1.19, Darwin, <https://www.environment.gov.au/system/files/resources/35ab71dd-ccd0-48f4-963e-91b42ae29020/files/assessment-report-ranger-closure-plan-2019.pdf> (accessed 11 November 2020).
- DoFD (Department of Finance and Deregulation) 2011, *Strategic Review of Geoscience Australia*, Canberra, [http://www.ga.gov.au/webtemp/image\\_cache/GA20983.pdf](http://www.ga.gov.au/webtemp/image_cache/GA20983.pdf) (accessed 10 November 2020).
- DoJSB (Department of Jobs and Small Business) 2017, *Greenfields Agreement Review*, November, [https://www.ag.gov.au/industrial-relations/industrial-relations-publications/Documents/greenfields\\_agreements\\_review.pdf](https://www.ag.gov.au/industrial-relations/industrial-relations-publications/Documents/greenfields_agreements_review.pdf) (accessed 21 November 2019).
- Doyle, C. 2015, *Indigenous Peoples, Title to Territory, Rights and Resources: The Transformative Role of Free Prior and Informed Consent*, Routledge, Abingdon, Oxon.
- DPMC and AGD (Department of Prime Minister & Cabinet and Attorney-General's Department) 2019, *Factual Submission Provided Jointly by: Department of Prime Minister & Cabinet and Attorney-General's Department*, <https://www.aph.gov.au/DocumentStore.ashx?id=dec1c1a6-e966-4ce0-b2e3-000daf82e422&subId=667421> (accessed 19 February 2020).
- 2015, *Annual Report 2014-15*, [https://www.pmc.gov.au/sites/default/files/publications/annual\\_reports/2014-15/dpmc\\_annual\\_report\\_2014\\_15.pdf](https://www.pmc.gov.au/sites/default/files/publications/annual_reports/2014-15/dpmc_annual_report_2014_15.pdf) (accessed 20 December 2019).
- DSEWPac (Department of Sustainability, Environment, Water, Population and Communities) 2012, *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy*, October, Canberra.
- Edgeworth, B., Rossiter, C., O'Connor, P. and Godwin, A. 2016, *Sackville and Neave Australian Property Law*, 10th edn, LexisNexis Butterworths, Chatswood, NSW.
- EDO (Environmental Defenders Offices of Australia) 2017, *Inquiry into the Rehabilitation of Mining and Resources Projects as It Relates to Commonwealth Responsibilities*, Submission no. 24, Sydney.
- EDO WA (Environmental Defender's Office of Western Australia) 2011, *Mining Law*, Fact Sheet 36, [https://www.edo.org.au/wp-content/uploads/2020/02/factsheet\\_me-mining.pdf](https://www.edo.org.au/wp-content/uploads/2020/02/factsheet_me-mining.pdf) (accessed 21 November 2020).
- Eggers, W., Turley, M. and Kishnani, P. 2019, *The Regulator's New Toolkit: Technologies and Tactics for Tomorrow's Regulator*, The Deloitte Center for Government Insights.
- Elks, S. 2020a, 'Explosion inquiry: Anglo miners have bonus slashed for reporting injuries', *The Australian*, 19 August, <https://www.theaustralian.com.au/business/mining-energy/explosion-inquiry-anglo-miners-have-bonus-slashed-for-reporting-injuries/news-story/805b524f5ad212523a16886b457fae11> (accessed 20 August 2020).

- 
- 2020b, ‘Morrison government “holding up” \$1bn Queensland coal mine, state Labor says’, *The Australian: Business Review*, <https://www.theaustralian.com.au/business/mining-energy/morrison-government-holding-up-1bn-queensland-coal-mine-state-labor-says/news-story/b9f454661b7f50647957156f41993389?btr=22b2385051526dbb8596832d4c1263b5> (accessed 26 February 2020).
- 2020c, ‘Queensland mine death probe unit “two years away”’, *The Australian*, 7 August, <https://www.theaustralian.com.au/nation/politics/queensland-mine-death-probe-unit-two-years-away/news-story/d5c8a87a6d36556b3f50fbee91b557a3> (accessed 7 August 2020).
- EPA Inquiry Ministerial Advisory Committee (Environment Protection Authority Inquiry Ministerial Advisory Committee) 2016, *Independent Inquiry into the Environment Protection Authority Victoria*, [http://www.epa-inquiry.vic.gov.au/\\_\\_data/assets/file/0008/336698/Inquiry-report-EPA\\_June.pdf](http://www.epa-inquiry.vic.gov.au/__data/assets/file/0008/336698/Inquiry-report-EPA_June.pdf) (accessed 28 January 2020).
- EPA Vic (Environment Protection Authority Victoria) 2018, *Applied Science Strategy*, <https://www.epa.vic.gov.au/-/media/epa/files/publications/1679.pdf> (accessed 30 January 2020).
- 2020, *Environment Protection Amendment Act 2018*, Text, <https://www.environment.vic.gov.au/sustainability/environment-protection-reform/ep-bill-2018> (accessed 29 January 2020).
- EPA WA (Environmental Protection Authority Western Australia) nd, *EPA Assessment Reports*, <https://www.epa.wa.gov.au/epa-assessment-reports> (accessed 10 January 2020).
- ERA WA (Economic Regulation Authority, Western Australia) 2014, *Inquiry into Microeconomic Reform in Western Australia*, Final report, 30 June, Perth, WA, <https://www.erawa.com.au/cproot/12778/2/Final%20Report%20-%20Inquiry%20into%20Microeconomic%20Reform%20in%20Western%20Australia.PDF> (accessed 6 November 2019).
- Evans, M.C. 2017, ‘Opportunities and risks in the implementation of biodiversity offset policy in Australia’, Australian National University, <https://openresearch-repository.anu.edu.au/bitstream/1885/133677/1/Evans%20Thesis%202017.pdf> (accessed 2 November 2020).
- , Maron, M., Gibbons, P. and Possingham, H.P. 2013, ‘A bird in the hand is worth two in the bush: ecological time preference and biodiversity offsets’, vol 15, presented at the *BIOECON Conference*, Cambridge, United Kingdom, September, [http://bioecon-network.org/pages/15th\\_2013/EVANS.pdf?LMCL=OzCKii](http://bioecon-network.org/pages/15th_2013/EVANS.pdf?LMCL=OzCKii) (accessed 2 November 2020).
- Evatt, E. 1996, *Review of the Aboriginal and Torres Strait Islander Heritage Protection Act 1984: Report*, <https://nla.gov.au/nla.obj-2579240138/view?partId=nla.obj-2580451917#page/n4/mode/1up> (accessed 6 October 2020).
- Everitt, B. 1995, ‘Scoping of Environmental Impact Assessments’, presented at EIA Process Strengthening Workshop, Canberra.
- EY (Ernst & Young) 2019, *The Future of Work: the Changing Skills Landscape for Miners*, <https://minerals.org.au/sites/default/files/190214%20The%20Future%20of%20Work%20the%20Changing%20Skills%20Landscape%20for%20Miners.pdf> (accessed 30 August 2020).

- 
- FAO (Food and Agriculture Organization of the United Nations) 2020, *Free, Prior and Informed Consent*, <http://www.fao.org/indigenous-peoples/our-pillars/fpic/en/> (accessed 4 February 2020).
- Finkel, A. 2019, *Independent Audit of NOPSEMA's Consideration of Exploration in the Great Australian Bight*, Commonwealth of Australia, <https://www.industry.gov.au/data-and-publications/independent-audit-of-nopsemas-consideration-of-exploration-in-the-great-australian-bight> (accessed 4 November 2019).
- FIRB (Foreign Investment Review Board) 2018, *Foreign Investment Review Board Annual Report 2017-18*, <https://firb.gov.au/about-firb/publications/2017-18-annual-report> (accessed 2 September 2019).
- 2020, *Foreign investment in mining*, 24 April, Guidance note 24, <https://firb.gov.au/resources/guidance/gn24/> (accessed 29 August 2020).
- Fleming, D.A. and Measham, T.G. 2015, 'Local economic impacts of an unconventional energy boom: the coal seam gas industry in Australia', *Australian Journal of Agricultural and Resource Economics*, vol. 59, no. 1, pp. 78–94.
- Forrest, A. 2014, *The Forrest Review: Creating Parity*, Canberra, <https://www.niaa.gov.au/sites/default/files/publications/Forrest-Review.pdf> (accessed 10 November 2020).
- Franks, D., Davis, R., Bebbington, A., Ali, S., Kemp, D. and Scurrah, M. 2014, 'Conflict translates environmental and social risk into business costs', *Proceedings of the National Academy of Sciences*, vol. 111, no. 21, pp. 7576–7581.
- Fraser Institute 2009, *35 big ideas: How the Fraser Institute is changing the world*, <https://www.fraserinstitute.org/sites/default/files/35th-anniversary-book.pdf> (accessed 18 February 2020).
- 2020, *Annual Survey of Mining Companies 2019*, <https://www.fraserinstitute.org/sites/default/files/annual-survey-of-mining-companies-2019.pdf> (accessed 28 February 2020).
- Freehills nd, *Argyle Diamon Mine Participation Agreement — Indigenous Land Use Agreement*, <https://www.atns.net.au/objects/agreements/argyle%20ilua.pdf> (accessed 19 October 2020).
- Frydenberg, J. 2020, *Major reforms to Australia's foreign investment framework*, <https://ministers.treasury.gov.au/ministers/josh-frydenberg-2018/media-releases/major-reforms-australias-foreign-investment-framework> (accessed 29 August 2020).
- FVTOC (Federation of Victorian Traditional Owner Corporations) 2019, *Expression of Interest: Seeking Victorian Traditional Owners to Participate in the First Principles Review Committee*, <https://www.fvtoc.com.au/blog/eoiforrprc> (accessed 13 December 2019).
- GA (Geoscience Australia) 2016, *Exploring for the Future*, <https://www.ga.gov.au/news-events/news/latest-news/exploring-for-the-future> (accessed 18 February 2020).
- 2020, *Exploring for the Future expands across Australia*, <https://www.ga.gov.au/news-events/news/latest-news/exploring-for-the-future-expands-across-australia> (accessed 21 September 2020).

- 
- GasFields Commission Queensland 2019, *Investigations into Onshore Gas Industry and Hydraulic Fracturing in Australia*, <https://gasfieldscommissionqld.org.au/gas-industry/technical-information/investigations-onshore-gas-industry-hydraulic-fracturing> (accessed 4 December 2019).
- Gehman, J., Lefsrud, L. and Fast, S. 2017, ‘Social licence to operate: Legitimacy by another name?’, *Canadian Public Administration*, vol. 60, no. 2, pp. 293–317.
- Geoscience Australia 2013, *Uranium*, <https://www.ga.gov.au/scientific-topics/minerals/mineral-resources-and-advice/australian-resource-reviews/uranium> (accessed 22 November 2019).
- 2014, *Uncover: Unlocking Australia’s Hidden Mineral Potential*, <http://www.ga.gov.au/news-events/news/latest-news/uncover-unlocking-australias-hidden-mineral-potential> (accessed 24 October 2019).
- 2015, *History of Australia’s Mineral Industry*, <http://www.australianminesatlas.gov.au/history/index.html> (accessed 9 October 2019).
- 2017a, *Australian Resource Reviews Bauxite 2017*, [https://d28rz98at9flks.cloudfront.net/116704/ARR\\_Bauxite\\_2017.pdf](https://d28rz98at9flks.cloudfront.net/116704/ARR_Bauxite_2017.pdf) (accessed 21 November 2019).
- 2017b, *Australian Resource Reviews Iron Ore 2017*, [https://d28rz98at9flks.cloudfront.net/116703/ARR\\_Iron\\_Ore\\_2017.pdf](https://d28rz98at9flks.cloudfront.net/116703/ARR_Iron_Ore_2017.pdf) (accessed 11 March 2020).
- 2019a, *Australian Energy Resources Assessment (AERA)*, July, <https://aera.ga.gov.au/> (accessed 3 November 2020).
- 2019b, *Australian Operating Mines Map 2019*, <https://data.gov.au/dataset/ds-ga-2724ef19-84b5-443e-9eda-6a5da27b931d/details?q=> (accessed 21 November 2020).
- 2019c, *Australian Resource Reviews Rare Earth Elements 2019*, [https://d28rz98at9flks.cloudfront.net/130434/ARR\\_Rare\\_Earths\\_2019.pdf](https://d28rz98at9flks.cloudfront.net/130434/ARR_Rare_Earths_2019.pdf) (accessed 21 November 2019).
- 2020, *Australia’s Identified Mineral Resources 2019*, [https://d28rz98at9flks.cloudfront.net/132457/132457\\_00\\_0.pdf](https://d28rz98at9flks.cloudfront.net/132457/132457_00_0.pdf) (accessed 11 March 2020).
- nd, *Critical Minerals*, <https://www.ga.gov.au/about/projects/resources/critical-minerals> (accessed 20 January 2020a).
- nd, *Mineral Potential Mapper*, <https://www.ga.gov.au/scientific-topics/minerals/mineral-potential-mapper> (accessed 22 November 2019b).
- Gernon, T. 2018, *Earthquakes from the Oil and Gas Industry Are Plaguing Oklahoma – Here’s a Way to Reduce Them*, *The Conversation*, <http://theconversation.com/earthquakes-from-the-oil-and-gas-industry-are-plaguing-oklahoma-heres-a-way-to-reduce-them-91044> (accessed 17 February 2020).
- GGIC (Government Geoscience Information Committee) 2018, *Australian Requirements for the Submission of Digital Exploration Data Version 4.5*, Commonwealth, State and Territory Governments of Australia, [http://www.australianminerals.gov.au/\\_\\_data/assets/pdf\\_](http://www.australianminerals.gov.au/__data/assets/pdf_)

- 
- file/0004/60772/National\_Guidelines\_Version\_4.5\_February\_18.pdf (accessed 3 March 2020).
- Gibbons, P. and Zeil, J. 2014, 'It's becoming harder to see the trees for the revenue', *The Sydney Morning Herald*, January, <https://www.smh.com.au/opinion/its-becoming-harder-to-see-the-trees-for-the-revenue-20140128-3112b.html> (accessed 3 December 2019).
- GISERA (Gas Industry Social and Environmental Research Alliance) 2019, *About Us*, [https://gisera.csiro.au/wp-content/uploads/2019/07/19-00210\\_GISERA\\_FACTSHEET\\_AboutUs2pp\\_WEB\\_190516.pdf](https://gisera.csiro.au/wp-content/uploads/2019/07/19-00210_GISERA_FACTSHEET_AboutUs2pp_WEB_190516.pdf) (accessed 31 October 2019).
- Glencore 2019, *Stakeholder Engagement Strategy*, <https://www.mtowncomplex.com.au/en/community/Documents/Stakeholder%20Engagement%20Strategy.pdf> (accessed 23 January 2020).
- 2020, *Ulan Coal Mines Limited EPBC Approval 2009/5252: Annual Compliance Report 2019*, <https://www.ulancoal.com.au/en/publications/EPBCReports/EPBC%202009-5252%202019-20%20%20compliance%20report.pdf> (accessed 8 October 2020).
- Global Energy Monitor 2020, *Global Coal Plant Tracker, July 2020 - Changes From January 2020 to July 2020 (MW)*, <https://endcoal.org/global-coal-plant-tracker/> (accessed 21 November 2020).
- Gooda, M. and Kiss, K. 2013, *The Declaration Dialogue Series: Paper No. 3 - We have a right to participate in decisions that affect us — effective participation, free prior and informed consent, and good faith*, Australian Human Rights Commission, [https://humanrights.gov.au/sites/default/files/2014\\_AHRC\\_DD\\_3\\_Consent.pdf](https://humanrights.gov.au/sites/default/files/2014_AHRC_DD_3_Consent.pdf) (accessed 10 November 2020).
- Gordon, O. and Roberts, L. 2019, "'On just terms": NT land claim to use same legal argument as The Castle', *ABC News*, 30 November, <https://www.abc.net.au/news/2019-11-30/galarwuy-yunupingu-gove-penninsula-compensation-claim/11752454> (accessed 30 January 2020).
- Government of Canada 2019, *Impact Assessment Process Overview - Phase 1: Planning*, <https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/impact-assessment-process-overview/phase1.html> (accessed 25 February 2020).
- Grain Producers SA 2017, *GPSA Update: Mining Act Review*, <http://grainproducerssa.com.au/latest/news/gpsa-update-mining-act-review/> (accessed 4 December 2019).
- Gray, B. 2020, *Submission to the Joint Standing Committee on Northern Australia Inquiry into the Destruction of 46,000 Year Old Caves at the Juukan Gorge in the Pilbara Region of Western Australia*, Parliament House, Canberra.
- Great Barrier Reef Marine Park Authority 2019, *Aboriginal and Torres Strait Islander Heritage Strategy*, [http://elibrary.gbrmpa.gov.au/jspui/bitstream/11017/3425/7/GBRMPA\\_ATSI\\_HeritageStrategy.pdf](http://elibrary.gbrmpa.gov.au/jspui/bitstream/11017/3425/7/GBRMPA_ATSI_HeritageStrategy.pdf) (accessed 27 October 2020).
- Gredley, R. 2020, 'No indigenous site should be harmed: Wyatt', *The Canberra Times*, 8 June, <https://www.canberratimes.com.au/story/6784581/no-indigenous-site-should-be-harmed-wyatt/> (accessed 24 September 2020).

- 
- Green, J. and Mudd, G. 2011, 'Green and Mudd: Indenture Act scourge', *The Advertiser*, 29 August, <https://www.adelaidenow.com.au/ipad/green-and-mudd-indenture-act-scourge/news-story/415de1c962103b4de8a911101ee557b9> (accessed 13 January 2020).
- Greiner, N., McCluskey, S. and Stewart-Weeks, M. 2017, *NSW Regulatory Policy Framework: Independent Review*, NSW Government, <https://www.treasury.nsw.gov.au/sites/default/files/2018-02/Independent%20Review%20of%20the%20NSW%20Regulatory%20Policy%20Framework%20final%20report.pdf> (accessed 6 November 2019).
- Gunner, M. 2018, *Fracking Moratorium Lifted – Strict Laws to Be in Place Before Exploration or Production Can Occur*, <http://newsroom.nt.gov.au/mediaRelease/25488> (accessed 4 November 2019).
- Gunningham, N. 2015, *Evaluating Mine Safety Legislation in Queensland*, Working Paper, 42, National Research Centre for OHS Regulation, [http://regnet.anu.edu.au/sites/default/files/publications/attachments/2015-05/WorkingPaper\\_42\\_0.pdf](http://regnet.anu.edu.au/sites/default/files/publications/attachments/2015-05/WorkingPaper_42_0.pdf) (accessed 19 August 2020).
- , Kagan, R. and Thornton, D. 2004, 'Social licence and environmental protection: Why businesses go beyond compliance', *Law & Social Inquiry*, vol. 29, no. 2, pp. 307–341.
- and Sinclair, D. 2014, 'The impact of safety culture on systemic risk management', *European Journal of Risk Regulation*, vol. 2014, no. 4, pp. 505–516.
- Harries, J. 1997, *Acid mine drainage in Australia: Its extent and potential future liability*, Supervising scientist report, Department of the Environment, <https://www.environment.gov.au/science/supervising-scientist/publications/ssr/acid-mine-drainage-australia-its-extent-and-potential-future-liability> (accessed 9 September 2020).
- Haslam McKenzie, F. 2020, 'Long distance commuting: A tool to mitigate the impacts of the resources industries boom and bust cycle?', *Land Use Policy*, vol. 93, <https://www.sciencedirect.com/science/article/abs/pii/S0264837718315874?via%3Dihub> (accessed 7 September 2020).
- , Phillips, R., Rowley, S., Brereton, D. and Birdsall-Jones, C. 2009, *Housing Market Dynamics in Resource Boom Towns*, AHURI Final Report no. 135, Perth, [https://www.ahuri.edu.au/\\_\\_data/assets/pdf\\_file/0006/2130/AHURI\\_Final\\_Report\\_No135\\_Housing-market-dynamics-in-resource-boom-towns.pdf](https://www.ahuri.edu.au/__data/assets/pdf_file/0006/2130/AHURI_Final_Report_No135_Housing-market-dynamics-in-resource-boom-towns.pdf) (accessed 5 March 2020).
- and Rowley, F. 2013, 'Housing market failure in a booming economy', *Housing Studies*, vol. 28, no. 3, pp. 373–388.
- Hatton, T. 2018, *Independent Scientific Panel Inquiry into Hydraulic Fracture Stimulation in Western Australia*, Final Report, September, Perth, WA, [https://frackinginquiry.wa.gov.au/sites/default/files/final\\_report.pdf](https://frackinginquiry.wa.gov.au/sites/default/files/final_report.pdf) (accessed 4 November 2019).
- Hawke, A. 2009a, *Independent Review of the Environmental Protection and Biodiversity Conservation Act 1999: Interim Report*, <https://www.environment.gov.au/system/files/resources/5d70283b-3777-442e-b395-b0a22ba1b273/files/interim-report.pdf> (accessed 27 November 2019).



- 
- 2009b, *Report of the Independent Review of the Environment Protection and Biodiversity Conservation Act 1999*, <https://www.environment.gov.au/system/files/resources/5f3fdad6-30ba-48f7-ab17-c99e8bcc8d78/files/final-report.pdf> (accessed 31 October 2019).
- Hayward, C. 1995, 'Section 111A of the Mining Act — summary refusal by the minister', *Australian Mining and Petroleum Law Bulletin*, vol. 14, no. 2, pp. 113–125.
- Heath, A. 2019, *Australia's Resource Industry — A Look into the Crystal Ball*, <https://www.rba.gov.au/speeches/2019/sp-so-2019-06-05.html> (accessed 9 March 2020).
- Hillgrove Resources 2011, *Kanmantoo Copper Mine Newsletter November 2011*, Vol. 6, <http://www.hillgroveresources.com.au/media/1/381/Newsletter%2011%2011.pdf> (accessed 13 October 2020).
- Hillman, R. 2006, 'The future role for state agreements in Western Australia', *Australian Resources and Energy Law Journal*, vol. 25, no. 3, pp. 294–329.
- Hogan, L., Harman, J., Maritz, A., Thorpe, S., Simms, A., Berry, P. and Copeland, A. 2002, 'Mineral Exploration in Australia: Trends, Economic Impacts and Policy Issues', *Australian Commodities: Forecasts and Issues*, vol. 9, no. 4, pp. 601–607.
- Holding, A. 1987, *House of Representatives Official Hansard*, 3 June, Parliament of Australia, Canberra, ACT, [https://parlinfo.aph.gov.au/parlInfo/download/chamber/hansardr/1987-06-03/toc\\_pdf/H%201987-06-03.pdf;fileType=application%2Fpdf#search=%221980s%22](https://parlinfo.aph.gov.au/parlInfo/download/chamber/hansardr/1987-06-03/toc_pdf/H%201987-06-03.pdf;fileType=application%2Fpdf#search=%221980s%22) (accessed 30 January 2020).
- Holm, D., Ritchie, L., Snyman, K. and Sunderland, C. 2013, 'Social impact management: A review of current practice in Queensland, Australia', *Impact Assessment and Project Appraisal*, vol. 31, no. 3, pp. 214–219.
- Home, A. 2019, *US races to build critical minerals alliances*, Australian Financial Review, <https://www.afr.com/markets/commodities/us-races-to-build-critical-minerals-alliances-20191008-p52yip> (accessed 14 August 2020).
- Hondros, N. and Hastie, H. 2020, 'BHP to axe interstate FIFO work as mining industry conforms to WA's "hard borders"', *WA today*, 8 September, <https://www.watoday.com.au/national/western-australia/bhp-to-axe-interstate-fifo-work-as-mining-industry-conforms-to-wa-s-hard-borders-20200908-p55tpg.html> (accessed 9 September 2020).
- Hough, C. 2019, 'Mining bill passes SA parliament but rebel MPs hopeful for inquiry', *ABC News*, 4 July, <https://www.abc.net.au/news/rural/2019-07-04/mining-bill-passes-sa-parliament-but-rebel-mps-hope-for-inquiry/11277340> (accessed 13 January 2020).
- House of Representatives Standing Committee on the Environment 2014, *Streamlining Environmental Legislation: Inquiry into Streamlining Environmental Regulation, 'Green Tape', and One Stop Shops*, [https://www.aph.gov.au/-/media/02\\_Parliamentary\\_Business/24\\_Committees/243\\_Reps\\_Committees/Environment/Green\\_Tape/Final\\_Report.pdf?la=en&hash=31BCED7419810B959A461C5874A1DBFD64416D8E](https://www.aph.gov.au/-/media/02_Parliamentary_Business/24_Committees/243_Reps_Committees/Environment/Green_Tape/Final_Report.pdf?la=en&hash=31BCED7419810B959A461C5874A1DBFD64416D8E) (accessed 11 November 2019).
- Howlett, M. and Ramesh, M. 2015, 'Achilles' heels of governance: Critical capacity deficits and their role in governance failures', *Regulation & Governance*, vol. 2015, pp. 1–13.

- 
- HRSCIISR (House of Representatives Standing Committee on Industry, Innovation, Science and Resources) 2018, *Keep it in the Regions - Mining and Resources Industry Support for Businesses in Regional Economies*, Canberra, [https://parlinfo.aph.gov.au/parlInfo/download/committees/reportrep/024209/toc\\_pdf/Keepitintheregions.pdf;fileType=application%2Fpdf](https://parlinfo.aph.gov.au/parlInfo/download/committees/reportrep/024209/toc_pdf/Keepitintheregions.pdf;fileType=application%2Fpdf) (accessed 2 December 2019).
- HRSCRA (House of Representatives Standing Committee on Regional Australia) 2013, *Cancer of the Bush or Salvation for our Cities? Fly-in, Fly-out and Drive-in, Drive-out Practices in Regional Australia*, Canberra, [https://www.aph.gov.au/Parliamentary\\_Business/Committees/House\\_of\\_Representatives\\_Committees?url=ra/fifodido/report/fullreport.pdf](https://www.aph.gov.au/Parliamentary_Business/Committees/House_of_Representatives_Committees?url=ra/fifodido/report/fullreport.pdf) (accessed 25 November 2019).
- Hume, N. 2020, 'Miners pause remote operations to prevent coronavirus spread', *Financial Times*, 23 March, <https://www.ft.com/content/a4a47ec6-6ac0-11ea-800d-da70cff6e4d3> (accessed 14 August 2020).
- Hunt, M., Kavenagh, T. and Hunt, J. 2015, *Hunt on Mining Law of Western Australia*, 5th edn, Federation Press, Leichhardt, NSW.
- Hunter, S. 2017, *Independent Review of the Water Trigger Legislation*, Commonwealth of Australia, <http://www.environment.gov.au/system/files/resources/905b3199-4586-4f65-9c03-8182492f0641/files/water-trigger-review-final.pdf> (accessed 17 October 2019).
- Huth, N.I., Cocks, B., Dalglish, N., Poulton, P.L., Marinoni, O. and Garcia, J.N. 2018, 'Farmers' perceptions of coexistence between agriculture and a large scale coal seam gas development', *Agriculture and Human Values*, vol. 35, no. 1, pp. 99–115.
- IAP2 (International Association for Public Participation) 2014, *IAP2's Public Participation Spectrum*, [https://www.iap2.org.au/wp-content/uploads/2019/07/IAP2\\_Public\\_Participation\\_Spectrum.pdf](https://www.iap2.org.au/wp-content/uploads/2019/07/IAP2_Public_Participation_Spectrum.pdf) (accessed 3 December 2019).
- ICMM (International Council on Mining and Metals) 2013, *Position Statement on Indigenous Peoples and Mining*, [https://www.icmm.com/website/publications/pdfs/commitments/2013\\_icmm-ps\\_indigenous-people.pdf](https://www.icmm.com/website/publications/pdfs/commitments/2013_icmm-ps_indigenous-people.pdf) (accessed 4 March 2020).
- 2015, *Good Practice Guide: Indigenous Peoples and Mining, Second Edition*, London, <https://www.csr.mq.edu.au/media/docs/1282/good-practice-guide-indigenous-peoples-and-mining-second-edition-2.pdf> (accessed 17 January 2020).
- IESC (Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development) 2012, *Proposed Action: Boggabri Coal Mine Extension Project (EPBC 2009/5256)*, Advice to decision maker on coal mining project, Date of advice 20/12/2012, <http://www.iesc.environment.gov.au/system/files/resources/3ed24c9a-237d-44be-8b4a-6b71d9b10c2a/files/iesc-advice-boggabri.pdf> (accessed 13 January 2020).
- IFC (International Finance Corporation) 2015, *The Art and Science of Benefit Sharing in the Natural Resource Sector*, Washington D.C., <http://commdev.org/pdf/publications/IFC-Art-and-Science-of-Benefits-Sharing-Final.pdf> (accessed 2 December 2019).

- 
- IMF (International Monetary Fund) 2009, *Balance of payments and international investment position manual*, 6th edn, Washington D.C, <https://www.imf.org/external/pubs/ft/bop/2007/pdf/bpm6.pdf> (accessed 11 November 2020).
- 2020, *World Economic Outlook Update, June 2020: A Crisis Like No Other, An Uncertain Recovery*, <https://www.imf.org/en/Publications/WEO/Issues/2020/06/24/WEOUpdateJune2020> (accessed 14 August 2020).
- Impact Agency of Canada 2019, *Impact Assessment Process Overview. Phase 1: Planning*, <https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/impact-assessment-process-overview/phase1.html> (accessed 12 November 2019).
- International Association for Impact Assessment 2020, *Awards*, <https://www.iaia.org/awards.php> (accessed 7 January 2020).
- IRENA (International Renewable Energy Agency) 2019, *A New World: The Geopolitics of the Energy Transformation*, [https://geopoliticsofrenewables.org/assets/geopolitics/Reports/wp-content/uploads/2019/01/Global\\_commission\\_renewable\\_energy\\_2019.pdf](https://geopoliticsofrenewables.org/assets/geopolitics/Reports/wp-content/uploads/2019/01/Global_commission_renewable_energy_2019.pdf) (accessed 4 March 2020).
- Isaac Regional Council 2018, *Isaac Regional Council Submission: House Standing Committee on Industry, Innovation, Science and Resources — Inquiry into How the Mining Sector Can Support Businesses in Regional Economies*, Submission no. 31, Queensland, [https://www.aph.gov.au/Parliamentary\\_Business/Committees/House/Industry\\_Innovation\\_Science\\_and\\_Resources/MiningSector/Submissions](https://www.aph.gov.au/Parliamentary_Business/Committees/House/Industry_Innovation_Science_and_Resources/MiningSector/Submissions) (accessed 5 March 2020).
- Jenner, K., Walker, A., Close, C. and Saunders, T. 2018, *Mining Investment Beyond the Boom*, March, <https://www.rba.gov.au/publications/bulletin/2018/mar/pdf/mining-investment-beyond-the-boom.pdf> (accessed 28 February 2020).
- Johnston, B. 2019, *Hydraulic Fracturing Remains Banned on 98 Per Cent of WA*, <https://www.mediastatements.wa.gov.au/Pages/McGowan/2019/09/Hydraulic-fracturing-remains-banned-on-98-per-cent-of-WA.aspx> (accessed 4 November 2019).
- JSCNA (Joint Standing Committee on Northern Australia) 2020, *Inquiry into the destruction of 46,000 year old caves at the Juukan Gorge in the Pilbara region of Western Australia*, [https://www.aph.gov.au/Parliamentary\\_Business/Committees/Joint/Northern\\_Australia/CavesatJuukanGorge](https://www.aph.gov.au/Parliamentary_Business/Committees/Joint/Northern_Australia/CavesatJuukanGorge) (accessed 12 October 2020).
- Ker, P. 2020a, 'Border shutdown will exacerbate mining skills shortage', *Australian Financial Review*, 7 April, <https://www.afr.com/companies/mining/border-shutdown-will-exacerbate-skills-shortage-wages-20200407-p54hsb> (accessed 19 August 2020).
- 2020b, *Resources sector investment rebounds*, *Australian Financial Review*, <https://www.afr.com/companies/mining/resources-sector-investment-rebounds-20201120-p56gf8> (accessed 23 November 2020).
- Kim, J. 2020, *South Korea joins Japan in making 2050 carbon-neutral pledge*, *Nikkei Asia*, <https://asia.nikkei.com/Spotlight/Environment/South-Korea-joins-Japan-in-making-2050-carbon-neutral-pledge> (accessed 29 October 2020).

- 
- King & Wood Mallesons 2017, *Full Federal Court Overturns Bygrave (no. 2) - ILUAs Must Be Executed by All Registered Native Title Applicants*, <https://www.kwm.com/en/au/knowledge/insights/full-federal-court-overturns-bygrave-iluas-registered-native-title-applicants-20170206> (accessed 23 January 2020).
- KLC (Kimberley Land Council) 2020, *Submission to the Joint Standing Committee on Northern Australia Inquiry into the Destruction of 46,000 Year Old Caves at the Juukan Gorge in the Pilbara Region of Western Australia*, 14 August, Broome.
- Knol-Kauffman, M., Solas, A.-M. and Arbo, P. 2020, 'Government-industry dynamics in the development of offshore waste management in Norway: from prescriptive to risk-based regulation', *Journal of Environment Planning and Management*, <https://doi.org/10.1080/09640568.2020.1779676> (accessed 11 November 2020).
- Kragt, M., Manero, A., Hawkins, J. and Lison, C. 2019, *A Review of Mine Rehabilitation Condition Setting in Western Australia*, The Western Australian Biodiversity Science Institute, Perth, <https://wabsi.org.au/wp-content/uploads/2020/01/Review-of-Mine-Rehab-Condition-Setting-WA-Project-Report.pdf> (accessed 11 November 2020).
- Lacey, J., Parsons, R. and Moffat, K. 2012, *Exploring the Concept of a Social Licence to Operate in the Australian Minerals Industry: Results from Interviews with Industry Representatives*, CSIRO Report no. EP125553, Brisbane, <https://publications.csiro.au/rpr/pub?pid=csiro:EP125553&sb=RECENT> (accessed 25 November 2019).
- Langoulant, J. 2018, *Special Inquiry into Government Programs and Projects - Volume 1*, [https://www.wa.gov.au/sites/default/files/2019-07/Special%20Inquiry%20into%20Government%20programs%20and%20projects%20-%20Volume%201\\_0.pdf](https://www.wa.gov.au/sites/default/files/2019-07/Special%20Inquiry%20into%20Government%20programs%20and%20projects%20-%20Volume%201_0.pdf) (accessed 2 December 2019).
- Langton, M. 2015, *From Conflict to Cooperation: Transformations and Challenges in the Engagement Between the Australian Minerals Industry and Australian Indigenous Peoples*, February, Minerals Council of Australia, Forrest, ACT.
- 2020, *Submission to the Joint Standing Committee on Northern Australia Inquiry into the Destruction of 46,000 Year Old Caves at the Juukan Gorge in the Pilbara Region of Western Australia*, Parliament House, Canberra.
- Law Council of Australia 2020, *Submission to the EPBC Act Review*, 20 April, Canberra, ACT.
- Levin, A. 2016, 'Observations on the development of native title trusts in Australia', *Trusts & Trustees*, vol. 22, no. 2, pp. 241–264.
- Ley, S. 2019, *Intention to Develop a Draft Bilateral Agreement with Western Australia Under Section 45 of the Environment Protection and Biodiversity Conservation Act 1999 (Cth)*, <https://www.environment.gov.au/system/files/pages/69324f7e-a815-485e-aafe-552a7b787a37/files/wa-notice-intention.pdf> (accessed 4 March 2020).
- 2020a, *Approvals Strengthened to Meet Infrastructure Pipeline*, Media Release, 15 June, Canberra, <https://minister.awe.gov.au/ley/media-releases/approvals-strengthened-meet-infrastructure-pipeline> (accessed 16 November 2020).

- 
- 2020b, *Environmental Protection and Biodiversity Conservation Amendment (Streamlining Environmental Approvals) Bill 2020 Explanatory Memorandum*, Canberra.
- 2020c, *Reform for Australia's Environment Laws*, <https://minister.awe.gov.au/ley/media-releases/reform-australias-environment-laws> (accessed 14 August 2020).
- Limerick, M., Tomlinson, K., Taufatofua, R., Barnes, R. and Brereton, D. 2012, *Agreement-making with Indigenous Groups: Oil and Gas Development, Australia*, Centre for Social Responsibility in Mining, University of Queensland, Brisbane.
- Lindenmayer, D., Crane, M., Evans, M., Maron, M., Gibbons, P., Bekessy, S. and Blanchard, W. 2017, 'The anatomy of a failed offset', *Biological Conservation*, vol. 210, pp. 286–292.
- Loutit, J., Mandelbaum, J. and Szoke-Burke, S. 2016, 'Emerging practices in community development agreements', *Journal of Sustainable Development Law and Policy*, vol. 7, no. 1, pp. 64–96.
- Lucas, J. 2020, 'COVID-19 stalls mineral exploration as companies suspend drilling programs, threatening hundreds of jobs', *ABC News*, 8 May, <https://www.abc.net.au/news/2020-05-08/mineral-exploration-industry-grinds-to-a-halt-during-covid-19/12225126> (accessed 11 November 2020).
- Ludlow, M. 2018, 'Former rich lister Peter Bond's Linc Energy fined \$4.5m for environment damage', *Australian Financial Review*, 11 May, <https://www.afr.com/politics/former-rich-lister-peter-bonds-linc-energy-fined-45m-for-environment-damage-20180511-h0zxr> (accessed 9 January 2020).
- 2019, 'Timber Creek decision opens can of worms on "spiritual losses" for Native Title', *Australian Financial Review*, 14 March, <https://www.afr.com/politics/timber-creek-decision-opens-can-of-worms-on-spiritual-losses-for-native-title-20190314-h1ccu8> (accessed 5 December 2019).
- Luke, H. 2017, 'Social resistance to coal seam gas development in the Northern Rivers region of Eastern Australia: Proposing a diamond model of social licence to operate', *Land Use Policy*, no. 69, pp. 266–280.
- MAC (Mining Association of Canada) 2019, *Towards Sustainable Mining: Indigenous and Community Relationships Protocol*, <https://mining.ca/wp-content/uploads/2020/01/FINALP1.pdf> (accessed 23 January 2020).
- Macdonald-Smith, A. 2020, 'Oil levy threat grows as offshore operator goes bust', *Australian Financial Review*, 11 February, <https://www.afr.com/companies/energy/oil-levy-threat-grows-as-noga-sinks-20200210-p53z8j#:~:text=Until%20last%20week%2C%20NOGA%20had,have%20owed%20about%20%2480%20million.> (accessed 21 November 2020).
- Macintosh, A. 2009, *The EPBC Survey Project: Final Data Report*, Supported by the Australia Institute and the Minerals Council of Australia, Australian National University.
- 2010a, 'Best practice environmental impact assessment: a model framework for Australia', *Australian Journal of Public Administration*, vol. 69, no. 4, pp. 401–417.

- 
- 2010b, ‘The Commonwealth’, in Bonyhady, T. and Macintosh, A. (eds), *Mills, Mines and Other Controversies: The Environmental Assessment of Major Projects*, The Federation Press, pp. 224–249.
- , Roberts, H. and Constable, A. 2017, ‘An empirical evaluation of environmental citizen suits under the Environmental Protection and Biodiversity Conservation Act 1999 (Cth)’, *Sydney Law Review*, vol. 39, no. 1, pp. 85–121.
- Mackenzie, A. 2019, ‘Our strategy delivers value and returns’, <https://www.bhp.com/media-and-insights/reports-and-presentations/2019/05/our-strategy-delivers-value-and-returns> (accessed 9 October 2019).
- Macklin, J. 2009, *Statement on the United Nations Declaration on the Rights of Indigenous Peoples*, 3 April, Parliament House, Canberra, [https://www.un.org/esa/socdev/unpfii/documents/Australia\\_official\\_statement\\_endorsement\\_UNDRIP.pdf](https://www.un.org/esa/socdev/unpfii/documents/Australia_official_statement_endorsement_UNDRIP.pdf) (accessed 10 February 2020).
- MacLennan, L. 2019, ‘“Just to piss the family off”: winery accuses mining company of bullying and intimidation’, *ABC News*, 18 October, <https://www.abc.net.au/news/2019-10-18/adelaide-winery-bullying-emails-from-terramin-mining-lawyers/11615296> (accessed 13 January 2020).
- Mansfield, J. 2013, *Report on Review of Part IV of the Aboriginal Land Rights (Northern Territory) Act 1976*, 28 March, Aboriginal Land Commissioner, Darwin, [https://www.dss.gov.au/sites/default/files/documents/06\\_2013/alc\\_review\\_of\\_part\\_iv.pdf](https://www.dss.gov.au/sites/default/files/documents/06_2013/alc_review_of_part_iv.pdf) (accessed 23 September 2020).
- Maron, M., Bull, J., Evans, M. and Gordon, A. 2015, ‘Locking in loss: baselines of decline in Australian biodiversity offset policies’, *Biological Conservation*, vol. 192, pp. 504–512.
- Marsden Jacob Associates 2018, *Mining Rehabilitation Fund Post-Implementation Review*, July, <http://www.dmp.wa.gov.au/Documents/Environment/MRF-PIR-July-2018.pdf> (accessed 18 September 2020).
- Martin, T. and Clough, A. 2020, *Queensland Coal Mining Board of Inquiry: Interim Report*, 31 August, [https://coalminesinquiry.qld.gov.au/wp-content/uploads/2020/09/Interim-Report-v1.0-20200831-FINAL\\_Redacted.pdf](https://coalminesinquiry.qld.gov.au/wp-content/uploads/2020/09/Interim-Report-v1.0-20200831-FINAL_Redacted.pdf) (accessed 14 September 2020).
- Martinez, C. and Franks, D. 2014, ‘Does mining company-sponsored community development influence social licence to operate? Evidence from private and state-owned companies in Chile’, *Impact Assessment and Project Appraisal*, vol. 32, no. 4, pp. 294–303.
- Mathews, T. 2019, ‘The Australian equity market over the past Century’, *RBA Bulletin*, vol. June, pp. 167–78.
- May, J., Hobbs, R. and Valentine, L. 2017, ‘Are offsets effective? An evaluation of recent environmental offsets in Western Australia’, *Biological Conservation*, vol. 206, pp. 249–57.
- MBDC (Mount Barker District Council) 2015, *Recycled Water Use*, <https://www.mountbarker.sa.gov.au/infrastructure/water/recycled-water/recycledwastewater> (accessed 13 October 2020).

- 
- MCA (Minerals Council of Australia) 2017, *Minerals Council of Australia Submission to Senate Environment and Communications Reference Committee Inquiry into the Rehabilitation of Mining and Resources Projects as It Relates to Commonwealth Responsibilities*, Submission no. 50, Canberra.
- 2018a, *Community and Social Development - Case Studies*, [https://minerals.org.au/community\\_and\\_social\\_development-case-studies](https://minerals.org.au/community_and_social_development-case-studies) (accessed 26 February 2020).
- 2018b, *Indigenous Partnerships*, <https://minerals.org.au/indigenous-partnerships> (accessed 9 October 2019).
- 2018c, *Submission to House of Representatives Standing Committee on Industry, Innovation, Science and Resources Inquiry into How the Mining Sector Can Support Businesses in Regional Economies*, Submission no. 48, Canberra, [https://www.aph.gov.au/Parliamentary\\_Business/Committees/House/Industry\\_Innovation\\_Science\\_and\\_Resources/MiningSector/Submissions](https://www.aph.gov.au/Parliamentary_Business/Committees/House/Industry_Innovation_Science_and_Resources/MiningSector/Submissions) (accessed 26 February 2020).
- 2018d, *Submission to the Attorney-General's Department on Reforms to the Native Title Act 1993 (Cth)*, February, <https://www.ag.gov.au/Consultations/Documents/Reformstothenativetitleact1993/submissions/Minerals-council-of-australia-submission.pdf> (accessed 7 November 2019).
- 2019a, *Submission to the Joint Standing Committee on Northern Australia Inquiry into Opportunities and Challenges Associated with Traditional Owner Participation in Northern Australia Development*, Submission no. 23, 18 March, Canberra.
- 2019b, *Working Together — A New Community of Practice for Minerals Industry and Indigenous Partnerships*, <https://minerals.org.au/sites/default/files/Community%20of%20Practice%20-%20Terms%20of%20Reference%202019.pdf> (accessed 21 November 2020).
- 2020, *Resources for Managing COVID-19*, Minerals Council of Australia, <https://minerals.org.au/resources-managing-covid-19> (accessed 14 August 2020).
- MCA NT (Minerals Council of Australia, Northern Territory Division) 2014, *Submission to the Green Paper on Developing Northern Australia*, August, Darwin.
- MCA Victoria (Minerals Council of Australia, Victorian Division) 2012, *2012–13 Victorian Pre-Budget Submission*, [http://www.communityovermining.org/MCA\\_VIC\\_-\\_pre-budget2012-13-130312.pdf](http://www.communityovermining.org/MCA_VIC_-_pre-budget2012-13-130312.pdf) (accessed 5 December 2019).
- McGowan, M. 2020, *Revised Policy to Secure Domestic Gas Supply and Create Jobs*, <https://www.mediastatements.wa.gov.au/Pages/McGowan/2020/08/Revised-policy-to-secure-domestic-gas-supply-and-create-jobs.aspx> (accessed 21 September 2020).
- and Dawson, S. 2020, *McGowan Government Announces Streamlined Environmental Assessment Processes During COVID-19 Recovery*, <https://www.mediastatements.wa.gov.au/Pages/McGowan/2020/05/McGowan-Government-announces-streamlined-environmental-assessment-processes-during-COVID-19-recovery.aspx> (accessed 14 August 2020).

- 
- McGrath, C. 2014, 'One stop shop for environmental approvals a messy backward step for Australia', *Environmental and Planning Law Journal*, vol. 31, no. 3, pp. 164–191.
- McKenna, S. 1995, 'Negotiating Mining Agreements under the Native Title Act 1993', *Agenda: A Journal of Policy Analysis and Reform*, vol. 2, no. 3, pp. 301–312.
- MCMPR (Ministerial Council on Mineral and Petroleum Resources) 2005, *Principles for Engagement with Communities and Stakeholders*, Canberra, [https://www.energymining.sa.gov.au/\\_\\_data/assets/pdf\\_file/0020/41735/mcmpr\\_principles\\_nov05.pdf](https://www.energymining.sa.gov.au/__data/assets/pdf_file/0020/41735/mcmpr_principles_nov05.pdf) (accessed 23 January 2020).
- Measham, T.G. and Fleming, D.A. 2014, 'Impacts of unconventional gas development on rural community decline', *Journal of Rural Studies*, vol. 36, pp. 376–85.
- Meesters, M. and Behagel, J. 2017, 'The social licence to operate: Ambiguities and the neutralisation of harm in Mongolia', *Resources Policy*, no. 53, pp. 274–282.
- Metcalf, D.J. and Bui, E.N. 2017, *Australia State of the Environment 2016: Land*, Independent report to the Australian Government Minister for the Environment and Energy, Australian Government Department of the Environment and Energy, Canberra.
- METS Ignited 2019, *METS Ignited Sector Demographics Report*, April, Brisbane.
- Minister for Planning and Public Spaces 2020, *Statement of Expectations for the Independent Planning Commission*, 14 May, <https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/general/whats-new/ministers-statementofexpectationsfor-ipc.pdf?la=en&hash=42A69A4DAE0C7DC67C69BF671B30B58B> (accessed 28 September 2020).
- Minister for Resources, Tim Pallas, MP 2018, *Statement of Expectations for Earth Resources Regulation*, September, [https://earthresources.vic.gov.au/\\_\\_data/assets/pdf\\_file/0006/463497/Earth-Resources-Regulation-Ministerial-Statement-of-Expectations-2018-20.pdf](https://earthresources.vic.gov.au/__data/assets/pdf_file/0006/463497/Earth-Resources-Regulation-Ministerial-Statement-of-Expectations-2018-20.pdf) (accessed 15 January 2020).
- Moffat, K. and Zhang, A. 2013, 'The paths to social licence to operate: An integrative model explaining community acceptance of mining', *Resources Policy*, no. 30, pp. 61–70.
- Morrison, S. 2019, 'Speech, Business Council of Australia Annual Dinner', <https://www.pm.gov.au/media/speech-business-council-australia-annual-dinner> (accessed 25 November 2019).
- 2020a, 'Address, National Press Club', <https://www.pm.gov.au/media/address-national-press-club-260520> (accessed 8 September 2020).
- 2020b, 'Press Conference - Sydney, NSW', <https://www.pm.gov.au/media/press-conference-sydney-nsw-27jul20> (accessed 28 September 2020).
- , Duke, R., Nunan, A. and King, W. 2018, *Heads of Agreement - The Australian East Coast Domestic Gas Supply Commitment*, 28 September, <https://www.industry.gov.au/sites/default/files/heads-of-agreement-2018-prime-minister-and-east-coast-lng-exporters.pdf> (accessed 22 September 2020).
- , Taylor, A. and Pitt, K. 2020, *Gas-Fired Recovery*, <https://www.pm.gov.au/media/gas-fired-recovery> (accessed 22 September 2020).



- 
- Mundine, N.W. and Henderson, E. 2017, *Crafting the Future: Minerals Industry Engagement with Indigenous Australia*, Policy paper, <https://www.indigenousminingfutures.net/elibrary/crafting-the-future-minerals-industry-engagement-with-indigenous-australia> (accessed 4 September 2020).
- Murdoch, L. 2010, 'Kakadu being poisoned by Rio Tinto mine, group warns', *The Sydney Morning Herald*, 24 May, <https://www.smh.com.au/national/kakadu-being-poisoned-by-rio-tinto-mine-group-warns-20100523-w42y.html> (accessed 6 March 2020).
- Murray, I., Fardin, J. and O'Hara, J. 2019, *Co-designing Benefits Management Structures*, Centre for Mining, Energy and Natural Resources, UWA Law School.
- NCDD (National Coalition for Dialogue and Deliberation) 2009, *Core Principles for Public Engagement*, <http://ncdd.org/rc/wp-content/uploads/2010/08/PEPfinal-expanded.pdf> (accessed 23 January 2020).
- Neill, K., Hartley, P., Tyers, R. and Adams, P. 2019, 'Western Australia's domestic gas reservation policy: modelling the economic impact with a computable general equilibrium approach', *Economic Record*, vol. 95, no. 308, pp. 90–113.
- NERA and APPEA 2018, *Improving the Environmental Approvals Process: Reference Case Review Report*, [https://referencecases.nera.org.au/Attachment?Action=Download&Attachment\\_id=286](https://referencecases.nera.org.au/Attachment?Action=Download&Attachment_id=286) (accessed 5 November 2019).
- Newcrest (Newcrest Mining Limited) nd, *2020 Annual Report*, [https://www.newcrest.com/sites/default/files/2020-09/Newcrest\\_2020AR\\_ASX\\_0.pdf](https://www.newcrest.com/sites/default/files/2020-09/Newcrest_2020AR_ASX_0.pdf) (accessed 11 September 2020).
- Newell, R.G., Raimi, D., Villanueva, S. and Prest, B. 2020, *Global Energy Outlook 2020: Energy Transition or Energy Addition?*, May, 20–05, Resources for the Future, <https://www.rff.org/publications/reports/global-energy-outlook-2020/> (accessed 14 August 2020).
- NNTC (National Native Title Council) 2020a, *NNTC Response to the Corporations (Aboriginal and Torres Strait Islander) Corporations Act 2006 Draft Review Report*, 2 October, [https://nntc.com.au/wp-content/uploads/2020/10/NNTC-Submission-to-CATSI-Act-Draft-Review-Report\\_Oct2020-FINAL.pdf](https://nntc.com.au/wp-content/uploads/2020/10/NNTC-Submission-to-CATSI-Act-Draft-Review-Report_Oct2020-FINAL.pdf) (accessed 25 November 2020).
- 2020b, *Submission to the Joint Standing Committee on Northern Australia Inquiry into the Destruction of 46,000 Year Old Caves at the Juukan Gorge in the Pilbara Region of Western Australia*, 31 July, Melbourne.
- NNTT (National Native Title Tribunal) 2012, *National Report: Native Title*, February, <https://web.archive.org/web/20120227095210/http://www.nntt.gov.au/News-and-Communications/Publications/Documents/Corporate%20publications/NNTT-national-report-card-February-2012.pdf> (accessed 8 October 2019).
- 2014a, *Register of Native Title Claims*, Dataset, 2 July, [http://www.nntt.gov.au/assistance/Geospatial/Pages/Metadata.aspx?filename=%20NTDA\\_Register\\_Nat](http://www.nntt.gov.au/assistance/Geospatial/Pages/Metadata.aspx?filename=%20NTDA_Register_Nat) (accessed 21 February 2020).

- 
- 2014b, *What Is the Registration Test?*, February, <http://www.nntt.gov.au/Information%20Publications/Fact%20Sheet%20What%20is%20the%20registration%20test%20February%202014.pdf> (accessed 10 October 2019).
- 2017, *Schedule of Native Title Determination Applications*, Dataset, 27 July, [http://www.nntt.gov.au/assistance/Geospatial/Pages/Metadata.aspx?filename=%20NTDA\\_Schedule\\_Nat](http://www.nntt.gov.au/assistance/Geospatial/Pages/Metadata.aspx?filename=%20NTDA_Schedule_Nat) (accessed 21 February 2020).
- 2019, *Submission to the Review of the Aboriginal Heritage Act 1972*, 31 May, Perth.
- Noetic Group 2018, *Regulatory Reform Review: Report for the NSW Resources Regulator*, Noetic Group, [https://www.resourcesregulator.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0007/837547/DOC18-786787-Noetic-Regulatory-Reform-Review-2018-Final-7-Sep-2018-From-IRF18-4935.pdf](https://www.resourcesregulator.nsw.gov.au/__data/assets/pdf_file/0007/837547/DOC18-786787-Noetic-Regulatory-Reform-Review-2018-Final-7-Sep-2018-From-IRF18-4935.pdf) (accessed 7 November 2019).
- NOPSEMA 2018a, *Cost Recovery Implementation Statement*, <https://www.nopsema.gov.au/assets/Corporate/A638103.pdf> (accessed 21 February 2020).
- 2019a, *Median Environment Plan Assessment Timeframes*, <https://www.nopsema.gov.au/news-and-publications/industry-and-nopsema-performance/median-environment-plan-assessment-timeframes/> (accessed 29 January 2020).
- 2019b, *Offshore Project Proposal Content Requirements*, <https://www.nopsema.gov.au/assets/Guidance-notes/A473026.pdf> (accessed 29 January 2020).
- 2019c, *Statement of Expectations — October 2019*, <https://www.nopsema.gov.au/assets/Corporate/A548477.pdf> (accessed 21 February 2020).
- 2017, *Annual Offshore Performance Report to 31 December 2016*, <https://www.nopsema.gov.au/assets/Publications/A552578.pdf> (accessed 3 October 2020).
- 2018b, *Submission to the Inquiry into the Work, Health and Safety of Workers in the Offshore Petroleum Industry*, 16 March, [https://www.aph.gov.au/Parliamentary\\_Business/Committees/Senate/Education\\_and\\_Employment/WHSinoffshorepetroleum/Submissions](https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Education_and_Employment/WHSinoffshorepetroleum/Submissions) (accessed 26 February 2020).
- 2019d, *Annual Report 2018–19*, Annual Report, Perth, <https://www.nopsema.gov.au/assets/Corporate/A698325.pdf> (accessed 30 January 2020).
- 2019e, *Introducing NOPSEMA*, April, Perth, <https://www.nopsema.gov.au/assets/Publications/A631330.pdf> (accessed 30 January 2020).
- 2020a, *Annual Report on the Cost Effectiveness of the Operations of NOPSEMA: Financial Year 2018-19*, March, <https://www.nopsema.gov.au/assets/Corporate/A726461.pdf> (accessed 7 October 2020).
- 2020b, *FAQs*, <https://www.nopsema.gov.au/news-and-publications/faqs/> (accessed 28 January 2020).
- 2020c, *Inspection Policy*, <https://www.nopsema.gov.au/assets/Policies/A400923.pdf> (accessed 20 August 2020).

- 
- NOPTA (National Offshore Petroleum Titles Administrator) 2019, *Stakeholder Survey Report 2019*, July, KPMG, [https://www.nopta.gov.au/\\_documents/Stakeholder-Survey-Report-2019.pdf](https://www.nopta.gov.au/_documents/Stakeholder-Survey-Report-2019.pdf) (accessed 17 January 2020).
- Northern Territory Social Policy Scrutiny Committee 2019, *Inquiry into the Environment Protection Bill 2019*, Legislative Assembly of the Northern Territory, Darwin.
- Nous Group 2019, *Streamline WA Steering Committee: Environmental Approvals in Mining*, <https://www.wa.gov.au/sites/default/files/2019-12/Streamline%20WA%20MEA%20workshop%20report.pdf> (accessed 30 January 2020).
- NSW Biodiversity Conservation Trust 2018, *Landholder Technical Support*, <https://www.bct.nsw.gov.au/landholder-technical-support> (accessed 10 March 2020).
- NSW DPE (New South Wales Department of Planning and Environment) 2016, *Environmental Impact Assessment Improvement Project: Discussion Paper*, <https://www.planning.nsw.gov.au/-/media/Files/DPE/Discussion-papers/environmental-assessment-impact-improvement-project-discussion-paper-2016-10.pdf> (accessed 7 November 2019).
- 2017a, *Approach to Setting Conditions*, Guideline 7, Draft Environmental Impact Assessment Guidance Series, <https://www.planning.nsw.gov.au/-/media/Files/DPE/Guidelines/guideline-7-draft-approach-to-setting-conditions-2017-06.pdf> (accessed 7 January 2020).
- 2017b, *Community and Stakeholder Engagement*, <https://www.planning.nsw.gov.au/~/-/media/Files/DPE/Guidelines/guideline-6-draft-community-and-stakeholder-engagement-2017-06.ashx> (accessed 3 December 2019).
- 2017c, *Scoping an Environmental Impact Statement: Draft Environmental Impact Assessment Guidance Series*, <https://www.planning.nsw.gov.au/-/media/Files/DPE/Guidelines/guideline-3-draft-scoping-an-environmental-impact-statement-2017-06.pdf> (accessed 12 December 2019).
- 2017d, *Social Impact Assessment Guideline: For State Significant Mining, Petroleum Production and Extractive Industry Development*, <https://www.planning.nsw.gov.au/-/media/Files/DPE/Guidelines/social-impact-assessment-guideline-2017-09.pdf> (accessed 26 February 2020).
- NSW DPIE (New South Wales Department of Planning, Industry and Environment) 2019, *Safeguarding Our Agricultural Land*, <http://www.planning.nsw.gov.au/Policy-and-Legislation/Mining-and-Resources/Safeguarding-our-Agricultural-Land> (accessed 9 January 2020).
- 2020a, *Assessment Bilateral Agreement*, <https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity/assessment-bilateral-agreement> (accessed 16 November 2020).
- 2020b, *Post Approval*, <https://www.planningportal.nsw.gov.au/major-projects/assessment/post-approval> (accessed 1 October 2020).

---

NSW EPA (New South Wales Environment Protection Authority) 2019a, *Air Quality Committees*, NSW EPA, <https://www.epa.nsw.gov.au/your-environment/air/regional-air-quality/air-quality-committees> (accessed 3 October 2020).

— 2019b, *Coal Train Dust Management*, <https://www.epa.nsw.gov.au/your-environment/air/regional-air-quality/coal-train-dust-management> (accessed 11 March 2020).

— 2019c, *Environment Protection Authority – Upper Hunter Air Quality Advisory Committee Minutes*, <https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/air/uhaqmcttee/uhaqac-minutes-july-2019.pdf?la=en&hash=17361FAF56ABB34CFBCDBBFB5320EBB623521AA2> (accessed 3 October 2020).

— 2019d, *NSW Environment Protection Authority Annual Report: 2018–19*, <https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/whoweare/19p1970-epa-annual-report-201819.pdf> (accessed 10 March 2020).

— 2020, *Training*, <https://www.epa.nsw.gov.au/licensing-and-regulation/authorised-officers-and-enforcement-officers/resources-and-training> (accessed 4 March 2020).

NSW Government 2014, *New South Wales Gas Plan: Protecting What’s Valuable, Securing our Future*, [https://www.resourcesandenergy.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0005/534830/NSW-Gas-Plan.pdf](https://www.resourcesandenergy.nsw.gov.au/__data/assets/pdf_file/0005/534830/NSW-Gas-Plan.pdf) (accessed 5 March 2020).

— 2019, *Community Consultative Committee Guideline*, <https://www.planning.nsw.gov.au/-/media/Files/DPE/Guidelines/Community-Consultative-Committee-Guideline-31-01-2019.pdf> (accessed 26 February 2020).

NSW IPC (New South Wales Independent Planning Commission) 2019a, *191012 Rixs Creek SSD 6300 Statement of Reasons*, <https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/projects/2019/06/rixs-creek-south-continuation-of-mining-project-ssd-6300/determination/191012-rixs-creek-ssd-6300-sor.pdf> (accessed 14 October 2019).

— 2019b, *Bylong Coal Project (SSD 6367) Statement of Reasons for Decision*, <https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/projects/2018/10/bylong-coal-project/determination/bylong-coal-project-ssd-6367--statement-of-reasons-for-decision.pdf> (accessed 28 October 2019).

— 2020, *Narrabri Gas Project*, <https://www.ipcn.nsw.gov.au/projects/2020/03/narrabri-gas-project> (accessed 30 September 2020).

NSW Legislative Council Planning and Environment Committee (New South Wales Legislative Council Portfolio Committee No. 7 - Planning and Environment) 2019, *Report on Proceedings Before Portfolio Committee No. 7 — Planning and Environment: Inquiry into Koala Populations and Habitat in New South Wales, at Smithurst Theatre, Gunnedah, on Friday 13 December 2019*, <https://www.parliament.nsw.gov.au/lcdocs/transcripts/2288/D19%2049313%20%20Transcript%20-%20Koala%20populations%20-%2013%20December%202019%20-%20CORRECTED.pdf> (accessed 10 January 2020).

— 2020, *Koala Populations and Habitat in New South Wales*, June, Sydney, [https://www.parliament.nsw.gov.au/lcdocs/inquiries/2536/Koala%20populations%20and%](https://www.parliament.nsw.gov.au/lcdocs/inquiries/2536/Koala%20populations%20and%20)

- 
- 20habitat%20in%20New%20South%20Wales%20-%20Report%203.pdf (accessed 8 October 2020).
- NSW Minerals Council 2013, *Mineral Exploration and You*, <http://www.nswmining.com.au/NSWMining/media/NSW-Mining/Publications/Fact%20Sheets/Fact-Sheet-Mineral-Exploration-and-You.pdf> (accessed 25 October 2019).
- nd, *Rehabilitation & Mine Closure*, <http://www.nswmining.com.au/environment/rehabilitation-mine-closure> (accessed 26 August 2019).
- NSW OEH (New South Wales Office of Environment and Heritage) 2014, *NSW Biodiversity Offsets Policy for Major Projects*, Sydney.
- 2018, *Guide to Finding Aboriginal Cultural Heritage Reform Proposals*, <https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Aboriginal-cultural-heritage/aboriginal-cultural-heritage-reform-proposals-guide-180170.pdf> (accessed 3 February 2020).
- NSW Parliament (Parliament of New South Wales Legislative Council Portfolio Committee No. 7 - Planning and Environment) 2020, *Environmental Planning and Assessment Amendment (Territorial Limits) Bill 2019 [Provisions]*, <https://nla.gov.au/nla.obj-2531361207> (accessed 10 September 2020).
- NSW PC (New South Wales Productivity Commission) 2019, *Review of the Independent Planning Commission*, Sydney.
- NSW Resources and Geoscience nd, *Explorer Rights and Obligations — Access to Land FAQs*, <https://www.resourcesandgeoscience.nsw.gov.au/miners-and-explorers/programs-and-initiatives/explorer-rights-and-obligations-access-to-land-faqs> (accessed 4 March 2020).
- NSW RR (New South Wales Resources Regulator) 2017, *Need Help? Introducing DRG's Community and Engagement Team*, <https://www.resourcesregulator.nsw.gov.au/news/2017/need-help-introducing-drgs-community-and-engagement-team> (accessed 30 January 2020).
- 2019, *Improving Rehabilitation, Sediment and Erosion Controls at Castillo Copper Exploration Project*, [https://www.resourcesandgeoscience.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0003/1155252/IIR19-10-Improving-rehabilitation,-sediment-and-erosion-controls-at-Castillo-Copper-exploration-project.pdf](https://www.resourcesandgeoscience.nsw.gov.au/__data/assets/pdf_file/0003/1155252/IIR19-10-Improving-rehabilitation,-sediment-and-erosion-controls-at-Castillo-Copper-exploration-project.pdf) (accessed 9 January 2020).
- 2020a, *Compliance Priorities: January – June 2020*, [https://www.resourcesregulator.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0005/1194962/Compliance-priorities-Jan-to-June-2020-v4.pdf](https://www.resourcesregulator.nsw.gov.au/__data/assets/pdf_file/0005/1194962/Compliance-priorities-Jan-to-June-2020-v4.pdf) (accessed 10 March 2020).
- 2020b, *Fact Sheet: Operational rehabilitation reforms*, September, [https://www.resourcesregulator.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0003/1262325/Amendment-to-Mining-Regulation-2016-fact-sheet.pdf](https://www.resourcesregulator.nsw.gov.au/__data/assets/pdf_file/0003/1262325/Amendment-to-Mining-Regulation-2016-fact-sheet.pdf) (accessed 11 November 2020).
- 2020c, *Mine Safety Performance Report 2018-2019*, August, [https://www.resourcesregulator.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0005/1254038/Mine-Safety-Performance-Report-2018-2019.pdf](https://www.resourcesregulator.nsw.gov.au/__data/assets/pdf_file/0005/1254038/Mine-Safety-Performance-Report-2018-2019.pdf) (accessed 3 September 2020).

- 
- NT DPIR (Northern Territory Department of Primary Industry and Resources) 2017, *Mining Management Plan Structure Guide for Mining Operations*, [https://nt.gov.au/\\_\\_data/assets/pdf\\_file/0017/203372/aa7-030-mmp-structure-guide-for-mining-operations.pdf](https://nt.gov.au/__data/assets/pdf_file/0017/203372/aa7-030-mmp-structure-guide-for-mining-operations.pdf) (accessed 26 February 2020).
- NT EPA (Northern Territory Environment Protection Authority) 2018, *Annual Report 2017–18*, Annual Report, Darwin, [https://ntepa.nt.gov.au/\\_\\_data/assets/pdf\\_file/0006/614976/ntepa\\_2018\\_annual\\_report.PDF](https://ntepa.nt.gov.au/__data/assets/pdf_file/0006/614976/ntepa_2018_annual_report.PDF) (accessed 30 January 2020).
- 2020, *Stakeholder Engagement and Consultation - Environmental Impact Assessment Guidance for Proponents*, <https://ntepa.nt.gov.au/consultation/environment-protection-act-2019-guidance-proponents-stakeholder-engagement-consultation> (accessed 11 September 2020).
- nd, *Completed Assessments*, <https://ntepa.nt.gov.au/environmental-assessments/projects-completed> (accessed 10 January 2020).
- OECD 2014, *The Governance of Regulators*, OECD Best Practice Principles for Regulatory Policy, Paris, <https://www.oecd.org/gov/regulatory-policy/the-governance-of-regulators-9789264209015-en.htm> (accessed 3 September 2019).
- 2017a, *OECD Due Diligence Guidance for Meaningful Stakeholder Engagement in the Extractives Sector*, <https://www.oecd.org/publications/oecd-due-diligence-guidance-for-meaningful-stakeholder-engagement-in-the-extractive-sector-9789264252462-en.htm> (accessed 7 September 2020).
- 2017b, *OECD Meeting on Mining Regions: Proceedings — October 2017, Antofagasta, Chile*, <https://www.oecd.org/regional/regional-policy/Proceedings-OECD-Mining-Regions-Conference.pdf> (accessed 26 February 2020).
- 2020a, *Investment Screening in Times of COVID-19 and Beyond*, <http://www.oecd.org/coronavirus/policy-responses/investment-screening-in-times-of-covid-19-and-beyond-aa60af47/> (accessed 29 September 2020).
- 2020b, *OECD FDI Regulatory Restrictiveness Index*, OECD.Stat, <https://stats.oecd.org/Index.aspx?datasetcode=FDIINDEX#> (accessed 29 September 2020).
- O’Faircheallaigh, C. 2004, ‘Denying citizens their rights? Indigenous people, mining payments and service provision’, *Australian Journal of Public Administration*, vol. 63, no. 2, pp. 42–50.
- 2016, *Negotiations in the Indigenous World: Aboriginal Peoples and the Extractive Industry in Australia and Canada*, Routledge, New York.
- and Twomey, J. 2010, *Appendix E-2, Indigenous Impacts Report Volume 2: Traditional Owner Consent and Indigenous Community Consultation (Final Report to the Kimberley Land Council)*, [https://jtsi.wa.gov.au/docs/default-source/default-document-library/browse\\_sar\\_appendix\\_e-2\\_1210.pdf?sfvrsn=29686b1c\\_10](https://jtsi.wa.gov.au/docs/default-source/default-document-library/browse_sar_appendix_e-2_1210.pdf?sfvrsn=29686b1c_10) (accessed 21 September 2019).
- Ogge, M. 2020, *CSIR...who? A Closer Look at Recent Research on Coal Seam Gas Environmental Impacts*, July, The Australia Institute, <https://www.tai.org.au/content/csir-who-closer-look-recent-research-coal-seam-gas-environmental-impacts> (accessed 21 September 2020).

- 
- O’Gorman, D. 2013, *Submission to the Deloitte Access Economics Review of the Roles and Functions of Native Title Organisations*, Brisbane, [https://web.archive.org/au/awa/20150311131447mp\\_/http://www.deloitteaccesseconomics.com.au/uploads/File/Gorman,%20Dan.doc](https://web.archive.org/au/awa/20150311131447mp_/http://www.deloitteaccesseconomics.com.au/uploads/File/Gorman,%20Dan.doc) (accessed 5 March 2020).
- OWAAG (Office of the Western Australian Auditor General) 2014, *Royalties for Regions — Are Benefits Being Realised*, Report no. 13, Perth, [https://audit.wa.gov.au/wp-content/uploads/2014/06/report2014\\_13-Royalties.pdf](https://audit.wa.gov.au/wp-content/uploads/2014/06/report2014_13-Royalties.pdf) (accessed 2 December 2019).
- OZ Minerals 2017, *Carrapateena Project: Environment Protection and Biodiversity Conservation Act 1999 — Referral of Proposed Action*, March, Adelaide, [http://epbcnotices.environment.gov.au/\\_entity/annotation/eb5e6109-5005-e711-a71a-005056ba00a8/a71d58ad-4cba-48b6-8dab-f3091fc31cd5?t=1567814400333](http://epbcnotices.environment.gov.au/_entity/annotation/eb5e6109-5005-e711-a71a-005056ba00a8/a71d58ad-4cba-48b6-8dab-f3091fc31cd5?t=1567814400333) (accessed 25 November 2019).
- Pallas, T. 2019, *Mineral Resources (Sustainable Development) Amendment Bill 2019 (Second reading speech)*, 5 June, <https://www.timpallas.com.au/parliament/mineral-resources-sustainable-development-amendment-bill-2019/> (accessed 4 September 2020).
- Parbhakar-Fox, A. 2016, ‘Treasure from trash: how mining waste can be mined a second time’, *The Conversation*, 29 June, <http://theconversation.com/treasure-from-trash-how-mining-waste-can-be-mined-a-second-time-59667> (accessed 26 February 2020).
- Parish, R. 2019, ‘Pilbara mining town suffering boom hangover with hundreds of homes boarded up’, *ABC News*, <https://www.abc.net.au/news/2019-04-24/mining-town-suffering-damage-and-destruction-at-vacant-houses/11029966> (accessed 7 September 2020).
- Parliament of Australia 1998, *Environment Protection and Biodiversity Conservation Bill Explanatory Memorandum*, <https://www.legislation.gov.au/Details/C2004B00223/Explanatory%20Memorandum/Text> (accessed 17 December 2019).
- 2020, *Temporary Migration*, [https://www.aph.gov.au/Parliamentary\\_Business/Committees/Senate/Temporary\\_Migration/TemporaryMigration](https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Temporary_Migration/TemporaryMigration) (accessed 11 March 2020).
- Parliament of the Commonwealth of Australia 2013, *Charities Bill 2013, Charities (Consequential Amendments and Transitional Provisions) Bill 2013: Explanatory Memorandum*, [https://parlinfo.aph.gov.au/parlInfo/download/legislation/ems/r5077\\_ems\\_992f7344-20b2-4b23-9220-52a0052e7545/upload\\_pdf/381255.pdf;fileType=application%2Fpdf](https://parlinfo.aph.gov.au/parlInfo/download/legislation/ems/r5077_ems_992f7344-20b2-4b23-9220-52a0052e7545/upload_pdf/381255.pdf;fileType=application%2Fpdf) (accessed 6 March 2020).
- 2014, *Environmental Protection and Biodiversity Conservation Amendment (Bilateral Agreement Implementation) Bill 2014: Revised Explanatory Memorandum*, Canberra.
- Pascual Juanola, M. 2019, ‘Broken windows, broken dreams: The WA town left in the boom-time dust’, *WA today*, 11 June, <https://www.watoday.com.au/national/western-australia/broken-windows-broken-dreams-the-wa-town-left-in-the-boom-time-dust-20190524-p51qzi.html> (accessed 7 September 2020).
- Patrick, A. 2018, ‘Judge to end bitter battle of James Price Point’, *Australian Financial Review*, 30 April, <https://www.afr.com/companies/energy/judge-to-end-bitter-battle-of-james-price-point-20180427-h0zce3> (accessed 25 November 2019).

- 
- PC (Productivity Commission) 2001, *Cost Recovery by Government Agencies*, Report no. 15, Canberra.
- 2006a, *Review of the Australian Consumer Product Safety System*, Research Report, Canberra.
- 2006b, *Road and Rail Freight Infrastructure Pricing*, Report no. 41, Canberra.
- 2007, *Public Support for Science & Innovation*, Research Report, Canberra.
- 2009, *Review of Regulatory Burden on the Upstream Petroleum (Oil and Gas) Sector*, Research Report, Canberra.
- 2010, *Australia's Anti-dumping and Countervailing System*, Report no. 48, Canberra.
- 2011a, *Performance Benchmarking of Australian Business Regulation: Planning, Zoning and Development Assessments.*, Research Report, Canberra.
- 2011b, *Performance Benchmarking of Australian Business Regulation: Planning, Zoning and Development Assessments*, Research report, Canberra.
- 2012, *Performance Benchmarking of Australian Business Regulation: The Role of Local Government as Regulator*, Research report, Canberra.
- 2013a, *Major Project Development Assessment Processes*, Research report, Canberra.
- 2013b, *Mineral and Energy Resource Exploration*, Report no. 65, Canberra.
- 2013c, *Regulator Engagement with Small Business*, Research Report, Canberra.
- 2014a, *Geographic Labour Mobility*, Research Report, Canberra.
- 2014b, *Public Infrastructure*, Report no. 71, Canberra.
- 2015a, *Barriers to Growth in Service Exports*, Research Report, Canberra.
- 2015b, *Examining Barriers to More Efficient Gas Markets*, Commission Research Paper, Canberra.
- 2015c, *Workplace Relations Framework*, Report no. 76, Canberra.
- 2016a, *Developments in Anti-Dumping Arrangements*, Commission Research Paper, Canberra.
- 2016b, *Migrant Intake into Australia*, Inquiry Report No. 77, April, Canberra.
- 2016c, *Regulation of Australian Agriculture*, Report no. 79, Canberra.
- 2017a, *Energy*, Shifting the Dial: 5 year Productivity Review, Supporting Paper no. 11.
- 2017b, *Introducing Competition and Informed User Choice into Human Services: Reforms to Human Services*, Report no. 85, Canberra.
- 2017c, *Realising the Productive Potential of Land*, Shifting the Dial: 5 year Productivity Review, Supporting Paper no. 10.
- 2017d, *Rising Protectionism: Challenges, threats and opportunities for Australia*, Commission Research Paper, Canberra.



- 
- 2017e, *Shifting the Dial: 5 Year Productivity Review*, Report no. 84, Canberra.
- 2017f, *Supporting Paper No. 14 - Commonwealth-State Relations*, 3 August, 14, *Shifting the dial - 5 year productivity review*.
- 2017g, *Transitioning Regional Economies*, Study Report, Canberra.
- 2018, *Horizontal Fiscal Equalisation*, Report no. 88, Canberra.
- 2019a, *Submission to the Senate Economics References Committee Inquiry into Australia's Oil and Gas Reserves*, November.
- 2019b, *Submission to the Senate Economics References Committee Inquiry into Australia's Oil and Gas Reserves*, November.
- 2019c, *Trade and Assistance Review 2017-18*, Annual Report Series.
- 2020a, *Foreign Investment in Australia*, Commission Research Paper, Canberra.
- 2020b, *National Agreement for Skills and Workforce Development Review - Interim Report*, Canberra.
- 2020c, *Regulatory Technology*, Information Paper, Canberra.
- 2020d, *Remote Area Tax Concessions and Payments*, Study Report, Canberra.
- 2020e, *Trade and Assistance Review 2018-19*, Annual Report Series.
- PDC (Pilbara Development Commission) nd, *Pilbara Local Content*, <https://www.pdc.wa.gov.au/fast-find/localcontent> (accessed 2 December 2019).
- Pepper, R. 2018, *Scientific Inquiry into Hydraulic Fracturing in the Northern Territory*, Final report, April, Darwin, NT, <https://frackinginquiry.nt.gov.au/inquiry-reports?a=494286> (accessed 1 November 2019).
- Peterson, D. 2006, 'Precaution: principles and practice in Australian environmental and natural resource management', Productivity Commission research paper.
- PKKP Aboriginal Corporation 2020, 'Ancient deep-time rock shelters believed destroyed in Pilbara mining blast, calls for greater flexibility to retain sites', 25 May, <https://pkkp.org.au/wp-content/uploads/2020/06/PKKP-20200525-FINAL-Media-Release-Rio-Tinto-Juukan-Gorge-blasts.pdf> (accessed 20 November 2020).
- PKKP (Puutu Kunti Kurrama People and Pinikura People) 2020, *Submission to the Joint Standing Committee on Northern Australia Inquiry into the Destruction of 46,000 Year Old Caves at the Juukan Gorge in the Pilbara Region of Western Australia*, Parliament House, Canberra.
- Porter, C. 2020, *The Future of Australian Workplaces*, <https://www.attorneygeneral.gov.au/media/speeches/future-australian-workplaces-29-september-2020> (accessed 29 October 2020).
- Power, S. and Tomaras, J. 2015, *Environment Protection and Biodiversity Conservation Amendment (Standing) Bill 2015*, Bills Digest, 37, 2015–16, Parliamentary Library, Canberra.

- 
- Powerlink Queensland 2015, *Submission to the Queensland Productivity Commission Electricity Pricing Issues Paper*, Brisbane, [https://qpc.blob.core.windows.net/wordpress/gravity\\_forms/12-4457891b4ac8d0960895c78212ee1497/2015/12/Powerlink-Queensland\\_Electricity-Inquiry-Submission.pdf](https://qpc.blob.core.windows.net/wordpress/gravity_forms/12-4457891b4ac8d0960895c78212ee1497/2015/12/Powerlink-Queensland_Electricity-Inquiry-Submission.pdf) (accessed 5 October 2020).
- Prutej, G. 2007, *Commonwealth Environment and Heritage Law*, Legal Briefing, Australian Government Solicitor, <https://www.ag.gov.au/publications/legal-briefing/br82.htm> (accessed 10 December 2019).
- QAO (Queensland Audit Office) 2015, *Royalties for the Regions*, Report 4: 2015-16, [https://www.qao.qld.gov.au/sites/default/files/reports/rtp\\_2015-16\\_royalties\\_for\\_the\\_regions.pdf](https://www.qao.qld.gov.au/sites/default/files/reports/rtp_2015-16_royalties_for_the_regions.pdf) (accessed 2 December 2019).
- 2020, *Managing Coal Seam Gas Activities*, 18 February, Report 12: 2019-20, <https://www.qao.qld.gov.au/reports-resources/reports-parliament/managing-coal-seam-gas-activities> (accessed 21 February 2020).
- Qld DEHP (Queensland Department of Environment and Heritage Protection) 2016, *Eligibility Criteria and Standard Conditions for Mining Lease Activities—Version 2*, [https://environment.des.qld.gov.au/\\_\\_data/assets/pdf\\_file/0026/88901/rs-es-mining-lease-projects.pdf](https://environment.des.qld.gov.au/__data/assets/pdf_file/0026/88901/rs-es-mining-lease-projects.pdf) (accessed 17 December 2019).
- Qld DERM (Queensland Department of Environment and Resource Management) 2011, *Greentape Reduction - Reforming Licensing Under the Environmental Protection Act 1994: A Climate Initiative. Discussion Paper and Regulatory Assessment Statement.*, Brisbane.
- Qld DES (Queensland Department of Environment and Science) 2017, *Model Mining Conditions*, Guideline: Mining, March, [https://environment.des.qld.gov.au/\\_\\_data/assets/pdf\\_file/0033/88926/rs-gl-model-mining-conditions.pdf](https://environment.des.qld.gov.au/__data/assets/pdf_file/0033/88926/rs-gl-model-mining-conditions.pdf) (accessed 28 February 2020).
- 2019a, *Department of Environment and Science Enforcement Guidelines*, July, [https://environment.des.qld.gov.au/\\_\\_data/assets/pdf\\_file/0030/86619/enforcement-guidelines.pdf](https://environment.des.qld.gov.au/__data/assets/pdf_file/0030/86619/enforcement-guidelines.pdf) (accessed 20 February 2020).
- 2019b, *Estimated Rehabilitation Cost Under the Environmental Protection Act 1994*, [https://environment.des.qld.gov.au/\\_\\_data/assets/pdf\\_file/0028/87517/rs-gl-erc-ep-act.pdf](https://environment.des.qld.gov.au/__data/assets/pdf_file/0028/87517/rs-gl-erc-ep-act.pdf) (accessed 15 October 2020).
- 2019c, *Guideline: Progressive rehabilitation and closure plans (PRC plans)*, November, [https://environment.des.qld.gov.au/\\_\\_data/assets/pdf\\_file/0026/95444/rs-gl-prc-plan.pdf](https://environment.des.qld.gov.au/__data/assets/pdf_file/0026/95444/rs-gl-prc-plan.pdf) (accessed 11 November 2020).
- 2019d, *Open Data Strategy, June 2019 – June 2020*, Brisbane, [https://www.publications.qld.gov.au/dataset/8bfddea9-4c36-45da-92b2-4b41d8a94636/resource/f6255637-1f2b-4ab2-abf7-ec7a5e5a167c/fs\\_download/des-open-data-strategy-2019.pdf](https://www.publications.qld.gov.au/dataset/8bfddea9-4c36-45da-92b2-4b41d8a94636/resource/f6255637-1f2b-4ab2-abf7-ec7a5e5a167c/fs_download/des-open-data-strategy-2019.pdf) (accessed 30 January 2020).
- 2020, *Residual Risk Assessment Guideline - Interim*, October, [https://environment.des.qld.gov.au/\\_\\_data/assets/pdf\\_file/0019/214354/era-gl-residual-risk-assessment.pdf](https://environment.des.qld.gov.au/__data/assets/pdf_file/0019/214354/era-gl-residual-risk-assessment.pdf) (accessed 5 November 2020).

- 
- Qld DNRM (Queensland Department of Natural Resources and Mines) 2013, *Queensland's Mine Safety Framework*, Consultation Regulatory Impact Statement, <https://cabinet.qld.gov.au/documents/2013/Jun/MineSafety%20RIS/Attachments/Attachment%20-%20RIS%20mine-safety-framework.PDF> (accessed 12 November 2020).
- 2016, *Land Access Code 2016*, September, [https://www.dnrme.qld.gov.au/\\_\\_data/assets/pdf\\_file/0004/442633/land-access-code-2016.pdf](https://www.dnrme.qld.gov.au/__data/assets/pdf_file/0004/442633/land-access-code-2016.pdf) (accessed 31 October 2019).
- Qld DNRME (Queensland Department of Natural Resources, Mines and Energy) 2018a, *Achieving Improved Rehabilitation for Queensland: Addressing the State's Abandoned Mines Legacy*, Discussion Paper, [https://s3.treasury.qld.gov.au/files/8243\\_Abandoned-Mines-Discussion-Paper\\_v61.pdf](https://s3.treasury.qld.gov.au/files/8243_Abandoned-Mines-Discussion-Paper_v61.pdf) (accessed 27 February 2020).
- 2018b, *Annual Report 2017–18*, Annual Report, Brisbane, [https://www.dnrme.qld.gov.au/\\_\\_data/assets/pdf\\_file/0009/1408176/dnrme-annual-report-2017-18.pdf](https://www.dnrme.qld.gov.au/__data/assets/pdf_file/0009/1408176/dnrme-annual-report-2017-18.pdf) (accessed 2 March 2020).
- 2018c, *Petroleum and Gas Reporting Guideline (2018)*, <https://www.dnrme.qld.gov.au/mining-resources/initiatives/pandg-reporting-guideline-2018> (accessed 24 February 2020).
- 2018d, *Qld Opens More Land to Meet Domestic Gas Supply Challenge*, <https://webarchive.nla.gov.au/awa/20180314204412/https://dnrme.qld.gov.au/home/news-publications/news/2018/march/qld-opens-more-land-to-meet-domestic-gas-supply-challenge> (accessed 6 November 2019).
- 2019a, *A Guide to Landholder Compensation for Mining Claims and Mining Leases*, April, Queensland, [https://www.dnrme.qld.gov.au/\\_\\_data/assets/pdf\\_file/0007/1441447/landholders-compensation-guide.pdf](https://www.dnrme.qld.gov.au/__data/assets/pdf_file/0007/1441447/landholders-compensation-guide.pdf) (accessed 13 December 2019).
- 2019b, *Code of Practice for the construction and abandonment of petroleum wells and associated bores in Queensland*, Petroleum and Gas Inspectorate, [https://www.dnrme.qld.gov.au/\\_\\_data/assets/pdf\\_file/0006/1461093/code-of-practice-petroleum-wells-bores.pdf](https://www.dnrme.qld.gov.au/__data/assets/pdf_file/0006/1461093/code-of-practice-petroleum-wells-bores.pdf) (accessed 8 September 2020).
- 2019c, *Minerals and Coal Reporting Guideline (2019)*, <https://www.dnrme.qld.gov.au/mining-resources/initiatives/mineral-coal-reporting-guideline> (accessed 24 February 2020).
- 2020, *Geoscience Data Modernisation Project*, <https://www.dnrme.qld.gov.au/mining-resources/initiatives/geoscience-data-modernisation-project> (accessed 24 February 2020).
- Qld DoATSIP (Queensland Department of Aboriginal and Torres Strait Islander Partnerships) 2020, *Review of the Cultural Heritage Acts*, <https://www.datsip.qld.gov.au/programs-initiatives/review-cultural-heritage-acts> (accessed 3 February 2020).
- Qld DSDTI (Queensland Department of State Development, Tourism and Innovation) 2018, *Social Impact Assessment Guideline*, <https://www.statedevelopment.qld.gov.au/resources/cg/social-impact-assessment-guideline.pdf> (accessed 26 February 2020).
- 2020, *Preparing an Environmental Impact Statement: Guidelines for Proponents*, August, <https://www.statedevelopment.qld.gov.au/resources/guideline/cg/preparing-an-eis-guideline-for-proponents.pdf> (accessed 23 November 2020).

- 
- QSNTS (Queensland South Native Title Services) 2014, *Submission to the Deloitte Access Economics Review of the Roles and Functions of Native Title Organisations — Part B*, Brisbane, [https://web.archive.org/au/awa/20150311131447mp\\_/http://www.deloitteaccess.economics.com.au/uploads/File/Queensland%20South%20Native%20Title%20Services%20-%20Part%20B.pdf](https://web.archive.org/au/awa/20150311131447mp_/http://www.deloitteaccess.economics.com.au/uploads/File/Queensland%20South%20Native%20Title%20Services%20-%20Part%20B.pdf) (accessed 2 March 2020).
- QTC (Queensland Treasury Corporation) 2017, *Review of Queensland's Financial Assurance Framework: Final Report*, Brisbane, <https://s3.treasury.qld.gov.au/files/review-of-queenslands-financial-assurance-framework.pdf> (accessed 25 February 2020).
- Quandamooka Yoolooburrabee Aboriginal Corporation 2020, *Submission 106 - Inquiry into the Destruction of 46,000 Year Old Caves at the Juukan Gorge in the Pilbara Region of Western Australia*, 14 August, Parliament House, Canberra.
- Queensland Government 2012, *Nationally Consistent Mine Safety Legislation: Queensland's Proposal for a Nationally Consistent Legislative Framework*, <https://www.parliament.qld.gov.au/Documents/TableOffice/TabledPapers/2012/5412T246.pdf> (accessed 18 August 2020).
- 2018a, *Achieving improved rehabilitation for Queensland: other associated risks and proposed solutions*, Discussion Paper, [https://s3.treasury.qld.gov.au/files/8244\\_Associated-Risks-discussion-paper-V61.pdf](https://s3.treasury.qld.gov.au/files/8244_Associated-Risks-discussion-paper-V61.pdf) (accessed 11 November 2020).
- 2018b, *Mines Legislation (Resources Safety) Amendment Bill 2018 - Explanatory Notes*, <https://www.legislation.qld.gov.au/view/pdf/bill.first.exp/bill-2018-028> (accessed 24 February 2020).
- 2019a, *A Review of Queensland's Environmental Offsets Framework: A Discussion Paper*, February, [https://www.qld.gov.au/\\_\\_data/assets/pdf\\_file/0018/94131/qld-enviro-offsets-framework-discuss-paper.pdf](https://www.qld.gov.au/__data/assets/pdf_file/0018/94131/qld-enviro-offsets-framework-discuss-paper.pdf) (accessed 7 January 2020).
- 2019b, *How Is the Government Investing Offset Funds?*, <https://www.qld.gov.au/environment/pollution/management/offsets/investing-funds> (accessed 21 January 2020).
- 2019c, *Mining Safety Reforms Continue for Workers*, <https://statements.qld.gov.au/statements/88286> (accessed 17 August 2020).
- 2020a, *Industry Probes Underground Coal Mine Explosion*, <https://statements.qld.gov.au/statements/89809> (accessed 21 August 2020).
- 2020b, *Mineral and Energy Resources and Other Legislation Amendment Bill 2020: Explanatory Notes*, <https://www.legislation.qld.gov.au/view/pdf/bill.first.exp/bill-2019-043> (accessed 21 November 2020).
- 2020c, *Queensland Government Register of Environmental Offsets*, <https://www.qld.gov.au/environment/pollution/management/offsets/registers> (accessed 7 January 2020).
- Queensland Treasury 2019, *Financial Provisioning Scheme*, Scheme Manager Information Sheet 1, <https://s3.treasury.qld.gov.au/files/Approved-Information-Sheet-1-Risk-category-allocation-.pdf> (accessed 12 March 2020).

- 
- Quinn, M. 2019, 'Keeping pace with technological change: The role of capabilities and dynamism', <https://treasury.gov.au/speech/s2019-390085> (accessed 28 February 2020).
- Ramdoe, I. 2015, *Synergising and Optimising Mineral Infrastructure in Regional Development Strategies*, International Centre for Trade and Economic Development and the World Economic Forum, <http://e15initiative.org/wp-content/uploads/2015/09/E15-Extractive-Ramdoe-Regional-Development-Strategies-FINAL.pdf> (accessed 26 February 2020).
- Razaghi, T. 2020, 'The remarkable recovery of property markets in Australian mining towns', *Domain*, <https://www.domain.com.au/news/the-remarkable-recovery-of-property-markets-in-australian-mining-towns-973986/> (accessed 7 September 2020).
- RBA (Reserve Bank of Australia) 2020, *Statement on Monetary Policy*, August, <https://www.rba.gov.au/publications/smp/2020/aug/pdf/statement-on-monetary-policy-2020-08.pdf> (accessed 12 August 2020).
- Reason Group 2017, *Independent Review of Assessment Performance*, Report for the Australian Pesticides and Veterinary Medicines Authority, [https://apvma.gov.au/sites/default/files/publication/28811-final\\_apvma\\_report\\_20171222.pdf](https://apvma.gov.au/sites/default/files/publication/28811-final_apvma_report_20171222.pdf) (accessed 29 January 2020).
- Regional Development Australia 2018, *The Cost of Doing Business in the Pilbara*, Port Hedland, <http://www.rdapilbara.org.au/resources/site1/General/Cost%20of%20Doing%20Business%20in%20the%20Pilbara%202018%20Web.pdf> (accessed 25 November 2019).
- Rio Tinto 2016, *Why Agreements Matter: A Resource Guide for Integrating Agreement into Communities and Social Performance Work at Rio Tinto*, <https://www.csr.uq.edu.au/media/docs/1378/whyagreementsmatter-web.pdf> (accessed 2 October 2020).
- 2018, *Argyle Diamonds Sustainable Development Report 2017*, <https://database.globalreporting.org/reports/61811/> (accessed 13 October 2020).
- 2019a, *2018 Annual Report*, February, <https://mc-56397411-4872-452d-b48e-428890-cdn-endpoint.azureedge.net/-/media/Content/Documents/Invest/Reports/Annual-reports/RT-Annual-report-2018.pdf?rev=efac091c28c64b7181669e21ffaa5f5c> (accessed 13 January 2020).
- 2019b, *Rio Tinto and China Baowu Sign Heads of Agreement for Joint Venture Extension Discussions*, <https://www.riotinto.com/en/news/releases/China-Baowu-Heads-of-Agreement-extension> (accessed 5 March 2020).
- 2020, *Submission to the Joint Standing Committee on Northern Australia Inquiry into the Destruction of 46,000 Year Old Caves at the Juukan Gorge in the Pilbara Region of Western Australia*, 31 July, Parliament House, Canberra.
- Roche, C. and Judd, S. 2016, *Ground Truths: Taking Responsibility for Australia's Mining Legacies*, <http://www.mpi.org.au/wp-content/uploads/2016/06/Ground-Truths-2016-web.pdf> (accessed 11 March 2020).
- Ronan Analytics 2019, *Queensland Safety Reset Survey Analysis and Key Findings Report*, [https://www.dnrme.qld.gov.au/\\_\\_data/assets/pdf\\_file/0011/1475894/safety-reset-survey-results-2019.pdf](https://www.dnrme.qld.gov.au/__data/assets/pdf_file/0011/1475894/safety-reset-survey-results-2019.pdf) (accessed 27 August 2020).

- 
- Roy Hill 2020, *Submission to the Joint Standing Committee on Northern Australia Inquiry into the Destruction of 46,000 Year Old Caves at the Juukan Gorge in the Pilbara Region of Western Australia*, Parliament House, Canberra.
- Ryan, L. and Malecki, A. 2015, *Additional Analysis of ARTC Data on Particulate Emissions in the Rail Corridor*, Broadway, NSW, <https://www.epa.nsw.gov.au/~media/EPA/Corporate%20Site/resources/air/artc-dust-ryan-report.ashx> (accessed 3 October 2020).
- SA DEM (South Australian Department for Energy and Mining) 2017, *South Australia Mineral Resources Regulation Report 2017*, Adelaide, p. 60, <https://sarigbasis.pir.sa.gov.au/WebtopEw/ws/samref/sarig1/image/DDD/RB201800007.pdf> (accessed 2 March 2020).
- 2018, *10 Year Moratorium on Fracture Stimulation in the Limestone Coast Region of South Australia*, [http://www.energymining.sa.gov.au/petroleum/latest\\_updates/10\\_year\\_moratorium\\_on\\_fracture\\_stimulation\\_in\\_limestone\\_coast\\_region\\_sa](http://www.energymining.sa.gov.au/petroleum/latest_updates/10_year_moratorium_on_fracture_stimulation_in_limestone_coast_region_sa) (accessed 21 February 2020).
- 2019, *Discussion Paper 1 - Reform Options to Improve the Operation of the Native Title Mineral Exploration System in South Australia*, [http://www.energymining.sa.gov.au/\\_\\_data/assets/pdf\\_file/0003/341580/Discussion\\_Paper\\_1\\_reform\\_options\\_to\\_improve\\_the\\_operation\\_of\\_the\\_native\\_title\\_mineral\\_exploration\\_system\\_in\\_SA.pdf](http://www.energymining.sa.gov.au/__data/assets/pdf_file/0003/341580/Discussion_Paper_1_reform_options_to_improve_the_operation_of_the_native_title_mineral_exploration_system_in_SA.pdf) (accessed 23 January 2020).
- SA DMITRE (South Australian Department for Manufacturing, Innovation, Trade, Resources and Energy) 2013, *Submission Dr72 to the Productivity Commission Inquiry into Non-Financial Barriers to Mineral and Energy Resource Exploration*, <https://www.pc.gov.au/inquiries/completed/resource-exploration/submissions/submissions-test2/submission-counter/subdr072-resource-exploration.pdf> (accessed 11 December 2019).
- SA DPC (South Australian Department of Premier and Cabinet) 2018, *Assessment of Leigh Creek Energy UCG Trial Proposal*, Adelaide, [http://energymining.sa.gov.au/\\_\\_data/assets/pdf\\_file/0010/313687/20180418\\_-\\_Summary\\_of\\_Leigh\\_Creek\\_Energy\\_Information.pdf](http://energymining.sa.gov.au/__data/assets/pdf_file/0010/313687/20180418_-_Summary_of_Leigh_Creek_Energy_Information.pdf) (accessed 10 January 2020).
- SA DSD (South Australian Department of State Development) 2015a, *Preparation of a Mining Proposal and Program for Environment Protection and Rehabilitation for Quarries in South Australia with Defined Impacts*, Minerals Regulatory Guidelines, MG23, <https://sarigbasis.pir.sa.gov.au/WebtopEw/ws/samref/sarig1/image/DDD/MRGMG23.pdf> (accessed 24 February 2020).
- 2015b, *Preparation of a Mining Proposal and/or Management Plan for Metallic and Industrial Minerals (excluding Coal and Uranium) in South Australia*, <https://sarigbasis.pir.sa.gov.au/WebtopEw/ws/samref/sarig1/image/DDD/MRGMG2A.pdf> (accessed 26 February 2020).
- Sadler, B. 1996, *Environmental Assessment in a Changing World: Evaluating Practice to Improve Performance*, Canadian Environmental Assessment Agency, Quebec, Canada.
- Safe Work Australia 2019, *Work-Related Traumatic Injury Fatalities Australia: Time Series Profile*, <https://www.safeworkaustralia.gov.au/doc/work-related-traumatic-injury-fatality-time-series> (accessed 23 February 2020).

- 
- 2020a, *Fatality Statistics by Industry*, <https://www.safeworkaustralia.gov.au/statistics-and-research/statistics/fatalities/fatality-statistics-industry> (accessed 20 August 2020).
- 2020b, *The Development of Model Whs Laws*, <https://www.safeworkaustralia.gov.au/law-and-regulation/development-model-whs-laws> (accessed 17 August 2020).
- Samuel, G. 2019, *Independent Review of the EPBC Act: Discussion paper*, <https://epbcactreview.environment.gov.au/resources/discussion-paper> (accessed 24 November 2019).
- 2020, *Independent Review of the EPBC Act: Interim Report*, June, <https://epbcactreview.environment.gov.au/resources/interim-report> (accessed 14 August 2020).
- SAPC (South Australian Productivity Commission) 2020, *Extractives Industry Supply Chain Review - Draft Report*, 23 June, Adelaide.
- Schodde, R. 2018, ‘The strategic benefits to governments in supporting exploration’, presented at NSW Minerals Council Exploration Forum, Sydney, 7 May.
- Scott, R.P. 2016, *Independent Review of the Gasfields Commission Queensland*, July, <https://cabinet.qld.gov.au/documents/2016/Oct/RevGasComm/Attachments/Report.PDF> (accessed 31 October 2019).
- SECLC (Senate Environment and Communications Legislation Committee) 2015, *Landholders’ Right to Refuse (Gas and Coal) Bill 2015*, September, Canberra, ACT.
- SECRC (Senate Environment and Communications References Committee) 2014, *Environmental Offsets*, June, Canberra.
- 2019, *Rehabilitation of Mining and Resources Projects and Power Station Ash Dams as It Relates to Commonwealth Responsibilities*, March, Canberra.
- Shire of Coolgardie 2019, *Remote Area Tax Concessions and Payments Enquiry — Submission by Shire of Coolgardie*, Productivity Commission Inquiry submission no. 38, [https://www.pc.gov.au/\\_\\_data/assets/pdf\\_file/0006/241449/sub038-remote-tax.pdf](https://www.pc.gov.au/__data/assets/pdf_file/0006/241449/sub038-remote-tax.pdf) (accessed 26 February 2020).
- Sibson, E. 2018, ‘Record \$4.5 million fine for serious environmental harm at Linc energy plant’, *ABC News*, 11 May, [https://www.abc.net.au/news/2018-05-11/linc-energy-fined-\\$4.5-million-for-serious-environmental-harm/9751154](https://www.abc.net.au/news/2018-05-11/linc-energy-fined-$4.5-million-for-serious-environmental-harm/9751154) (accessed 9 January 2020).
- Singh, S.C. 2020, *India to Stop Thermal Coal Imports from FY24: Prahlad Joshi*, <https://economictimes.indiatimes.com/industry/energy/power/india-to-stop-thermal-coal-imports-from-fy24-prahlad-joshi/articleshow/74189630.cms?from=mdr> (accessed 17 August 2020).
- Slezak, M. 2018, ‘Maules Creek offsets still not secured, five years after land clearing approved’, *The Guardian*, 2 March, <https://www.theguardian.com/environment/2018/mar/02/maules-creek-land-clearing-continues-despite-lack-of-require-offsets> (accessed 21 November 2020).

- 
- and Robertson, J. 2017, “Woodside says it was behind oil spill that regulator kept secret”, *The Guardian*, 19 May, <https://www.theguardian.com/environment/2017/may/19/woodside-says-it-was-behind-oil-spill-that-regulator-kept-secret> (accessed 10 March 2020).
- SLR Consulting 2014, *Interactions Between Dairy and Unconventional Gas Mining Activities - Eastern Australia*, Briefing report, July, Lambton, NSW, <https://www.dairyaustralia.com.au/-/media/dairyaustralia/documents/farm/environment/coal-seam-gas-mining/csgslr-review-of-csg-and-dairy-interaction--31-july-2014-part-1.ashx> (accessed 23 October 2019).
- Smith, W. 2016, *Independent Review of the Regional Development Australia Programme*, [regional.gov.au/regional/publications/files/Final\\_Report-RDA\\_Independent\\_Review\\_12\\_December\\_2016.pdf](http://regional.gov.au/regional/publications/files/Final_Report-RDA_Independent_Review_12_December_2016.pdf) (accessed 26 February 2020).
- Smyth, J. and Hume, N. 2020, “Australia mine safety crisis spurs workforce debate”, *Financial Times*, 10 March, <https://www.ft.com/content/fe96a974-5209-11ea-8841-482eed0038b1> (accessed 20 August 2020).
- Standen, S. 2019, ‘Karratha housing shortfall prompts council to commit up to \$35m to kickstart market’, *ABC News*, 15 December, <https://www.abc.net.au/news/2019-12-15/karratha-council-to-invest-millions-to-keep-housing-affordable/11792788> (accessed 7 September 2020).
- Strelein, L. and Tran, T. 2007, *Taxation, Trusts and the Distribution of Benefits Under Native Title Agreements*, Native Title Research Report, 1/2007, Australian Institute of Aboriginal and Torres Strait Islander Studies and Eastern Maar Aboriginal Corporation.
- Sturmer, J. 2015, ‘Protesters chain themselves to land clearing equipment at Maules Creek coal mine site’, *Australian Broadcasting Commission*, 15 February, <https://www.abc.net.au/news/2015-02-15/activists-disrupt-maules-creek-coal-mine/6109164> (accessed 25 November 2019).
- Symes, J. 2018, *Banning Fracking, Protecting Farmers and Supporting Jobs, Premier of Victoria*, 21 December, <https://www.premier.vic.gov.au/banning-fracking-protecting-farmers-and-supporting-jobs/> (accessed 28 October 2019).
- Tas DPIPWE (Tasmanian Department of Primary Industries, Parks, Water and Environment) 2019, *Review of the Aboriginal Heritage Act 1975*, <https://dPIPWE.tas.gov.au/about-the-department/aboriginal-heritage-act> (accessed 3 February 2020).
- Tas DSG (Tasmanian Department of State Growth) 2018, *Annual Report 2017–18*, Annual Report, Hobart.
- Tas EPA (Tasmanian Environment Protection Authority) 2019, *Guidelines for Preparing an Environmental Impact Statement*, Hobart, <https://epa.tas.gov.au/Documents/Guidelines%20for%20Preparing%20an%20Environmental%20Impact%20Statement.pdf> (accessed 26 February 2020).
- nd, *Savage River Rehabilitation Project*, Hobart, <https://epa.tas.gov.au/epa/water/remediation-programs/savage-river-rehabilitation> (accessed 24 February 2020).



- 
- Tasmanian Government 2017, *Federal Senate Environment and Communications Reference Committee Inquiry into Rehabilitation of Mining and Resources Projects as it Relates to Commonwealth Responsibilities*, Submission no. 68, Hobart.
- TBSE (Toowoomba and Surat Basin Enterprise) 2019, *Renewable Energy in the Western Downs*, [https://www.tsbe.com.au/sites/default/files/uploaded-content/field\\_f\\_content\\_file/renewables\\_fact\\_sheet.pdf](https://www.tsbe.com.au/sites/default/files/uploaded-content/field_f_content_file/renewables_fact_sheet.pdf) (accessed 7 September 2020).
- Teague, B. and Catford, J. 2016, *Hazelwood Mine Fire Inquiry Report 2015/2016 Volume IV - Rehabilitation*, [https://www.parliament.vic.gov.au/file\\_uploads/11172\\_HAZ\\_MFIREport-2015\\_16-Volume4\\_FA\\_LR\\_15B0\\_pQfGZRfC.pdf](https://www.parliament.vic.gov.au/file_uploads/11172_HAZ_MFIREport-2015_16-Volume4_FA_LR_15B0_pQfGZRfC.pdf) (accessed 25 February 2020).
- , ——— and Petering, S. 2014, *Hazelwood Mine Fire Inquiry Report 2014 Part Three: Fire Risk Management*, Melbourne, [http://report.hazelwoodinquiry.vic.gov.au/wp-content/uploads/2014/08/Hazelwood\\_Mine\\_Inquiry\\_Report\\_Part03\\_PF.pdf](http://report.hazelwoodinquiry.vic.gov.au/wp-content/uploads/2014/08/Hazelwood_Mine_Inquiry_Report_Part03_PF.pdf) (accessed 12 November 2020).
- The Institute of Quarrying nd, *What is Quarrying?*, <https://www.quarrying.org/about-quarrying/quarrying-explained> (accessed 19 February 2020).
- Thompson, B. 2019, *Canberra's Rare Earth Cash Splash for Defence Projects*, Australian Financial Review, <https://www.afr.com/companies/mining/canberra-s-rare-earth-cash-splash-for-defence-projects-20191113-p53aae> (accessed 31 August 2020).
- TIA (Transparency International Australia) 2017, *Corruption Risks: Mining Approvals in Australia*, Sydney, NSW.
- TMEC (Tasmanian Minerals & Energy Council) 2014, *Submission: Draft Bilateral Approvals Agreement*, [https://www.pc.gov.au/\\_\\_data/assets/pdf\\_file/0005/248018/sub046-resources.pdf](https://www.pc.gov.au/__data/assets/pdf_file/0005/248018/sub046-resources.pdf) (accessed 19 January 2020).
- Toscano, N. and Bagshaw, E. 2020, *Miners confident on China coal demand as import threat looms*, The Sydney Morning Herald, <https://www.smh.com.au/business/the-economy/miners-confident-on-china-coal-demand-as-import-threat-looms-20200522-p54vgr.html> (accessed 14 August 2020).
- Treadgold, T. 2020, *\$32 Billion In Australian Oil And Gas Work Deferred Till Markets Improve*, <https://www.forbes.com/sites/timtreadgold/2020/03/27/32-billion-in-australian-oil-and-gas-work-deferred-till-markets-improve/#6331646a7be9> (accessed 7 October 2020).
- Treasury 2013a, *Not-for-profit sector tax concessions working group: Fairer, simpler and more effective tax concessions for the not-for-profit sector. Final report*, <https://treasury.gov.au/sites/default/files/2019-03/NFP-Sector-WG-Final-Report.pdf> (accessed 21 November 2020).
- 2013b, *Taxation of Native Title and Traditional Owner Benefits and Governance Working Group: Report to Government*, <https://treasury.gov.au/programs-initiatives-taxation/tnttobg-working-group> (accessed 17 October 2019).
- 2019, *Deregulation Taskforce Terms of Reference*, <https://treasury.gov.au/review/deregulation-taskforce/TOR> (accessed 17 January 2020).

- 
- 2020a, *Foreign Investment Reforms*, June, [https://treasury.gov.au/sites/default/files/2020-06/p2020-87595\\_0.pdf](https://treasury.gov.au/sites/default/files/2020-06/p2020-87595_0.pdf) (accessed 21 November 2020).
- 2020b, *Major reforms to the Foreign Investment Review Framework*, <https://treasury.gov.au/consultation/c2020-99761> (accessed 29 August 2020).
- nd, *Statements of Expectations*, <https://treasury.gov.au/the-department/accountability-reporting/statements-of-expectations> (accessed 21 February 2020).
- UN (United Nations) 2007, *Resolution adopted by the General Assembly on 13 September 2007: 61/295. United Nations Declaration on the Rights of Indigenous Peoples*, 2 October.
- Uncover Australia nd, *Uncover Australia*, <https://www.uncoveraustralia.org.au/> (accessed 14 October 2019).
- UNHRC (United Nations Human Rights Council) 2018, *Free, Prior and Informed Consent: A Human Rights-Based Approach. Study of the Expert Mechanism on the Rights of Indigenous Peoples*, [https://ap.ohchr.org/documents/dpage\\_e.aspx?si=A/HRC/39/62](https://ap.ohchr.org/documents/dpage_e.aspx?si=A/HRC/39/62) (accessed 21 November 2020).
- United Kingdom Department for Business, Energy & Industrial Strategy, Oil and Gas Authority, Kwarteng, K. and Leadsom, A. 2019, *Government Ends Support for Fracking*, GOV.UK, <https://www.gov.uk/government/news/government-ends-support-for-fracking> (accessed 17 February 2020).
- Upper Hunter Mining Dialogue 2019, *Upper Hunter Mining Dialogue Beneficial Reuse of Voids Project: Summary Report*, November, [http://miningdialogue.com.au/getattachment/Dialogue/Latest-Projects/Land-Management/Investigation-of-Possible-Beneficial-Uses-for-Mine/UHMD\\_Beneficial-Reuse-of-Voids-Project\\_Summary-Report.pdf](http://miningdialogue.com.au/getattachment/Dialogue/Latest-Projects/Land-Management/Investigation-of-Possible-Beneficial-Uses-for-Mine/UHMD_Beneficial-Reuse-of-Voids-Project_Summary-Report.pdf) (accessed 6 November 2020).
- nd, *Grazing Study*, <http://miningdialogue.com.au/dialogue/latest-projects/land-management/grazing-study> (accessed 11 November 2020).
- Urquhart, A. and Pratt, L. 2014, *Australian Labor Party Senators' Dissenting Report*, Dissenting Report to the Senate Environment and Communications Legislation Committee Report on the EPBC Act (Bilateral Agreement Implementation) Bill 2014 [Provisions] and EPBC Amendment (Cost Recovery) Bill 2014 [Provisions].
- US EPA (US Environmental Protection Agency) 2008, *EPA's Environmental Justice Collaborative Problem-Solving Model*, Washington DC, <https://www.epa.gov/sites/production/files/2016-06/documents/cps-manual-12-27-06.pdf> (accessed 23 January 2020).
- VAGO (Victorian Auditor-General's Office) 2020, *Rehabilitating Mines: Independent Assurance Report to Parliament*, August, Melbourne, [https://www.audit.vic.gov.au/sites/default/files/2020-08/20200805-Rehabilitating-Mines-report\\_0.pdf](https://www.audit.vic.gov.au/sites/default/files/2020-08/20200805-Rehabilitating-Mines-report_0.pdf) (accessed 24 September 2020).
- Van Assche, K., Gruezmacher, M. and Deacon, L. 2020, 'Land use tools for tempering boom and bust: Strategy and capacity building in governance', *Land Use Policy*, vol. 93, <https://www.sciencedirect.com/science/article/abs/pii/S0264837719302364> (accessed 7 September 2020).

- 
- Vanclay, F. 2003, 'International principles for social impact assessment', *Impact Assessment and Project Appraisal*, vol. 21, no. 1, pp. 5–12.
- Vic DEDJTR (Victorian Department of Economic Development, Jobs, Transport and Resources) 2017, *Rehabilitation Bond Policy for the Latrobe Valley Coal Mines*, [https://earthresources.vic.gov.au/\\_\\_data/assets/pdf\\_file/0010/456679/Rehabilitation-bond-policy-Latrobe-Valley-coal-mines.pdf](https://earthresources.vic.gov.au/__data/assets/pdf_file/0010/456679/Rehabilitation-bond-policy-Latrobe-Valley-coal-mines.pdf) (accessed 27 February 2020).
- 2018, *Latrobe Valley Mine Rehabilitation: FAQs June 2018*, [https://earthresources.vic.gov.au/\\_\\_data/assets/pdf\\_file/0011/459245/Latrobe-Valley-mine-rehabilitation-FAQs.pdf](https://earthresources.vic.gov.au/__data/assets/pdf_file/0011/459245/Latrobe-Valley-mine-rehabilitation-FAQs.pdf) (accessed 12 November 2020).
- Vic DJCS (Victorian Department of Justice and Community Safety) 2019, *History of Native Title Claims in Victoria*, <http://www.justice.vic.gov.au/your-rights/native-title/history-of-native-title-claims-in-victoria> (accessed 30 January 2020).
- Vic DJPR (Victorian Department of Jobs, Precincts and Regions) 2019a, *Agreeing Access to Private Land*, text, Earth Resources, <https://earthresources.vic.gov.au/community-and-land-use/commercial-consent-agreement> (accessed 21 October 2019).
- 2019b, *Community Engagement Guidelines for Mining and Mineral Exploration*, <https://earthresources.vic.gov.au/legislation-and-regulations/guidelines-and-codes-of-practice/community-engagement-guidelines-for-mining-and-mineral-exploration> (accessed 3 September 2019).
- 2019c, *Operational Policy – Fit and Proper Person. Assessment Under the Mineral Resources (Sustainable Development) Act 1990*, Melbourne, <https://earthresources.vic.gov.au/legislation-and-regulations/guidelines-and-codes-of-practice/fit-and-proper-person-policy> (accessed 23 January 2020).
- 2019d, *Traditional Owner Settlement Act*, text, Earth Resources, <https://earthresources.vic.gov.au/legislation-and-regulations/legislation/traditional-owner-settlement-act> (accessed 30 January 2020).
- 2019e, *Victorian Gas Program*, Earth Resources, <https://earthresources.vic.gov.au/projects/victorian-gas-program> (accessed 28 October 2019).
- 2020, *Restrictions on Onshore Gas*, Earth Resources, <https://earthresources.vic.gov.au/geology-exploration/oil-gas/restrictions-on-onshore-gas> (accessed 21 September 2020).
- Vic DSE (Victorian Department of Sustainability and Environment) 2006a, *Ministerial Guidelines for Assessment of Environmental Effects Under the Environmental Effects Act 1978*, [https://www.planning.vic.gov.au/\\_\\_data/assets/pdf\\_file/0026/95237/DSE097\\_EES\\_FA.pdf](https://www.planning.vic.gov.au/__data/assets/pdf_file/0026/95237/DSE097_EES_FA.pdf) (accessed 26 February 2020).
- 2006b, *Ministerial Guidelines for Assessment of Environmental Effects Under the Environmental Effects Act 1978, Seventh Edition*.
- Vic DTF (Victorian Department of Treasury and Finance) 2013, *Cost Recovery Guidelines*, January, [https://www.dtf.vic.gov.au/sites/default/files/2018-01/Cost-Recovery-Guidelines-Jan2013\\_0.pdf](https://www.dtf.vic.gov.au/sites/default/files/2018-01/Cost-Recovery-Guidelines-Jan2013_0.pdf) (accessed 17 February 2020).

- 
- Victorian Aboriginal Heritage Council 2020, *Taking Control of Our Heritage - Discussion Paper on Legislative Reform of the Aboriginal Heritage Act 2006*, June, Melbourne.
- Victorian Auditor-General 2017, *Effectiveness of the Environmental Effects Statement Process*, Melbourne.
- Victorian Government 2018, *State of Discovery: Mineral Resources Strategy 2018-2023*, Victoria.
- WA DJTSI (Western Australian Department of Jobs, Tourism, Science and Innovation) nd, *List of State Agreements*, <https://www.jtsi.wa.gov.au/what-we-do/manage-state-agreements/list-of-state-agreements> (accessed 13 January 2020a).
- nd, *WA Domestic Gas Policy*, <https://www.jtsi.wa.gov.au/economic-development/economy/domestic-gas-policy> (accessed 6 November 2019b).
- nd, *What is a State Agreement*, <https://www.jtsi.wa.gov.au/what-we-do/manage-state-agreements/what-is-a-state-agreement> (accessed 13 January 2020c).
- WA DMIRS (Western Australian Department of Mines, Industry Regulation and Safety) 2017, *Mining Rehabilitation Fund – Guidance*, March, p. 17, <http://www.dmp.wa.gov.au/Documents/Environment/ENV-MEB-382.pdf> (accessed 20 November 2020).
- 2018, *Modernising Work Health and Safety Laws in Western Australia: Proposals for Amendments to the Model Work Health and Safety Bill for Adoption in Western Australia*, 30 June, [https://www.commerce.wa.gov.au/sites/default/files/atoms/files/whs\\_act\\_consultation.pdf](https://www.commerce.wa.gov.au/sites/default/files/atoms/files/whs_act_consultation.pdf) (accessed 18 August 2020).
- 2019a, *Department of Mines, Industry Regulation and Safety Annual Report 2018-19*, <https://www.dmirs.wa.gov.au/annualreport/2018-19/assets/pdf/dmirs-ar-19-web-final.pdf> (accessed 10 March 2020).
- 2019b, *DMIRS Approvals Reporting (Mining and Petroleum): September Quarter 2019*, [https://www.dmp.wa.gov.au/Documents/Investors/Approvals\\_Performance\\_Report-third\\_Quarter.pdf](https://www.dmp.wa.gov.au/Documents/Investors/Approvals_Performance_Report-third_Quarter.pdf) (accessed 4 March 2020).
- 2019c, *Mining Rehabilitation Fund: Yearly Report 2018-19*, [https://www.dmp.wa.gov.au/Documents/Environment/ENV-MRF\\_YearlyReport2018-19.pdf](https://www.dmp.wa.gov.au/Documents/Environment/ENV-MRF_YearlyReport2018-19.pdf) (accessed 20 February 2020).
- 2020a, *DMIRS approvals reporting (mining and petroleum): June quarter 2020*, [http://www.dmp.wa.gov.au/Documents/Investors/Approvals\\_Performance\\_Report-second\\_Quarter2020.pdf](http://www.dmp.wa.gov.au/Documents/Investors/Approvals_Performance_Report-second_Quarter2020.pdf) (accessed 4 March 2020).
- 2020b, *November 2020 - Work Health and Safety Bill passes Parliament*, <https://www.commerce.wa.gov.au/worksafe/november-2020-work-health-and-safety-bill-passes-parliament> (accessed 10 November 2020).
- 2020c, *Safety performance in the Western Australian mineral industry: 2018-19 accident and injury statistics*, [https://www.dmp.wa.gov.au/Documents/Safety/MSH\\_Stats\\_Reports\\_SafetyPerfWA\\_2018-19.pdf](https://www.dmp.wa.gov.au/Documents/Safety/MSH_Stats_Reports_SafetyPerfWA_2018-19.pdf) (accessed 20 August 2020).

- 
- nd, *Lead Agency Framework*, <https://www.dmp.wa.gov.au/Investors/Lead-Agency-Framework-1495.aspx> (accessed 10 February 2020a).
- nd, *Native Title Act Process*, Webpage, Department of Mines, Industry Regulation and Safety, <https://www.dmp.wa.gov.au/Minerals/Native-Title-Act-Process-5548.aspx> (accessed 28 November 2019b).
- 2019d, *Strategic Plan: Towards 2024*, Perth.
- nd, *Mineral Sands*, <https://www.dmp.wa.gov.au/Investors/Mineral-sands-1473.aspx> (accessed 10 March 2020c).
- WA DMP (Western Australian Department of Mines and Petroleum) 2014, *The Mining Rehabilitation Fund — The First Two Years*, [https://www.dmp.wa.gov.au/Documents/Environment/MRF\\_The\\_First\\_Two\\_Years.pdf](https://www.dmp.wa.gov.au/Documents/Environment/MRF_The_First_Two_Years.pdf) (accessed 27 February 2020).
- 2015, *Guidelines for Preparing Mine Closure Plans*, <http://www.dmp.wa.gov.au/Documents/Environment/ENV-MEB-121.pdf> (accessed 26 February 2020).
- WA DPC (Western Australian Department of the Premier and Cabinet) nd, *Lead Agency Framework: A Guidance Note for Implementation*.
- WA DPLH (Western Australian Department of Planning, Lands and Heritage) 2020, *Western Australian Government Submission to the Joint Standing Committee on Northern Australia Inquiry into the Destruction of Indigenous Heritage Sites at Juukan Gorge*.
- WA DWER (Western Australian Department of Water and Environmental Regulation) 2019, *Pilbara Environmental Offsets Fund: Implementation Plan*, November, Joondalup, [https://dwer.wa.gov.au/sites/default/files/PEOF\\_Implementation\\_%20plan.pdf](https://dwer.wa.gov.au/sites/default/files/PEOF_Implementation_%20plan.pdf) (accessed 20 November 2020).
- WA EPA (Western Australian Environmental Protection Authority) 2017, *Instructions on How to Prepare Environmental Protection Act 1986 Part IV Environmental Management Plans*, Joondalup.
- WA PC (Western Australian Planning Commission) 2010, *Karratha — Regional HotSpots Land Supply Update*, [https://www.dplh.wa.gov.au/getmedia/6de27eda-a106-47db-b4f3-6e5fd8eb4df2/RLSA\\_Karratha\\_Regional\\_hotspots\\_land\\_supply\\_Dec2010\(2\)](https://www.dplh.wa.gov.au/getmedia/6de27eda-a106-47db-b4f3-6e5fd8eb4df2/RLSA_Karratha_Regional_hotspots_land_supply_Dec2010(2)) (accessed 25 November 2019).
- WA RDT (Western Australian Regional Development Trust) 2019, *2018–19 Annual Report*, <http://www.drd.wa.gov.au/Publications/Documents/WARDT-annual-report-2018-19.pdf> (accessed 2 December 2019).
- WABSI (The Western Australian Biodiversity Science Institute) 2020, *Digitally Transforming Environmental Impact Assessment*, The Western Australian Biodiversity Science Institute, [https://wabsi.org.au/wp-content/uploads/2019/10/Digitally-Transforming-Environmental-Assessment\\_Working-Group-Report.pdf](https://wabsi.org.au/wp-content/uploads/2019/10/Digitally-Transforming-Environmental-Assessment_Working-Group-Report.pdf) (accessed 30 January 2020).
- Walker, S. 2020, *Review of the Circumstances that Led to the Administration of the Northern Oil and Gas Australia (NOGA) Group of Companies*, June, Canberra.

- 
- Walsh, L. 2020, 'Contractor tangled in machinery the eighth Qld mine death', *Australian Financial Review*, 13 January, <https://www.afr.com/companies/mining/pressure-mounts-as-thiess-worker-dies-at-coronado-coal-mine-20200113-p53r0m> (accessed 20 February 2020).
- Walton, A., McCrea, R. and Jeanneret, T. 2018, *Social Baseline Assessment: Narrabri Project — Final Report*, Report to the Gas Industry Social and Environmental Research Alliance, Canberra, <https://gisera.csiro.au/project/social-baseline-assessment-narrabri-region-nsw-relation-csg-development/> (accessed 21 January 2020).
- Weekes, J. 2018, 'Concerns Linc Energy may never pay fines', *The Queensland Times*, 5 November, <https://www.qt.com.au/news/ecological-vandalism-linc-energy-fined-millions/3412203/> (accessed 2 November 2018).
- Wentworth Group of Concerned Scientists 2012, *Statement on Changes to Commonwealth Powers to Protect Australia's Environment*, <https://wentworthgroup.org/2012/09/statement-on-changes-to-commonwealth-powers-to-protect-australias-environment/2012/> (accessed 22 November 2019).
- Werner, T., Bach, P., Yellishetty, M., Amirpoorsaeed, F., Solly, P., Tan, Y., Lewis, C., Hudson, E., Heberling, K., Richards, T., Chia, H.C., Truong, M., Gupta, T., Wu, X., Walsh, S., Miller, A., Roach, M. and Schnapp, A. 2020, 'A Geospatial Database for Effective Mine Rehabilitation in Australia', *Minerals*, vol. 10, no. 9.
- Western Australian Government 2014, *WA Environmental Offsets Guidelines*, August, [https://www.epa.wa.gov.au/sites/default/files/Policies\\_and\\_Guidance/WA%20Environmental%20Offsets%20Guideline%20August%202014.pdf](https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/WA%20Environmental%20Offsets%20Guideline%20August%202014.pdf) (accessed 23 January 2020).
- 2019, *Implementation Plan: Implementation of the Government's response to the Independent Scientific Panel Inquiry into Hydraulic Fracture Stimulation in Western Australia*, <https://www.hydraulicfracturing.wa.gov.au/wp-content/uploads/2019/07/Implementation-Plan.pdf> (accessed 1 October 2020).
- 2020a, *Action 5a: Right of consent — Traditional Owners*, <https://www.hydraulicfracturing.wa.gov.au/action/action-5a/> (accessed 1 October 2020).
- 2020b, *Collie company breaks ground at Lake Kepwari as project expanded to \$5.7 million development*, 27 February, <https://www.mediastatements.wa.gov.au/Pages/McGowan/2020/02/Collie-company-breaks-ground-at-Lake-Kepwari-as-project-expanded-to-5-point-7-million-dollar-development.aspx> (accessed 11 November 2020).
- 2020c, *Financial Assurance*, Position Paper, July, Implementation of the Government's response to the Independent Scientific Panel Inquiry into Hydraulic Fracture Stimulation in Western Australia, [https://www.hydraulicfracturing.wa.gov.au/wp-content/uploads/2020/09/Financial-Assurance\\_WEB.pdf](https://www.hydraulicfracturing.wa.gov.au/wp-content/uploads/2020/09/Financial-Assurance_WEB.pdf) (accessed 11 November 2020).
- 2020d, *Streamline WA Projects*, <https://www.wa.gov.au/organisation/department-of-mines-industry-regulation-and-safety/streamline-wa-projects> (accessed 29 January 2020).
- 2020e, *WA Recovery Plan*, July, <https://www.wa.gov.au/sites/default/files/2020-07/WA-Recovery-Plan.pdf> (accessed 7 September 2020).

- 
- 2020f, *What is Environment Online?*, <https://www.wa.gov.au/service/environment/environment-information-services/what-environment-online> (accessed 14 August 2020).
- Wheeler, C. 2013, “The public interest revisited - we know it’s important but do we know what it means?”, *Australian Institute of Administrative Law Forum*, vol. 5, pp. 34–49.
- Wintawari Guruma Aboriginal Corporation 2020, *Submission to the Joint Standing Committee on Northern Australia Inquiry into the Destruction of 46,000 Year Old Caves at the Juukan Gorge in the Pilbara Region of Western Australia*.
- Wintle, B., Maron, M., Legge, S., Woinarski, J., Morgain, R., Garnett, S., Lindenmayer, D., Moggridge, B. and Cadenhead, N. 2020, *Submission to the EPBC Act Review*, April, <https://epbcactreview.environment.gov.au/sites/default/files/2020-05/ANON-K57V-XYS3-4%20-%20NESP%20Threatened%20Species%20Recovery.pdf> (accessed 2 November 2020).
- Woodward, J. 2016, *Regulatory Maturity Project: Final Report*, April.
- World Bank nd, *World Integrated Trade Solution*, <https://wits.worldbank.org/CountryProfile/en/country/by-country/startyear/LTST/endyear/LTST/tradeFlow/Import/indicator/MPRT-TRD-VL/partner/WLD/product/Total> (accessed 21 November 2020).
- Wyatt, B. 2020, *Media Statements - \$116 Million Regional Land Booster Package Delivers Record Sales*, <https://www.mediastatements.wa.gov.au/Pages/McGowan/2020/08/116-million-dollar-Regional-Land-Booster-Package-delivers-record-sales.aspx> (accessed 7 September 2020).
- and MacTiernan, A. 2020, *Media Statements - \$116m Affordable Land Package to Drive Growth in Regional WA*, <https://www.mediastatements.wa.gov.au/Pages/McGowan/2020/07/116m-dollars-affordable-land-package-to-drive-growth-in-regional-WA.aspx> (accessed 7 September 2020).
- Wyatt, K. 2019, *Dignitary Address to the 42nd Session of the UN Human Rights Council*, Department of the Prime Minister and Cabinet, <https://ministers.pmc.gov.au/wyatt/2019/dignitary-address-42nd-session-un-human-rights-council> (accessed 18 September 2020).
- Wyndham, T. 2017, *Notification of Referral Decision and Designated Proponent - Controlled Action*, Department of the Environment and Energy.
- Zuchetti, A. 2019, *Controversial new director IDs a step closer*, My Business, <https://www.mybusiness.com.au/management/6470-controversial-new-director-ids-a-step-closer> (accessed 23 January 2020).