

A scenic view of a river at dusk. The sky is a deep blue with scattered clouds. In the background, a town is illuminated by warm streetlights, and their glow is reflected in the calm water of the river. The riverbank in the foreground is rocky and covered with dry, golden-brown grass. A paved path runs along the bank. The overall atmosphere is peaceful and serene.

SUBMISSION

**PRODUCTIVITY COMMISSION: OPPORTUNITIES
IN THE CIRCULAR ECONOMY**

NOVEMBER 2024

About the Regional Australia Institute

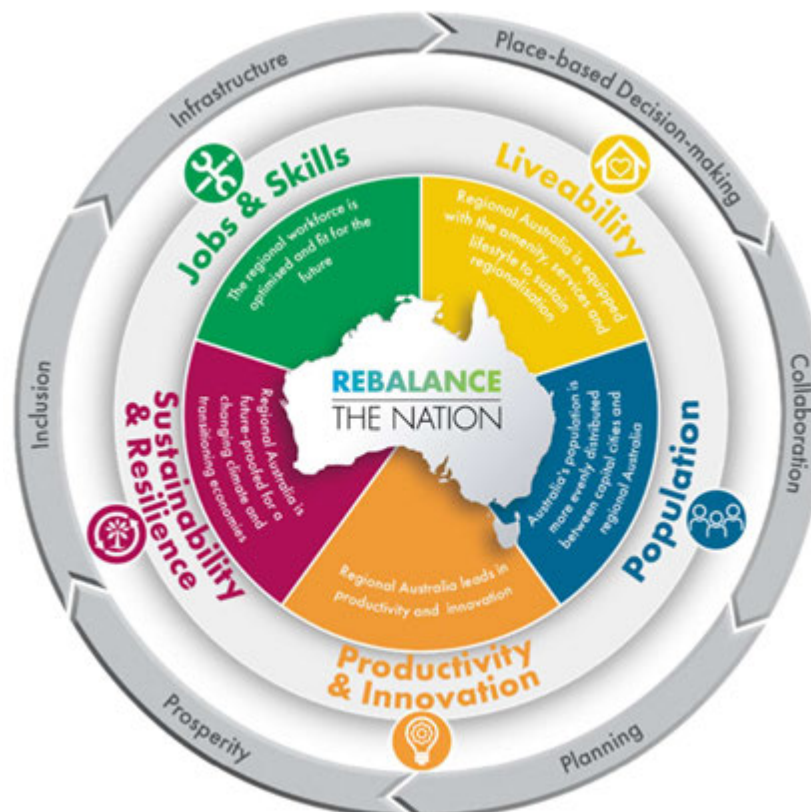
The Regional Australia Institute (RAI) is the nation's first and only independent think-tank dedicated to empowering Australia's regions. We are a not-for-profit organisation that undertakes research to inform, educate and activate our rural and regional communities.

The RAI celebrates 13 years in 2024. We are proud of the vast array of research, data, and detailed insights the RAI has provided into many of the significant issues and challenges facing regional Australia. The work of the Institute is made possible through research partnerships with federal, state and territory governments, the national Regions Rising event series, regional consultancy projects, membership, and philanthropic funding.

In 2022, the RAI launched the [Regionalisation Ambition 2032 - A Framework to Rebalance the Nation](#). The Ambition is a 10-year plan for regional Australia that seeks balanced growth across our nation's regional towns and cities. It outlines key targets, actions and benefits that will contribute to building prosperous regional communities, and a stronger Australia.

The RAI exists so that decision-makers at all levels of government, not-for-profits, industry, and community have the information they need to ensure the best outcomes for regional Australia. By replacing myths and stereotypes with facts and knowledge, the RAI seeks to build a more inclusive, unified and prosperous future for all Australians.

We care about the regions, because when our regions are strong, Australia is strong.



RAI submission: Opportunities in the Circular Economy

The Regional Australia Institute (RAI) welcomes this opportunity to make a submission to the Productivity Commission's inquiry into *Opportunities in the Circular Economy*.

This inquiry is timely given the nascent state of the circular economy in regional Australia but also the significant economic, social and environmental opportunities and benefits that lie ahead in the regions under strong national leadership and the right policy settings.

Regional Australia will be critically important for Australia's future circular economy, with many current and prospective circular initiatives located regionally in the energy, agriculture, fisheries, forestry, mining, manufacturing and construction sectors. These sectors present considerable opportunities for large-scale waste minimisation and re-use and recycling of waste into new products that serve a range of useful purposes instead of diversion to landfill.

In October 2024, the RAI released [Circular Economy in Action: Regional Perspectives](#), a research project that explored the methods, barriers, and case studies of circular economy implementation in regional contexts. The research project was funded by the Intergovernmental Shared Inquiry Program, a research partnership between the RAI and the Commonwealth, state and territory governments. A copy of the report is attached to this submission and its contents are recommended for consideration by the inquiry.

The RAI's report examined six case study regions – Bega Valley, Limestone Coast, Launceston, Central Desert, Rockhampton and Albury – and made eight recommendations for developing the circular economy in regional Australia (see Attachment 1).

The report found that the regions already play a central role in growing Australia's circular economy, but they face a common set of challenges, typically due to their smaller markets, higher transport costs and more limited access to skills and finance. It found that strong local leadership, a willingness to collaborate and take risks, better coordination of government policy and strong community engagement and support for circular economy opportunities will make more circular projects happen in the regions, as is occurring in the case study regions examined in the RAI report.

The RAI strongly recommends that the Productivity Commission consider the report's findings and apply a regional perspective in its advice to government to support and extend the circular economy progress already made by innovative regional businesses, communities and individuals.

[Circular economy opportunities in the regions](#)

Regional Australia is undergoing major social, economic and demographic change, with consistent net inflows of internal migrants from capital cities, a boom in the diversity and quantity in regional labour markets, and unprecedented growth of investment in energy infrastructure and green manufacturing. Opportunities to improve the productivity and resource efficiency of regional supply chains through circular initiatives will support Australia's objectives for regional development, emissions reduction, sustainability and a more productive economy.

Regions with strong circular economy practices are leveraging their unique attributes and locational advantages. For example, Albury has leveraged its location between Sydney and Melbourne to create a recycling hub that can service both major capitals. The Limestone Coast region capitalises on existing

sustainable practices in traditional industries such as forestry, to lead the community in other circular economy activities.

Significant opportunities exist to use circular principles to reduce waste and create new sustainable products from the transition to net zero in the regions. For instance, waste materials generated within renewable energy zones can be re-used to generate green power and provide firming power to renewable energy companies. Similarly, the establishment of processing and resource recovery facilities for damaged or end of life solar panels, or for construction materials from renewable energy projects, can create valuable product streams and divert waste from landfill.

As identified in the RAI report, positive cases are already emerging from regional businesses, who are leading the charge towards a sustainable future. In the Limestone Coast region, for example, pioneering initiatives across industry sectors demonstrate the power of circular economy practices and collaboration, transcending traditional business practices to embrace sustainability and innovation (see Box 1).

Circular economy challenges in the regions

Regions exhibit unique characteristics and common challenges that differ from urban areas. For example, in the Report, challenges related to geographic isolation, small population size and infrastructure deficiencies were evident across many regions and require targeted strategies.

The RAI report found that, across regions, the scarcity of local waste management infrastructure, compounded by high transportation costs and logistical complexities, significantly hindered the efficacy of recycling and waste reduction efforts. These infrastructure challenges, often described as the ‘tyranny of distance’, are a major barrier to the adoption and scalability of circular economy models in remote areas. Additionally, limited land availability for new circular economy initiatives puts further strain on already stretched local government areas, hindering the expansion of circular practices. These logistical complexities intertwine with economic factors, influencing the decision-making process for many local councils and communities.

Moreover, in addressing these infrastructural deficits, insufficient and misaligned funding support has often been detrimental to the progression of regional circular economies. Traditional grants often fail to meet the specific demands of regional businesses engaged in circular practices, indicating a gap in funding suitability and lack of support compared to the risks associated with innovative circular economy projects, leaving businesses to navigate the financial burdens of circular economy initiatives largely on their own. Risk-averse lending structures can hinder innovation, leaving many innovative endeavours unsupported.

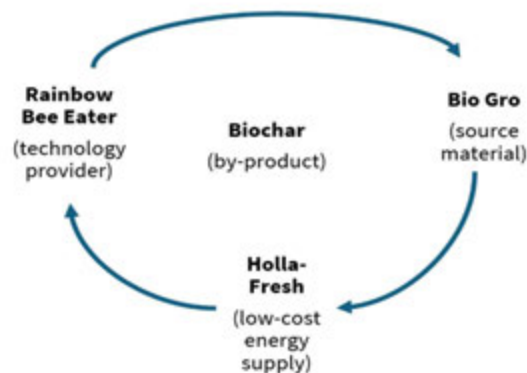
The RAI report identified the importance of local leadership for regional circular economy initiatives, along with engagement with the community at the grassroots level to embed circular economy principles into daily life and ensure broad-based support for sustainability initiatives. Conversely, a lack of a clear vision, poor local leadership and management or community engagement limits commitment and support for sustainability initiatives. To overcome these hurdles, it is crucial for governments and relevant organisations to focus on education and awareness, as well as provide financial, technical, and logistical support to grassroots movements to incorporate communities into the broader circular economy agenda.

Box 1: Limestone Coast case study: Horizontal networks

The relationship of **Holla-Fresh**, a family-owned herb supplier in Tantanoola, **Bio Gro**, a provider of garden and landscaping products in Mount Gambier and **Rainbow Bee Eater**, a Melbourne-based technology firm, is a key example of cross industry collaboration.

The journey towards circularity began with Holla-Fresh's ambition to reduce its carbon footprint and operational costs, prompting the exploration of renewable energy sources. Bio Gro became a vital partner in this endeavour, freely supplying the essential biomass residue material needed for Holla-Fresh's new energy requirements. In return, Bio Gro utilises the biochar produced through the pyrolysis process. As a high-carbon charcoal, the biochar serves as an ideal, long-lasting soil additive and water retention medium, with potential applications in animal feed supplements, concrete strengthening, water filtration, and road surfacing.

Rainbow Bee Eater's ECHO2 technology, which converts organic residues into renewable energy, provided the technological foundation for this sustainable cycle. This solution not only addressed waste disposal challenges but also supplied Holla-Fresh with a sustainable and cost-effective energy source. As a result, Holla-Fresh significantly reduced its energy costs and emissions, achieving a carbon-negative status.



As Figure above shows, this process has created a sustainable loop, where waste from one process serves as the input for another, illustrating the essence of circular economy.

Green Industries SA (GISA), a state government agency, has been crucial in the development of this initiative. As a facilitator and advocate for sustainable practices within the region, GISA played a key role in bridging the gap between Holla-Fresh and its partners. By coordinating the national expression of interest process, GISA not only identified the most suitable technologies and partners for Holla-Fresh's goals but also provided the necessary support and resources to ensure the feasibility and implementation of the project.

This collaboration serves as an outstanding example of the circular economy in action. It has spurred innovation, created opportunities for three companies, boosted the regional economy, inspired new research and laid the groundwork for significantly reducing carbon footprints and achieving tangible business results. Furthermore, it highlights the importance of public-private collaboration in achieving sustainable circularity.

Circular Economy in Action: Regional Perspectives Recommendations

A major step forward in national circular economy policy frameworks beyond the current piecemeal approach will be required to provide businesses and communities with the certainty and support needed to expand circular activities. The commitment by Australia's governments to a National Circular Economy Framework, based on the advice of the Circular Economy Ministerial Advisory Group, along with the findings of this inquiry, can deliver a more systemic approach to circular economy policy that will enable and drive future development. The RAI makes the following recommendations:

Recommendation 1:

Establish a dedicated authority within state and territory governments to develop policy, coordinate planning and facilitate collaboration for circular economy activities.

Why?

Based on the models of Sustainability Victoria and Green Industries SA, this authority should include a specific focus on regional communities and could offer tools and resources to support communities to access information, training and funding opportunities. By providing tailored support, a dedicated authority can enable regional communities to address unique challenges and advance their circular economy initiatives effectively.

Recommendation 2:

Review the National Waste Policy and Action Plan to ensure actions relating to industry capacity and infrastructure requirements adequately address regional challenges.

Why?

Regions face geographical challenges that add cost and complexity, such as transport and lack of economies of scale. It is important that national plans, when considering investment and infrastructure, view these challenges through a regional lens, to ensure equality with metropolitan areas. Data collection and reporting divided into metropolitan and regional areas can help identify gaps.

Recommendation 3:

Review circular economy policy to comprehensively address upstream processes such as design innovation, materials substitution, product standards and reduction in resource use.

Why?

Addressing waste management components of product life cycles in isolation neglects the broader philosophy of the circular economy. National circular economy policy should expand beyond the current focus on waste management to encompass upstream processes that encourage broader economic, environmental and social change. This could occur through the Australian Government's proposed national framework for circular economy.

Recommendation 4:

Establish state-level circular economy data hubs that aggregate and summarise waste generation and material flow data collected by councils.

Why?

Expanding and managing circular economy initiatives in Australia requires reliable regional level data, and evidence-backed case studies. A state-level circular economy data hub would support councils with data and information sharing and help track progress towards circular economy targets.

Recommendation 5:

Establish a regional investment fund for circular economy initiatives.

Why?

Seed capital and the economic feasibility of projects can be significant barriers to circular economy initiatives. To ensure the feasibility of circular projects, the fund would be used to offer low-interest loans or financial guarantees to mitigate the investment risks for smaller councils and communities.

Recommendation 6:

Ensure that local, state, and national regulatory frameworks are aligned so that circular economy initiatives in regions can scale effectively without being hindered by conflicting policies.

Why?

Governments at all levels must continue to develop and articulate a comprehensive vision for the circular economy in regional Australia and build an enabling framework that supports businesses and communities to implement it. Conflicting regulatory frameworks across the levels of government can stifle the natural development of regions and communities navigating government policy. To ensure that the policy context is conducive to circular economy initiatives, there must be consistency and accessibility. For example, ensuring environmental legislation, waste management protocols and biosecurity requirements are consistent between states would allow regional businesses to transport and recycle waste materials across borders. This also includes the development of cascading regulatory frameworks that are aligned across national, state and local contexts; and continuing to develop policies around natural resource conservation, design and manufacturing for circularity and product stewardship.

Recommendation 7:

Develop information and education campaigns across all levels of government, industry and community to promote circular practices.

Why?

Circular economy concepts are not widely understood or known by regional constituents. This could lead to low participation or acceptance of circular practices, and without community uptake the broader transition to a circular economy will be hindered. Disseminating information and making circular concepts accessible to communities could significantly improve regional participation.

Recommendation 8:

Provide financial, technical, and logistical support to grassroots movements and local initiatives that promote circular economy practices, such as repair workshops, local recycling programs and community gardens.

Why?

Grassroots initiatives are community led, engaging numerous sectors of regional economies whilst allowing community members to collaborate within the circular economy. Market stewardship from governments or support from private and not-for-profit organisations for regional circular initiatives could provide the indispensable support that may prevent failure or weaker outcomes from community led projects.