



Summary of submission to the Committee on Environment and Planning regarding the sustainability of energy supply and resources in NSW

Focusing on: Changing energy and resource markets, renewable energy opportunities and effects on regional communities, especially renewal potential in the Hunter Region.

1. The Hunter now

The Hunter Valley [“Coal Chain”](#) comprises:

- A plentiful supply of fresh water from Glenbawn dam
- Around 40 large coal mines with a long operating history
- An extensive rail network linking individual mine sites to the Port of Newcastle
- A workforce of 93,800 people skilled in heavy engineering and material handling
- An electricity transmission network providing capacity for 40% of NSW’s needs
- Port of Newcastle bulk coal-handling facility, able to handle other commodities

2. The Hunter 2022-2040

Electricity production from coal-fired power stations in Australia and overseas will decline during this period, causing mine owners to make economic decisions on coal production. All of this time could be needed to plan the transition from coal to new industries to provide jobs for the local workforce and stimulate economic growth.

The recovery of resources from waste could be a possible major replacement industry, solving not only a local economic problem but also a state-wide, even national, waste disposal problem. See EY report [How we can find the treasure in our trash.](#)

HOW THE HUNTER VALLEY COULD BECOME A WORLD-SCALE CENTRE FOR THE CONVERSION OF WASTE TO ENERGY AND THE RECYCLING OF WASTE MATERIALS:

- Inward transport of waste diverted from landfill and pre-sorted plastics/metal/paper
- Solutions for waste in NSW, other states, and 3.9M tonnes p.a. waste exported
- Waste-to-energy plants on existing power stations replace coal-fired power stations
- Recycling plants on current mine sites, fed by existing rail links, Hunter Expressway and proposed Singleton and Muswellbrook bypasses
- Economic multiplier effect from new businesses to use the recycled materials

3. Technology available for Waste to Energy and Material Recycling

Proven waste and recycling technologies already operate in Australia and overseas, ready to meet environmental controls, improve Hunter air quality and reduce dust contamination.

- **Waste to energy** (Waste which can't be recycled)

[Covanta \(Dublin\) waste to energy plant](#)

[Kwinana Project](#) and [East Rockingham](#) – the first waste to energy plants in Australia

- **Recycling**

[Recycling Centre in Brooklyn, NY, USA](#) (visited by Mr. Scott Morrison in 2019)

[Visy recycling in Australia](#)

[Global Renewables recycling in Australia](#)

Australia reported a recycling rate of 60% in 2019, but 27 m. tonnes went to landfill.

Recycling waste and waste conversion, with strict environmental controls, the use of proven technology, and plants located in the more remote areas of mine sites to minimise visual impact, could be a winner for both the Hunter and the nation.

4. National Waste Report 2020 (Australian waste)

[National Waste Report 2020](#) summary of information relevant to waste handling in the Hunter:

- A 5% increase in the recycling rate could add \$1BN to Australia's GDP.
- 2018-19 exports of recyclable waste materials were 3.88 Mt.
- NSW has a waste industry backed by \$802 million investment.
- NSW introduced measures to respond to China's waste acceptance restrictions.
- By 2028 waste management should be a flourishing and economically viable industry.

- Australian waste and resource recovery sector managed 61.5 Mt of core waste (excluding ash) in 2018-19, including about 43.5 Mt through recycling and most of the rest through landfill. It accounts for 0.43% of Australian GDP and employs 50,000 people.
- The Australian government is moving towards a national waste policy to remove difficulties created by existing management by multiple jurisdictions.
- Limited landfill space and the high cost of energy are likely to drive an increase in recycling and the development of waste to energy facilities.

5. SUMMARY

The Hunter Valley provides the ideal location for a world-leading waste removal industry that will establish new global standards

Recycling and zero-waste success achieved in other parts of the world, notably [San Francisco](#) and [Sweden](#), can be replicated in the Hunter for the benefit of all Australians.

As the world strives to limit its use of fossil fuels, the Hunter can transition from a coal-based economy to a broadly-based group of waste transformation industries, retaining its workforce, improving the environment, and assisting the [National Waste Policy](#).