

NAME REDACTED		OBJECT	Submission ID: 213916
Organisation:	N/A	Key issues:	Social impacts,Land use compatibility (surrounding land uses),Other issues
Location:	New South Wales 2444		
Attachment:	N/A		

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I would like to propose an alternative to the proposed plastics recycling facility:

Australia's first waste-to-energy plant is to be completed in the City of Kwinana, WA, Australia and is currently operating in Denmark (https://www.ramboll.com/en-apac/projects/energy/state-of-the-art-waste-to-energy-facility-in-copenhagen)

As a resident of NSW I believe it is everyone's responsibility to speak up to protect the environment for now and the future.

Please refer to the website: https://www.ramboll.com/en-apac/projects/energy/australia-s-first-waste-toenergy-plant

"Australia produces more than 70 million tonnes of waste annually of which about 60% is recycled and the remaining 40% ends up in landfills. The new waste-to-energy facility in Kwinana south of Perth, Western Australia will divert waste from landfills, while generating power for the local community.

The facility will be the first large-scale facility of its kind in Australia. It will be capable of processing 460,000 tonnes of waste annually and producing 38MW of electricity, enough to power up to 58,000 homes.

The facility will recover resources and energy from municipal and commercial waste, equal to approximately 25% of Perth's residual non-recyclable waste. It has the potential to cut CO2 emissions by more than 460,000 tonnes each year by significantly reducing the amount of waste taken to landfills, a major source of methane emissions, and by replacing energy from fossil fuels.

Kwinana Energy Recovery, a co-development between financial groups Macquarie Capital and DIF and later acquired by Acciona, appointed Ramboll as technical advisor and Owner's Engineer, responsible for the process technology and elements of the environmental permitting process.

In the planning phase, our team assisted the client in negotiating the engineering, procurement and construction (EPC) contract for the facility. As the Owner's Engineer we are responsible for undertaking design review and inspection during manufacturing and construction. Moreover, we will oversee the testing and commissioning of the facility and transfer to commercial operations.

Ramboll has also been appointed as the project's environmental advisor. Our environmental services include assessing potential re-use and disposal options for residue products generated as part of the project and assessing air quality both in the conceptual phase and for regulatory approvals.

## Strict environmental standards

The plant will use well-proven grate technology, which uses thermally treated waste to heat water into steam to produce electricity and enables the recovery of valuable metals. The technology meets strict environmental standards and is already in use in many countries with a strong track record in Europe.

The facility also uses a highly advanced flue gas cleaning system, which protects against pollutants being released into the atmosphere. The emissions are continuously tracked through an emissions monitoring system



that reports emissions online, which ensures emissions and local air quality remain within limits set by the Western Australian Government.

*The facility is currently being constructed on site in Kwinana and is expected to reach commercial operation by 2024.* 

An estimated 0.8 1.0 tonne of CO2 is saved for each tonne of waste diverted from landfill. At the waste-toenergy facility in Kwinana, this leads to a CO2 reduction of 460,000 tonnes each year.

Approximately 93% of Australia's energy supply (in 2019) came from fossil fuels. With a transition to waste-toenergy, the potential for decreasing CO2 emissions from energy production is abundant."

Thank you.