
Barwon Water has reviewed the evidence base report and supports proposed interventions that enable high levels of resource recovery for organics, particularly food organics and a waste to energy sector that recovers energy from residual waste.

Barwon Water is currently developing, in partnership with two key industrial businesses in our region, a waste-energy bio-grid (WEB) model which escalates residual organic wastes up the waste hierarchy from treatment to recycling via recovery of energy. It also enables a range of treatment opportunities that turn residual organic waste into a sustainable energy source.

The project is a paradigm shift in the management of trade waste, taking high strength, residual organic waste from these partners and using anaerobic digestion to convert this waste into dispatchable renewable energy in the form of electricity and hot water. A symbiotic cycle is created by returning this energy back to the businesses.

This will reduce the businesses’ collective reliance on grid electricity and gas, significantly reducing their carbon footprint and providing a sustainable waste management solution.

The WEB model is replicable across Australia.

Based on our learnings from developing the WEB model, we submit the following points for your consideration:

1. As identified in the evidence base report, food organics make up 35% of waste in household bins. There is an opportunity to expand the WEB model to include food organic waste as an additional energy source thus minimising waste to landfill reducing greenhouse gas emissions, and enabling economic growth by providing energy and waste security to businesses.

2. The WEB model creates an opportunity to leverage investment in water infrastructure (with anaerobic digestion being a common upgrade path for wastewater treatment facilities).
3. The targeted and symbiotic nature of organic waste-to-energy projects like WEBs enable the transition to a circular economy and advance businesses into the new energy economy.

We are supportive of the advice outlined in this evidence base report, and thank you for the opportunity to provide a submission. For any further details or queries please contact Emily Rahles-Rahbula (emily.rahles-rahbula@barwonwater.vic.gov.au).