

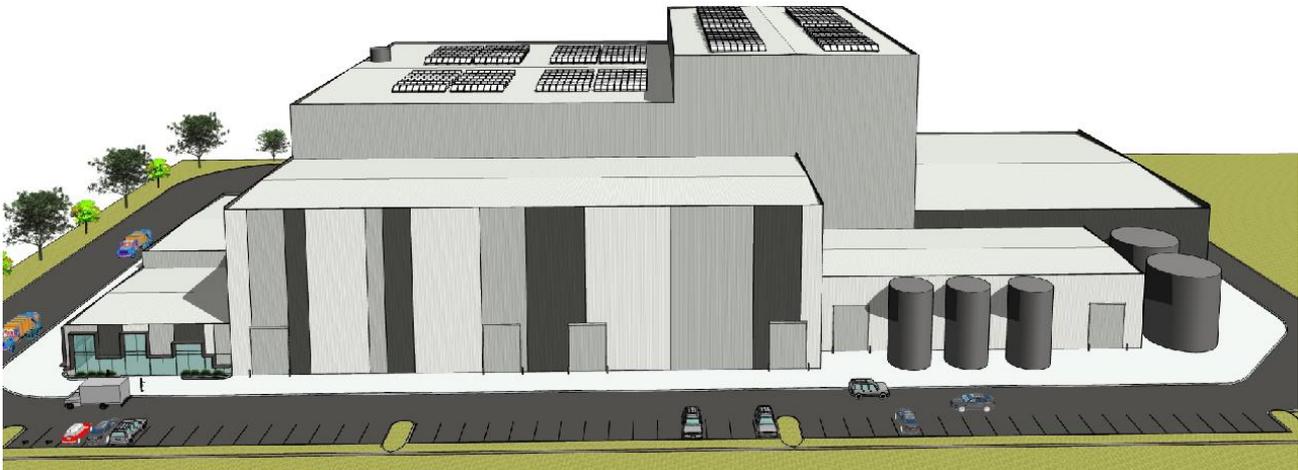
Energy Recovery Facility will generate enough electricity for 16,000 homes.

Recovered Energy Australia Pty Ltd proposes to construct a world leading high tech process to convert up to 200,000 tonnes per annum of general household domestic waste into baseload renewable energy.

The location identified by Recovered Energy Australia Pty Ltd (REA) as the preferred area for its first waste gasification to energy plant is on the appropriately zoned industrial land at Laverton North. It has been selected for its extensive buffer zone and position within an area identified by the State Government as an existing Resource and Recovery Hub of State Importance¹. It also has access to high energy consuming industries that could utilise the renewable power generated.

The proven technology used by REA is called *waste gasification to energy* and is currently in use throughout Asia and the Middle East. It meets the Victorian operational and environmental standards and is an economically viable alternative for municipal waste disposal.

The process, a controlled air gasification system is one of the most scalable and environmentally responsible thermal technologies for converting solid municipal waste to electricity. It also recovers valuable metals and glass and produces bottom ash or slag that can also be utilised for road base.



Design and Layout of the Proposed Waste Gasification to Energy Plant.

Waste to Energy (WTE) technology is a proven waste management solution that is extensively used worldwide. There are hundreds of facilities around the world safely converting millions of tonnes of waste into electricity. Waste buried at landfill decomposes and releases methane, a very potent greenhouse gas that is over 25 times more destructive to the atmosphere than CO₂.



¹ *Statewide Waste and Resource Recovery Infrastructure Plan 2015-2044, Table 2.2, Existing Hubs of State Importance, p35*

Waste Gasification to Energy – How it Works

Most homes have three waste bins to separate their waste streams:



Green waste like lawn clippings.



Recyclables like plastics and paper.

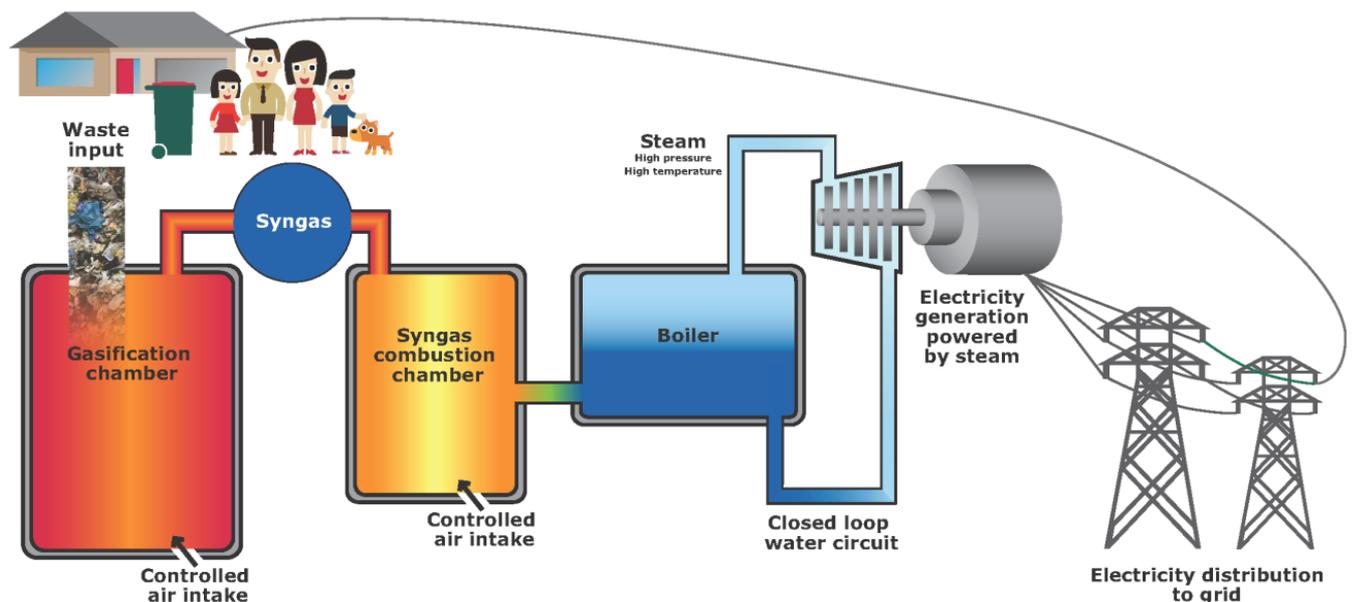


Residual waste. It is this residual bin that Councils will send to the WTE facility for recovery of energy, metals and glass.

During the waste gasification process there is a thermochemical transformation of the rubbish into a synthetic gas (syngas) that is used to heat water in the boiler and this drives a turbine to produce electricity. The energy is fed into the grid to power local industry and homes.

There is an extensive operation inside the WTE plant to clean up the gases to meet the strict air emissions and environmental conditions required under the EPA approvals process.

The WTE plant will operate on 24/7 basis generating over 10 MW of electricity that will be exported into the grid which is enough to power 16,000 homes. It will also employ 15~25 people.



For Further Information or to Contact us, visit www.recoveredenergy.com.au