

Maryvale Energy from Waste Project

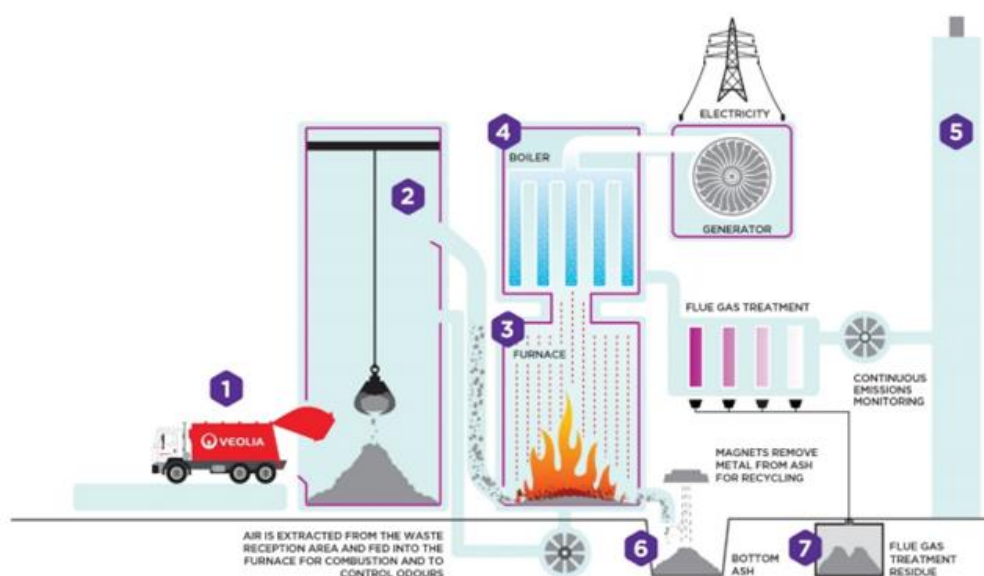
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Creating an innovative new industry, jobs and investment for the Latrobe Valley

The Maryvale Energy from Waste (EfW) project has teamed up with O.C.O Technology from the UK to bring their leading technology to Australia to establish an Accelerated Carbonation Technology (ACT) facility. This is in addition to a Bottom Ash processing facility that will be operated by Veolia. Both facilities will be co-located with the Maryvale EfW facility.

The EfW facility will use a thermal combustion process featuring Moving Grate technology and semi-dry flue gas treatment. Two ash residues will be produced as by-products:

- Bottom Ash from the Grate furnace (6)
- Flue Gas Treatment residues (FGTR) from the flue gas scrubbing and cleaning process (7)



Bottom Ash will be processed at the Bottom Ash facility to recover metals for recycling and produce a recycled aggregate suitable for road construction. O.C.O Technology has a process to use FGTR to create a new product - Manufactured Limestone, which is a high quality aggregate suitable for concrete and block manufacturing, as well as other construction uses.

These facilities will process the by-products generated during the production of energy and enable the re-use of recycled aggregates for construction applications. The EfW facility would be diverting approximately 99 per cent of its waste from landfill, to deliver a best practice sustainable solution for residual waste.

EPA Victoria has approved the design of the Bottom Ash facility and is assessing the application to re-use the processed ash as a recycled aggregate. Veolia will invest \$8 million to develop the Bottom Ash facility, which will support approximately 25 jobs during construction and once operational it's expected to support 10 direct ongoing jobs.

An application has been submitted to EPA Victoria for approval of the ACT facility for the production of Manufactured Limestone. An application will also soon be submitted seeking EPA Victoria's approval to re-use the Manufactured Limestone. Once approved, O.C.O Technology will invest approximately \$14 million to build the ACT facility, supporting an estimated 14 full time jobs once operational.

With superior energy efficiency and stringent emissions controls, these residual treatment processes and the Maryvale EfW facility will bring state-of-the-art alternative technology to Gippsland. It will provide Councils with a competitive waste management solution that avoids landfill and reduces emissions.



Examples of bottom ash and aggregates

Maryvale EfW consortium signs \$48.2 million MMI grant agreement

The EfW project consortium partners recently signed a \$48.2 million grant agreement with the Australian Government under the Manufacturing Collaboration Stream of the Modern Manufacturing Initiative (MMI).

The grant demonstrates both the Government's commitment to supporting innovative, alternative energy sources and the importance of EfW technology as a waste management solution to reduce non-recyclable waste going to landfill. It also accelerates the over \$600 million Maryvale EfW project towards completing the development phase and commencing construction.

Local and Social Procurement

The EfW consortium is committed to engaging with local and social enterprises for opportunities to participate in the project. Services and materials will be evaluated by price, experience, capability, and contribution to local and social benefit:

The consortium will encourage opportunities for:

- Local businesses and people
- Social enterprises
- Indigenous businesses
- Disability enterprises
- Female led businesses
- Local education providers

The project will support more than 500 Victorian jobs during the construction phase – with approximately 225 of these local jobs in the Gippsland region. Once the EfW facility is operational, it will support an estimated 450 Victorian jobs, including direct and flow-on – with around 130 of these being local jobs.

AUSNET Connection

The EfW facility recently received an offer to connect to the electricity grid from AUSNET and the Australian Energy Market Operator. It means the project has been accepted for a grid connection with a capacity of 70 megawatts electrical (MWe), which is sufficient for Stage 1 and Stage 2 of the project.

While the EfW facility will generate the majority of the energy requirements for the Maryvale Mill, during times when the Mill does not require energy, excess electricity can be exported back into the grid.

Due to the complexity of the grid connections (safety, reliability, and engineering considerations) the approval is lengthy, taking more than two years to achieve.

Next steps involve undertaking detailed design work. After the engineering design is completed for the steam turbine generator and high voltage switchgear, a further review will be undertaken prior to full and final approval.



Maryvale Mill's transition to 100 per cent brown packaging paper manufacturing

Opal's Maryvale Mill is an important supplier to the company's integrated packaging value chain, which is focused on the growing packaging market. The Maryvale EfW facility will play a key role in securing the Mill's future energy needs.

The Mill is currently transitioning its operations to the 100 per cent manufacture of brown packaging papers and has applied to EPA Victoria for a Development Licence, which is an important step in this transition. The changes to the Mill's operations will enable a range of benefits including environmental improvements to its water usage and emissions profile.



If you are interested in learning more, please contact us at:

The Creating Energy from Waste Information Centre, 1 Monash Way Morwell, open every Tuesday 10am – 3pm or email: creatingenergy@opalanz.com

Visit our website: <https://opalanz.com/future/energy-from-waste/>