

Maryvale Energy from Waste Project

March 2023

Securing Opal Australian Paper's energy future

The Maryvale Energy from Waste (EfW) project remains as important as ever in securing the Mill's energy future. The state-of-the-art facility is planned to be built in two stages to deliver the majority of the site's future energy requirements.

Despite the recent decision to stop manufacturing white paper, the Maryvale Mill is committed to continuing to manufacture and supply brown packaging paper into the future to meet the growing need for fibre packaging in Australia and New Zealand.

Stage One of the project will divert 325,000 tonnes of non-recyclable waste from landfill and reduce the Mill's demand for natural gas and electricity.

Stage One will reduce net greenhouse gas emissions in Victoria by an estimated 270,000 tonnes annually and seek to divert more than 99 per cent of residual waste from landfill. The EfW facility will provide Councils with a sustainable, stable and efficient waste management solution.

The consortium partners Veolia, Masdar Tribe Australia and Opal are committed to continuing to move the project forward and deliver both Stage One and Two of the facility. Stage Two would double the non-recyclable waste diverted from landfill to 650,000 tonnes in total.



An example of packaging manufactured with brown paper.

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/>

Recognising leadership in waste management

Showing great leadership and strategic thinking, the Maroondah City Council has signed Victoria's first residual waste contract for the Maryvale EfW facility.

Doing so demonstrates circular economy and sustainability principles in action. The Maryvale EfW consortium has recognised the partnership with Maroondah City Council and their best practice in residual non-recyclable waste management.



L to R: Steve Kozlowski, Maroondah City Council Chief Executive Officer, Mayor Cr Rob Steane and Jonathan Mayberry, General Manager Business Development, Veolia.

Getting construction underway in 2023

The consortium partners are working to finalise all aspects of the project so that building can commence by the end of this year.

Key to this is securing the supply of sufficient waste from local and regional Councils.

To-date, the EfW facility has been successful in securing commitments for around 175,000 tpa of the waste required. This means we are close to reaching the required minimum target of 220,000 tpa when our \$600M project is expected to move forward to construction.

We are currently active in two tender processes for Council waste supply contracts and securing either or both would enable us to reach our minimum waste target. We are working to finalise arrangements for the connection to the electricity grid, contracts with specialist service and equipment providers and bank financing. The fundamentals of the project are strong, and the partners remain confident of getting construction underway this year.



Community Waste to Landfill

A “hidden” GHG

In 2020 Victorian Councils collected a total of 2.37 million tonnes of household waste, comprising 0.57 million tonnes of recyclables, 0.57 million tonnes of organics and 1.22 million tonnes of residual waste. More than one million tonnes of Council residual waste ends up in landfill every year.¹

When buried organic waste rots and produces methane, which as a greenhouse gas, is officially stated to be 28 times more harmful than carbon dioxide (CO₂) (National Greenhouse Accounts Factors 2022).²

- The average Victorian Council and their residents produce 20,000 - 30,000 tonnes of residual waste annually.
- Nearly two million tonnes of CO₂ equivalent emissions are produced from landfill waste in Victoria each year.
- Landfills are mostly privately operated and/or are located in other LGAs and currently Councils do not report their emissions.
- Residents who generate the waste are often unaware of the consequences of landfilling their waste and how this contributes to climate change.

See how the Maryvale EfW facility will target 99 per cent landfill diversion:

<https://youtu.be/vWyrTzntUrc>

¹ [Waste and recycling in Victoria, Local government waste services report, Sustainability Victoria; November 2021](#)

² <https://www.dcceew.gov.au/sites/default/files/documents/national-greenhouse-accounts-factors-2022.pdf>

Landfill – no longer a viable option

Victoria has more than 80 operating landfills. Over the next decade, landfill availability in and around Melbourne will significantly reduce, which will have a major impact on pricing for waste disposal services. Veolia’s Hallam Road Landfill, the second largest landfill in Victoria, typically takes up to 500,000 tonnes per annum, is anticipated to have less than five years of capacity, subject to incoming tonnages and levels of waste compaction.

New landfills are blocked in some areas, partly due to increasing concerns around environmental impacts and growing sentiment for more progressive resource recovery technologies, to tackle our residual waste challenge. With population growth in Melbourne and increasing rates of consumer consumption, there is an increasing need to invest in innovative alternatives to landfill, such as advanced recycling and energy from waste.

The impending closure of landfills, combined with the development timeline for the design and build of a highly engineered EfW facility, means that there is an urgent need now for Councils to commit to innovative alternative solutions to landfill.

In the State Government’s ‘Waste to Energy Framework,’ November 2021, Recycling Victoria recognises a role for EfW investment in Victoria, supporting EfW facilities that meet best-practice environment protection requirements, reduce waste to landfill, support waste avoidance, reuse and recycling, and demonstrate social licence with affected communities.

The Maryvale EfW project ticks all the boxes and provides an exciting opportunity for visionary Councils to drive positive change through the procurement of residual waste processing contracts. It can offer Councils a truly circular economy solution for residual waste through high-efficiency energy production, net reduction in greenhouse gas emissions and 99 per cent landfill diversion.

