The Development and Expansion of Waste-to-Energy (WtE) Infrastructure in Victoria

Legislative Council Economy and Infrastructure Committee

Opal Submission – 1 April 2026

Summary of recommendations:
To support the development and expansion of WtE infrastructure in Victoria, Opal recommends that the Victorian Government leverage international learnings and best practice and specifically to:

- Provide financial support to enable the commercial feasibility of modern combustion WtE projects, including with landfill levy revenues and Victoria's sustainability fund.
- Ensure policy and regulatory settings support the timely delivery of WtE projects by aligning decision-making with evidence and acceptable risk, rather than requiring unanimous community support.
- Prioritise regulation of WtE based on residual waste integrity and environmental performance, rather than volume-based caps, to avoid unintended diversion of waste to landfill.

Introduction

Thank you for the opportunity to make a submission to the Economy and Infrastructure Committee regarding the Inquiry into Waste-to-Energy (WtE) Infrastructure in Victoria.

Opal is one of Australia and New Zealand's largest recycling, paper and packaging businesses and is a member of the NIPPON PAPER GROUP. We manufacture paper and cardboard packaging solutions and is committed to a circular economy approach. To learn more, go to: www.opalanz.com

Opal and its consortium partners are currently progressing a large-scale WtE project in Maryvale, Victoria, known as the Maryvale Energy from Waste (EfW) project. The proposed facility would be co-located to the Maryvale Paper Mill. This project is designed to process residual waste that cannot be feasibly recycled, to generate energy to power the Mill and reduce its reliance on gas and electricity. By doing so, the EfW facility is expected to divert approximately 710,000 tpa of residual waste from landfill. The project enjoys a number of best practice attributes including high energy efficiency, European compliant air emissions, efficient logistics, diversion of more than 99% of residual waste away from landfill, recovery of metals and minerals for recycling and re-use, and proactive and ongoing stakeholder engagement activity.

As a business operating across the wood fibre, recycling and manufacturing value chain, Opal is well placed to provide insight into the role of WtE within a modern circular economy.

Inquiry Terms of Reference and recommendations

Suitability of existing WtE infrastructure plans and policies

Best practice waste-to-energy (WtE) applications focus on the thermal processing of residual waste, whereby materials have already been separated for reuse, recycling or organics

recovery. Within the waste hierarchy, WtE sits above landfill and below recycling, and complements material recovery systems.

Victoria's policy settings broadly align with this hierarchy. However, current settings constrain commercial viability and do not consistently align regulatory mechanisms with desired environmental and economic outcomes.

Well-regulated WtE facilities can reduce landfill volumes, lower lifecycle greenhouse gas emissions, recover materials and generate dispatchable energy.

Recommendation 1: Policy settings should align regulation with residual waste processing, emissions performance and material recovery outcomes, rather than volume-based constraints.

Impact on residential communities and transport infrastructure

WtE can reduce long-term landfill impacts including GHG emissions, public amenity and ongoing post-closure management costs borne by communities through council rates. WtE also provides new energy and drives resource recovery opportunities to the local economy.

Transport impacts are often overstated. Waste is already collected and aggregated through existing systems and WtE typically replaces landfill as the endpoint. As population centres expand landfill capacity declines, transport costs will increase as travel distances increase.

Recommendation 2: Project assessments should consider net system impacts, recognising WtE's role in reducing the environmental and amenity impacts related to landfill.

Annual caps on waste used in thermal WtE processing

WtE policy should focus on whether the correct material is processed, rather than the total volume. Annual caps on waste risk unintended outcomes by limiting the processing of legitimate residual waste and diverting materials to landfill, undermining the waste hierarchy. Ensuring only residual waste is processed is more effectively achieved through clear definitions, feedstock controls and transparent monitoring.

Recommendation 3: Prioritise enforcement of the residual waste boundary, rather than caps that may increase landfill dependency.

Regulatory framework to establish and manage WtE facilities

Victoria's EPA framework provides strong oversight of emissions to air, land and water. However, it does not clearly differentiate between facilities that meet international best practice standards, like operating up time, and those that do not.

Recommendation 4: Embed international best practice performance benchmarks to provide clarity for proponents, and confidence for communities.

Impact of WtE: separation of recycling and organics

Victoria's source separation framework is aligned with best practice. WtE should operate strictly as a residual waste solution within this system. The existing Permitted Waste definition is a suitable specification ensuring compliance with the technically. Environmentally or economically practicable (TEEP) test.

Recommendation: Opal does not have a specific recommendation for this term of reference.

Emissions, waste and ash by-products

Modern WtE facilities operate under continuous emissions monitoring and achieve high diversion from landfill. Residual ash streams can support recovery of metals and reuse of mineral fractions, in line with the principles of the circular economy. Victoria currently lacks a clear framework to enable these materials to be reclassified for productive use.

Well–regulated jurisdictions consider waste residues as potential inputs into new products and materials consistent with recovery and recycling principles. They seek to re-classify approved residues out of the waste regulatory framework by applying "end of waste principles". The EU End-of-Waste (EoW) policy, anchored in the Waste Framework Directive, aims to boost the circular economy by establishing clear, high-safety criteria for converting waste into safe, secondary raw materials. It removes bureaucratic barriers (red tape) for recycled materials, ensuring they enjoy the same internal market freedoms as virgin materials, ensuring non-toxicity and environmental protection

Recommendation 5: Develop Victoria's end-of-waste framework to enable waste materials that are no longer a risk to be reclassified as a product in their own right to encourage the commercial applications and avoid any excessive and unnecessary burden of red tape regulations and costs that undermine product value.

Cost-benefit of WtE to consumers and businesses

WtE is currently not commercially viable at scale in Victoria, despite delivering higher-order environmental outcomes than landfill. This reflects a structural imbalance where landfill remains economically advantaged due to lower capital requirements and established pricing. Without intervention, the economics will continue to favour landfill and constrain WtE.

Recommendation 6: Support WtE projects through targeted financial and regulatory mechanisms, including the use of landfill levy revenues from Victoria's Sustainability Fund, to position WtE just below the cost of landfilling.

Alternative waste management approaches and emerging technologies

WtE complements, rather than replaces, recycling systems. While emerging technologies may improve outcomes, they are not yet proven at scale. Delaying investment in proven WtE infrastructure has and will extend reliance on landfill.

Recommendation 7: Proceed with proven WtE technologies while remaining open to future innovation.

Adequacy of community consultation

Victoria's planning and EPA processes provide established consultation pathways. These enable stakeholders to raise concerns and ensure risks are assessed and managed. It should be acknowledged that major infrastructure projects are unlikely to achieve full, unanimous support. Rather the focus should be on meaningful community consultation and appropriate mitigation to those risks to allow the project to proceed with a low and acceptable risk profile in order to deliver an essential service for the greater good of communities.

Recommendation 8: Decisions should be based on evidence and acceptable risk, supported by robust consultation.

We would welcome the opportunity to discuss our recommendations in greater detail at a public hearing. As Victoria's most advanced EfW project, we would welcome members of the Committee to visit our Making Energy from Waste Information Centre in Morwell to learn more about this innovative project and the economic and environmental benefits.

Yours sincerely

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