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PARLIAMENTARY INQUIRY IN TO WASTE TO ENERGY

I write to you on behalf of South East Metropolitan Advanced Waste Processing Pty. Ltd. (SEMAWP) to provide a submission to the Parliament's Waste to Energy Inquiry.

BACKGROUND

SEMAWP is a company limited by shares. Its shareholders are nine Local Government Authorities:

Bayside City Council
Cardinia Shire Council
Casey City Council
Frankston City Council
Greater Dandenong Council
Kingston City Council
Knox City Council
Whitehorse City Council
Yarra Ranges Shire Council

The Councils established the company to undertake a collaborative procurement, facilitated by the Victorian State Government, for the provision of alternatives to landfill for the disposal of residual (red bin) waste. Key drivers for these Councils are:

- Diminishing landfill capacity in Melbourne's south eastern region in the next decade (in particular Hampton Park landfill)
- Significant population growth projections in Melbourne's south east
- Rising Waste Levy costs affecting the financial cost of landfill, and
- Landfill's position at the bottom of the waste hierarchy.

SEMAWP Councils preferred a Waste to Energy solution as it provides:

- Diversion of a minimum of 80% of waste to landfill
- Complements efforts to reduce, re-use and recycle waste and support a circular economy
- Implements proved technologies used safely around the world, and
- Recovery of material and energy from waste.

PROCUREMENT PROCESS

Following a six year procurement process, SEMAWP entered into binding contracts with a consortium comprising Veolia, Masdar Tribe and Opal Energy to provide its residual waste stream to underpin the development of a Waste to Energy facility at Maryvale in Gippsland.



This proposed facility already has the required permits and has achieved social licence with the local community and has the full support of the “host” Council, Latrobe City.

The procurement process underpinning the final contractual agreements was a long and complex exercise and subject to strict probity restrictions. It commenced in 2018, and was only completed towards the end of 2024.

It was an exhaustive process, commencing with the development of two Business Cases that both clearly demonstrated the benefits of pursuing a regional approach to Advanced Waste Processing rather than continuing with Business as usual (disposal of waste to landfill). This was followed by a market sounding exercise in 2020 to assist in assessing available technologies and alternatives, leading to an Expression of Interest process in 2021. From this EOI process three providers were shortlisted for a closed tender process, with the eventual preferred contractor being chosen following extensive clarifications and negotiations. In June 2024 the SEMAWP Board considered the final Waste Supply Agreement (WSA) and made a recommendation to proceed to participating Councils. Following each Council supporting and adopting this recommendation, the WSA was duly executed.

The procurement was funded and managed by the Victorian State Government, in conjunction with a team of advisers covering probity, legal, commercial and technical expertise. All advisers were required to sign off on both the probity and legality of the process and the agreements’ benefits to the aims of Councils.

Key advisers were:

Legal: Norton Rose Fulbright
Commercial: PWC / Scyne Advisory
Technical: Arcadis
Probity: Landells

From a participating Council perspective, a rigorous governance structure was put in place, with each Council having an Executive representative on the Board of the Special Purpose Vehicle (SEMAWP Pty. Ltd.) established to manage the project, while the EOI and Tender evaluation were completed by a panel comprising technical expertise from each Council.

I also note that early in the procurement the State Government gave SEMAWP an exemption from the then Waste to Energy cap of 1 million tonnes. I note this cap has been increased more recently.

I also note that the finalisation of this procurement has been particularly timely in light of the recent advice from the operators of the Hallam Road landfill (the last large landfill in the south east of Melbourne) that it will no longer accept municipal waste after 30 June 2027.

COMMITTEE TERMS OF REFERENCE

With regards to other parts of your Committee’s Terms of Reference, I provide the following as information supportive of the use of Waste to Energy as an appropriate method of residual waste disposal:

- **Policy and regulation**

Victorian Recycling Infrastructure Plan (VRIP) 2024



South East Metropolitan
Advanced Waste Processing

The 2024 VRIP confirms that Waste to Energy presents an opportunity to divert waste from landfill to 'higher order' waste management solutions through energy recovery.

It identifies the need to address capacity and capability challenges for residual waste (red bin waste) due to the extended timelines involved in developing new infrastructure. It also confirms the medium term strategic direction for residual waste as supporting improved system resilience, including through increased use of Waste to Energy facilities.

The VRIP confirms the ability of Waste to Energy to reduce the state's reliance on landfills, whilst supporting the achievement of Government's landfill diversion and decarbonisation targets and objectives.

It also identifies the potential for synergies in co-locating industry with energy infrastructure, as is the case with the proposed Maryvale EfW facility at the Opal paper plant, to support the energy transition from fossil fuels.

Victorian Waste to Energy Framework and Waste to Energy Scheme

The Victorian Waste to Energy Scheme recognises the key role of Waste to Energy in diverting waste from landfill. The Scheme implements the Victorian Waste to Energy Framework and places a cap on the amount of waste that can be thermally treated to make energy, initially set at 1 million tonnes of waste per annum.

Victoria's Waste to Energy Scheme is established by the *Circular Economy (Waste Reduction and Recycling) Act 2021* and the Circular Economy (Waste Reduction and Recycling) (Waste to Energy Scheme) Regulations.

The Victorian Department of Treasury and Finance 2024 Economic Growth Statement ([Economic Growth Statement – Victoria: Open for Business](#)), confirmed the increase in the cap from the initial 1 million to 2 million tonnes per annum, and the potential for an additional increase to 2.5 million tonnes per annum. This additional increase has subsequently been approved, following a revised regulatory impact statement issued in March 2025 (see: <https://engage.vic.gov.au/download/document/39056> and <https://engage.vic.gov.au/download/document/39601>).

These developments reflect the Victoria Government's significant current and ongoing support for the development and use of Waste to Energy facilities.

Federal Waste and Circular Economy Strategies

Overall, the Federal Government is actively working to integrate waste to energy solutions into its waste and broader environmental and economic strategies.

National Waste Policy: Less Waste, More Resources (2018) and National Waste Policy Action Plan (2024)

The National Waste Policy provides a framework for waste and resource recovery in Australia. It supports Waste to Energy as part of its broader strategy to reduce waste and maximize resource use. The policy includes targets to recover 80% of all resources from waste streams and halve the amount of organic waste sent to landfill by 2030.

The National Waste Policy and supporting National Waste Policy Action Plan identify Waste to Energy solutions as part of the waste management hierarchy, which promotes efficient resource use by outlining the preferred order for material management and treatment options.



Strategy 7 - *Increasing Industry Capacity*- within the National Waste Policy document, confirms the need to identify and address opportunities for improved energy recovery, to deliver ongoing improvements in diversion from landfill and use of the waste hierarchy.

The 2024 National Waste Policy Action Plan emphasises the importance of waste-to-energy solutions as part of Australia's transition to a circular economy. It confirms the relevance of the waste management hierarchy to support decision making and that energy recovery from waste is preferred to landfill disposal.

Federal Funding for Maryvale Waste to Energy Facility

The Maryvale Energy from Waste (EfW) project, the facility contracted to SEMAWP Councils, received a \$48.2 million grant through the Australian Government’s Modern Manufacturing Initiative (MMI) in 2022 to progress the facility. This reflects the significant Federal Government support for the Maryvale facility. This funding is in addition to a number of Victorian Government grant funding allocations, including the initial feasibility studies which confirmed the rationale and feasibility for the facility’s development.

- **Recent experience with international waste to energy projects**

United Kingdom

The UK waste-to-energy (We) sector continued to expand in 2024, consistent with trends over the past decade. Total permitted capacity at operational plants rose by 4.6 per cent in 2024. A total of 16.82Mt of waste was treated in UK WtE facilities, an increase of 4.3% compared to 2023 (Source: Tolvik Consulting, UK Energy from Waste Statistics – 2024).

The increases in both permitted capacity and the amount of wastes treated in UK WtE facilities, is shown in the graph and table below.

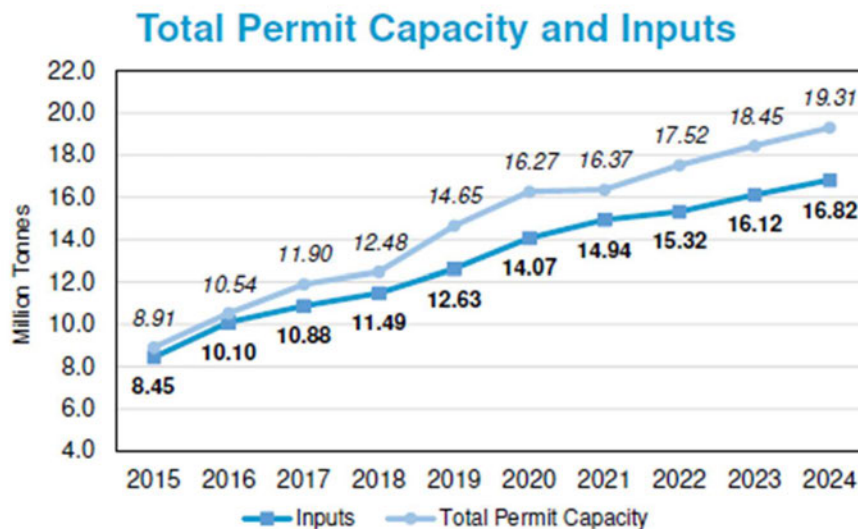


Figure 1: Total UK Permitted Capacity and WtE Inputs in 2015-2024 (Source: APR)



Mtpa	Permit Capacity		Total Inputs		
	Fully Operational	Total (incl. in construction)	Tonnage Inputs	Operational vs Permitted Cap.	Annual Increase
2020	16.27	20.37	14.07	86.3%	11.4%
2021	16.37	21.67	14.94	89.0%	6.2%
2022	17.52	23.24	15.32	88.0%	2.6%
2023	18.45	23.93	16.12	87.9%	5.2%
2024	19.31	24.16	16.82	88.6%	4.3%

Figure 2: Total Permit Capacity (as at December 2024) and WtE Inputs (Source: Tolvik Consulting)

Europe

The European Waste-to-Energy market is mature, and projected to grow, driven by EU and individual state policy and increased waste generation. By country, Germany accounted for 23% of the European waste-to-energy market in 2024 with thermal processes leading with a 60% revenue share in 2024.

Summary reference data on the extent and coverage of European facilities is provided on: <https://www.cewep.eu/interactive-map/> and [Waste-to-Energy in Europe in 2018](#) (2018 data). Additional data sources can be provided on request.

The following are notable examples of European WtE facilities:

- **Denmark**

Amager Bakke is located in the outskirts of Copenhagen. It was constructed to replace an older facility and began operations in 2017. The plant processes around 400,000 tons of waste annually, providing electricity and district heating for approximately 150,000 homes in the city. In addition to its primary function as a waste-to-energy facility, Amager Bakke has been designed as a community hub. The roof features a ski slope, hiking trails, and a climbing wall, making it a unique recreational space for residents.

Website link: [Amager Bakke - ARC](#)

- **Austria**

Spittelau Waste to Energy facility was opened in Vienna 1992 with a capacity of 250,000 tonnes of waste per annum. It generates energy for approximately 60,000 households and provides district heating to over 50,000 households and public buildings in Vienna. The incinerator is equipped with technologies which minimise emissions, ensuring it meets EU environmental standards.

Website link: [Spittelau waste incineration plant | Wien Energie Positionen](#)

- **France**

The Sycotom Ivry Paris XIII waste to energy facility in Paris was modernised in 2005, and processes 350,000 tonnes of waste per year. The facility recovers waste either as energy, in the form of



electricity or heat, or as materials, mainly metals and clinker. The generated electricity is injected into the grid network, and steam is injected into the Parisian district heating system (CPCU). Clinker is transported by river, and is treated and reused in road construction. Metal by-products are reused in the metalworking industry. The plant has ISO 14001 certification for its environmental management system.

Website link: [Waste-to-energy plant Syctom Ivry, Paris 13, Ivry-sur-Seine, Paris | Glasfabrik Lamberts](#)

- **Middle East**

Waste-to-energy (WTE) projects are less mature but are rapidly gaining momentum in the Middle East region. The following are two notable examples:

- The Warsan Waste-to-Energy (WtE) plant in Dubai began full commercial operations began in March 2024 and is one of the largest and most advanced waste-to-energy facilities in the world. It processes approximately 1.9 million tonnes of municipal waste annually and produces around 200 MW of renewable electricity.
- Abu Dhabi's proposed Al Bihouth plant is expected to process 900,000 tonnes of waste per annum into energy. The plant is a key initiative in Abu Dhabi's strategy to divert 80% of waste from landfills by 2030. It is expected to reduce overall carbon emissions by 1.1 million tonnes per year.

SEMAWP's procurement and contract is a complex project and groundbreaking for the State of Victoria. It is also I believe the largest local government joint procurement project in our country's history and one that provides an example for how LGAs can work cooperatively for improved economic, social and environmental outcomes.

I trust the above is sufficient for your Committee's needs, however we would welcome the opportunity to discuss our submission further.

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Yours sincerely,

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Mick Cummins
Chair – SEMAWP Pty. Ltd.



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