



Legislative Council Economy and Infrastructure Committee

## Inquiry into the development and expansion of waste-to-energy (WtE) infrastructure in Victoria

---

Submission from Friends of Latrobe Water

3 April 2026

Friends of Latrobe Water Inc.  
[REDACTED]

[REDACTED]  
W: [www.flowlatrobe.org](http://www.flowlatrobe.org)

Face Book: @FLoWLatrobe  
Twitter: @FLOWLatrobe

## Contents

FEEDBACK.....	2
(1) the suitability of existing WtE infrastructure plans and policies, including –.....	2
(a) the impact of WtE projects on residential communities and transport infrastructure; .....	3
(c) the regulatory framework to establish and manage WtE facilities;.....	3
Whole of Government Regulatory Reform .....	3
General Environmental Duty.....	4
Fit for purpose.....	4
Risk profiles .....	4
As Far as Reasonably Practicable .....	5
(2) the impact of WtE, including from –.....	6
(a) separating recycling and organic material from WtE streams;.....	6
(b) nature and management of emissions, waste and ash byproducts;.....	6
(4) the adequacy of community consultation;.....	7
Terminology consistency and clarity .....	7
AFARP vs ALARP .....	8
(5) any other related matters .....	8
Summary .....	8
References.....	9

## FEEDBACK

### (1) the suitability of existing WtE infrastructure plans and policies, including –

What is best practice WtE technology and waste identification feedstock?

FLoW contends any auditing of existing plans and policies would reveal four key, consistent flaws:

- a failure to undertake a risk-based assessment of compliance risk;
- inappropriate compliance plans not underpinned by robust risk assessments;
- a failure to undertake appropriate monitoring of the regulated industry and to use its regulatory powers effectively to address instances of noncompliance; and,
- an absence of robust performance measures or evaluation frameworks.

Regardless of best practice waste incinerator technology, pollutants are still produced and that is the clincher - what other technology is acceptable which creates potentially more hazardous waste or emissions (for those impacted communities) than contained in the feedstock.

### (a) the impact of WtE projects on residential communities and transport infrastructure;

- Design determines operational risk but is subject to change.
- Planning, on behalf of the public, determines risks we can be subjected to, judged by a select few in the absence of clear criteria and all the inconvenient facts.
- Regulators determine compliance and enforcement yet are significantly under resourced to actually monitor compliance.

In terms of emissions and truck traffic, what distance is acceptable to transport waste from a collection point that needs to be created for various stakeholders to dump their waste in the first place then transport to the receiving waste incinerator in regional areas. What negative processes does each stage create and is it viable.

It is the regional communities that suffer the public health and environmental risk when new thermal waste to energy projects is co-located near transport and industrial hubs. Yet the planning processes for Environmental Effects Statement (if referred) do not consider the cumulative pollutant loading to the regional airshed.

### (c) the regulatory framework to establish and manage WtE facilities;

## Whole of Government Regulatory Reform

A one size fits all approach will not work and cherry-picking parts of a model to suit has potential to increase risk or fail to effectively determine risk. What is the setting – urban, peri-urban, semi-rural, rural, topography, nearby waterways. This includes the type of sensitive receptors. Aside from transport routes, noise and odour, WtE should also include effects of airshed emissions to the breathable airspace and waterway discharges into waterways which provide drinking water and irrigation to grow produce for human consumption, raising livestock from grazing and aquatic values.

Without a nationally consistent principles base, WtE policy using SoK, national EPA standards and best practice technology including separation of materials would see states applying different regulatory frameworks, essentially for the same use across Australia creating significant gaps in whether a project is assessed as appropriate or not.

Ultimately, economic productivity and growth is the goal yet no adequate holistic and coordinated approach to regulatory reform exists which is exactly the point this Inquiry and ToR are examining.

- The Committee need to analyse the regulatory shortfalls in planning as the primary mechanism in undermining social, economic and environmental risks. This includes lack of harmonisation across policy directives with fast tracking of state significant projects having the potential for politically subjective decision-making rather than purely objective, evidence-based data.

## General Environmental Duty

Under the Environment Protection Act 2017 (EP Act), the GED applies to the person/manager generating the waste but is interpreted differently with each shire, around different risks, different scales and different landscapes but importantly, noting the GED framework is totally absent from the planning decision and approval process.

The GED framework already provides the risk-assessment methodology that is absent from planning and water but then requires EPA to be reactive to the risk that was not effectively assessed in the initial stages of planning.

The risk hierarchy, the precautionary principle, and the state of knowledge obligation describe what competent environmental risk assessment demands. The Environment Reference Standard provides the quantitative benchmarks. What is missing is the bridge between this framework and the decisions that create environmental risk.

- The Committee needs to assess whether the regulatory architecture of EPA's GED to manage WtE is functioning as Parliament intended across Victoria's regulatory landscape. Where decisions made under complementary statutes systematically create environmental risk without reference to the Act's risk framework warrants priority attention.

## Fit for purpose

State of Knowledge (SoK) is the amount of updated scientifically and credible research/information that underpins the foundational regulatory framework for an industry. Currently there is no one cross-jurisdictional harmonised framework fit-for-purpose to manage WtE and the dynamic processes of change.

Departments/regulators/agencies are each applying regulatory adaptations of policy directives, interpretations and adjustment of law and controls to keep pace with new technologies, market changes, and management of risks.

## Risk profiles

- Who provides oversight of the risk? Who has liability for risk occurring if approval was granted ignoring State of Knowledge?
- Need improved assessment model of risk as tolerable is subjective with risk related to WtE plants across the different phases of construction, operation and decommissioning.

- Would a WtE plant be classified as a major hazards facility – that would depend on feedstock which would create grey areas and then industry loopholes which is why risk frameworks need to be scientifically rigorous in planning using updated credible state of knowledge not cherry-picked consultancy reports.
- Risk cannot be effectively quantified in the absence of a regularly framework specific to WtE. To effectively rank risk via a scoring system (risk matrix) there would need to be a regulatory framework covering multiple departments, etc., planning, environment, water, industry, local government. Currently, there only appears to be cherry picked guidelines from multiple industry standards which, in the process, mongrels the intent of regulation, responsible compliance and enforcement.
- Risk terminology and risk matrices are meaningless if risk is not clearly articulated in an inclusive framework which considers cumulative impacts.
- Updated state of knowledge is critical to sustainable planning.
- There exist too many conflicting guidelines/standards under different departmental jurisdictional objectives and policy directives that are not harmonised, updated or fit for purpose.
- If planning does not cross-reference State of Knowledge, the GED and is in conflict with other co-regulatory practices, the precautionary principle should be applied.
- State significant, fast tracking WtE is contrary to good outcomes and sets public health and the environment up for negative consequences.

### As Far as Reasonably Practicable

- ALARP and AFARP cannot be applied across the entirety of a project area as a general risk discription as domains on a project site must be separately identified for risk rating with design, construction, operation and decommissioning.
- In the context of tolerability, risk is based on how much the public is prepared to pay for that level of risk (impacts to health and environment) that would be created (negative health, environment, transport impacts).
- Currently, transparency around risk is not transparent
- The risk hierarchy, precautionary principle and state of knowledge obligations underpin what competent environmental risk assessment demands. However, economic consideration should not override sustainability and risk management rather improved waste management practices should be targeted.
- Need to qualify and quantify what tolerable risk is and to who and at what cost especially if risk is only acknowledged for risks designated medium or high in the risk assessment. Applying AFARP to then minimise individual risks based on cost is a legal get-out clause for waste operators.
- Worst is the exclusion of different phases in the approval stage to determine overall cumulative impacts through to decommission increasing risks to the public and environment. ALARP does not consider this collectively.

## (2) the impact of WtE, including from –

### (a) separating recycling and organic material from WtE streams;

Separation is definitely preferred but still does not account for waste that would provide the totality of hazardous waste via the flue system, waste residue and byproducts. Additionally, relying on organic material has implications for the inappropriate disposal of biosolids that contains PFAS.

Understanding all types of feedstock and analysis for contained negative chemical release and the environmental hazards that each produces is much researched in international studies but with knowledge gaps for monitoring. With Europe managing incinerators for decades challenges still exist to reduce dioxins, PFAS and heavy metals.

### (b) nature and management of emissions, waste and ash byproducts;

While policy-makers see WtE as a solution to a volume problem, it does create problems in other sectors that require the precautionary principle to be applied when Australia is so behind in their state of knowledge, mandated best practice and regulatory framework. Most problematic is how poorly resourced EPA are to even provide the monitoring infrastructure for compliance and risk exposure.

The recycling hierarchy based on a circular economy is flawed as the energy created is from dirty feedstock, some toxic so recovery cannot be classified as recycling which is a manipulation of terms to make burning rubbish appear more appealing/acceptable. Fact is, WtE generates new emissions, hazardous waste residues and waste byproducts that creates a new stream of problematic waste to join the perpetual cycle.

The burning of plastics which is energy intensive is, in itself, just chemical recycling, again creating a hazardous waste, toxic air pollution that EPA do not even have the resources to manage to ensure compliance. It is not in dispute WtE emit some of the most dangerous pollution because of what the non-recyclable rubbish is, but approving WtE plants is just another pathway to add more GHG emissions, Persistent Organic Pollutants (POPs) and PFAS into the environment.

PFAS use in domestic and industrial products is pervasive with unknown quantities in waste from PFAS loaded consumer products, pharmaceuticals, food contact materials, disposable nappies, menstrual products to name a few through to construction materials, such as composite wood building materials, floor coverings, and insulation materials. Worst if biosolids are used as organic feedstock. Health impacts research is consolidating internationally but Australia is still to re-evaluate their overly conflicting PFAS health messaging so how would Victoria assess PFAS risk from WtE.

Thermal destruction of PFAS for PFOA and PFOS is around 1200°C - 1500°C yet proposed WtE plants burn hot around 800°C which may not be enough to even degrade other PFAS without causing those molecules to become precursor chemicals into shorter-chain, highly mobile PFAS requiring high temperatures (>800°C) to ensure full destruction.

The fate of PFAS goes somewhere if not destroyed with pathways via air emission dispersed to the atmosphere adding more pollutant loading. Ingestion is the dominant exposure pathway for the public which also includes contaminating nearby local food production. Alternatively, flue gas treatment can capture some PFASs and transfer them to WtE residues. In that case, WtE residues negatively continue the cycling without ever being destroyed. Therefore, WtE becomes a new source pathway to disperse PFAS unchecked rather than contain it.

- How can risk management frameworks assess PFAS in the waste cycle to prevent increased air emissions depositing to land and water and the breathable space. EPA Victoria currently do not have the resources to even manage industrial pollution and toxic emissions expose to the regional area of Latrobe Valley in Gippsland.

#### (4) the adequacy of community consultation;

Informed public engage with WtE proposals along with those that will neighbour a proposed WtE plant. On the whole, the general public are uninformed and we find ignorant to what is waste and how best to dispose of different types of waste. As an example, too many people throw their batteries including lithium-ion batteries into the household rubbish which is why the informed public are concerned around heavy metals and fire risks around transport routes and unloading.

FLoW finds most information is sector driven that understate risks and impacts in the absence of all the facts.

#### Terminology consistency and clarity

- It is either waste to energy (WtE) or energy from waste (EfW), cannot be both from community perspective – are they the same or essentially different?
- Why use what appears to be a NSW term in preference to the term WtE which already exists in Victoria. Is it a deliberate exercise to distance a project name EfW due to the existing negative information worldwide about WtE and confuse the public?
- This inquiry is based on WtE but OPAL's project approval in Gippsland was on EfW with Recycle Victoria and the EPA regulator<sup>1</sup> clearly accepting this terminology.

---

<sup>1</sup> <https://engage.vic.gov.au/project/epa-development-licences/page/australian-paper-wa>

## Australian Paper works approval application

Australian Paper has applied for approval for an energy-from-waste facility in Maryvale in the Latrobe Valley.

Paper Australia P/L (Australian Paper) has received Victorian state and federal funding to perform a feasibility study for an energy-from-waste plant at its paper mill in Maryvale in the Latrobe Valley.

On 25 May 2018, the business submitted a final works approval application for the plant to EPA, as per section 19B(c) of the *Environment Protection Act 1970*.

The question this Committee needs to answer –

- is WtE and EfW essentially the same? If not, is EfW excluded from scrutiny with this inquiry or part of it?

### AFARP vs ALARP

- The Committee needs to determine the difference between Victoria's use of the terms **AFARP** (As Far as Reasonably Practicable) and **ALARP** (As Low as Reasonably Practicable) when considering weighing up risk identification and assessment of public safety and health for risk of multiple or single fatality. Which is safer?

It appears the focus of eliminating risks has the get out clause of cost-effectiveness based on the trouble, time and money needed to control the risk even if a technically feasible solution exists. This is not supporting best practice technology and operation.

*EPA Publication 1856 defines "reasonably practicable" as a proportionate, objective test for managing environmental risks, requiring duty holders to implement controls based on risk level, likelihood of harm, and cost-effectiveness. It guides businesses to eliminate or reduce risks to human health and the environment by prioritizing effective measures.<sup>2</sup>*

## (5) any other related matters

The use of AI for planning and SoK could be detrimental to decision-making if the input data is flawed, lacking in scientific rigor, legacy issues are ignored, cumulative airshed pollutant loading is unknown. Adapting decision-making frameworks using digital technology can then be counter productive and create unintended risks.

Through our work engaging with DEECA, FLoW have become disillusioned by the deliberate absence of critical facts in government engaged consultant reports to achieve a predicted outcome with no accountability to the repercussions.

### Summary

In summary, WtE plants are not solving a waste issue in so much as creating new problems around chemical loading to the public and environment. Only total WtE consumption of all rubbish could make a business model viable but that would then exclude best practice and that is unacceptable.

---

<sup>2</sup> <https://www.epa.vic.gov.au/sites/default/files/epa/publications/1856-english.pdf>

## References

**Emission of Per- and Polyfluoroalkyl Substances from a Waste-to-Energy Plant—  
Occurrence in Ashes, Treated Process Water, and First Observation in Flue Gas**

2023 <https://pmc.ncbi.nlm.nih.gov/articles/PMC10339719/>

**Distribution of Per- and Polyfluoroalkyl Substances (PFASs) in a Waste-to-Energy  
Plant—Tracking PFASs in Internal Residual Streams**

2024 <https://pubs.acs.org/doi/10.1021/acs.est.3c10221>

**The health impacts of waste incineration: a systematic review**

2020 <https://www.sciencedirect.com/science/article/pii/S132602002300732X>