Submission – *NSW PARLIAMENTARY SELECT COMMITTEE INQUIRY ON PROPOSED ENERGY FROM WASTE FACILITIES*

31 October 2025

Prepared by Northern Sydney Regional Organisation of Councils (NSROC)

Member Councils: Hornsby Council

Hunter's Hill Council

Ku-ring-gai Council

Lane Cove Council

Mosman Council

North Sydney Council

City of Ryde

Willoughby City Council

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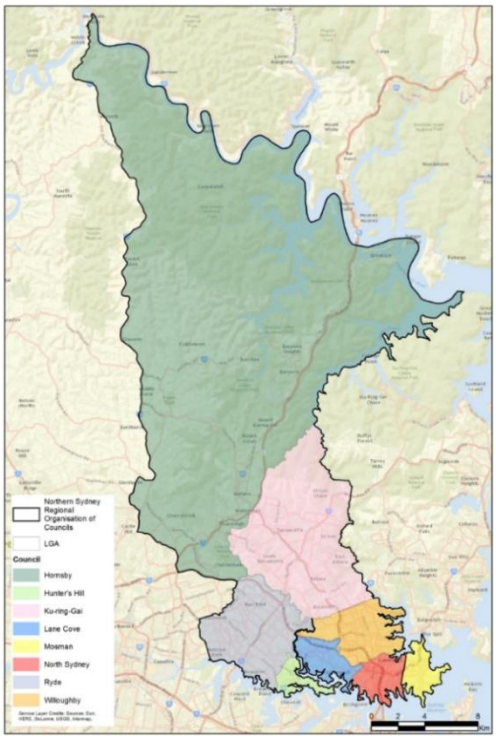
Context

The Northern Sydney Regional Organisation of Councils (NSROC) is pleased to provide this submission to the NSW Parliament Legislative Council Select Committee Inquiry into Proposed Energy from Waste facilities (the Inquiry), while noting individual councils may also make independent submissions. This submission has been prepared with the input and support of our member councils but should be considered draft until formal NSROC Board endorsement.

NSROC is a voluntary association of eight local government authorities in Sydney. NSROC assists member councils collaborate on key issues and activities, develops regional solutions and generates social, environmental and economic benefits – for local communities and the region overall.

NSROC member councils service an area of 639km^2 with a population of 660,667, extending from the Hawkesbury River in the north to Sydney Harbour in the south, west to Meadowbank on the Parramatta River, as shown in Map 1.



Map 1: Northern Sydney Regional Organisation of Councils area

The eight NSROC member councils are:

- Hornsby Shire Council
- Hunter's Hill Council
- Ku-ring-gai Council
- Lane Cove Council
- North Sydney Council
- Mosman Council
- City of Ryde
- Willoughby City Council

Our member councils employ approximately 2,700 people across the region, delivering a wide range of services, including operational waste management for public and private domains. Collectively the eight councils have a waste budget of over $90 million per year and manage around 14% of metropolitan Sydney's municipal waste.[1]

Councils operate in complex resource-constrained environments and are challenged by mounting infrastructure and services costs. Growing populations and consumption, greater housing density, more frequent extreme weather events, impacts of climate change, increasing cyber security needs and cost shifting by other levels of government - are some of the challenges. The needs and priorities of local communities often outpace councils' capacity to generate income and meet expectations.

NSROC understand the inquiry was primarily initiated due to community concerns about the proposed EfW facilities planned for Tarago and Parkes in Regional NSW. The inquiry aims to assess whether these proposals are safe, fair and in line with best global practice.

[1] Based on 2021/22 figures

Introduction

NSROC considers that EfW needs to be part of the suite of waste management options adopted in NSW. The existing energy from waste policy framework ensures that higher order uses take priority and reduces the likelihood that EfW will be the first-choice disposal mechanism. It appears unlikely that NSW will meet its 80% diversion target and have sufficient residual waste disposal capacity by 2030 without incorporating EfW. However, given the long lead time to deliver such facilities, the NSW Government needs to commit to facilitating the development and operation of at least one EfW facility by 2030 in a suitable location based on viable transport arrangements. Sydney represents a major source of potential waste and priority should be given to a location able to cater efficiently and effectively for that waste.

Goulburn Mulwaree remains a suitable site for an EFW plant in association with the Woodlawn Bioreactor at Tarago. The location of the Parkes Special Activation Precinct (SAP) at the intersection of north-South and east-west rail lines makes it a logical place for an EFW facility. NSROC also considers that the support that Regional Development NSW has provided for the Parkes SAP in assisting potential proponents is a good model for how such potentially unpopular but critical infrastructure should be planned and developed.

Even with EfW facilities and organics processing facilities in place there will still be a need for landfills, but the NSW Government needs to clearly communicate to the NSW community that best practice EfW is a critical component of waste management and to spell out the advantages it offers for both energy production and the local economy. Part of that education needs to address the reasonable concerns in the community about potential emissions and cost impacts.

Strategic Context Needed

NSROC recognises the inquiry is primarily focussed on the two proposed EfW facilities at Tarago and Pakes. However, the establishment of any EfW facilities in NSW must be done within a well thought out integrated waste management infrastructure plan. NSROC recently made a submission to the NSW EPA on their Draft NSW Waste and Circular Infrastructure Plan Chapter 1. In this submission we raised our concerns that the Plan is without strategic context and lacks clarity on how it fits within a broader, long-term infrastructure framework, or how it contributes towards net zero and circular economy. Waste management in accordance with the waste hierarchy, creates opportunities for resource usage circularity. That could include "*Circular Infrastructure*" of the Plan's title, however apart from facilitating EfW, the Plan does not for provide for any "Circular Infrastructure".

Energy from Waste may assist in future waste management, within a balanced and integrated waste management system, and is better than landfilling as a last resort. However, there are concerns that EfW, without clear alignment to circular economy principles, emissions reduction targets, and strong support for recycling and waste avoidance - risks undermining efforts at the upper tiers of the waste hierarchy. Without adequate safeguards, EfW could displace more sustainable outcomes and compromise council-led zero-waste initiatives. To ensure EfW contributes positively, the Plan must provide clear policy direction, robust criteria, and assurance that EfW is positioned appropriately within the broader waste and resource recovery strategy.

Why has NSROC made this submission?

This Parliamentary Inquiry is of direct relevance to NSROC members for the following key reasons:

- Both EfW projects may in the future be potential options for residual waste generated from the NSROC region. Therefore, ensuring the EfW facilities are designed, built and operated in accordance with global best practice is in the best interest of NSROC members.
- Our member councils have significant concerns at the potentially increased costs likely to be faced by residents whose waste is transported to either of these facilities. NSROC councils may face community pushback over rising waste charges
- If residual waste were to be sent to these facilities from the NSROC region, this would potentially impact on reported Scope 3 greenhouse gas emissions for member Councils associated with both the transport and processing of waste at the EfW, influencing their ability to meet NSW Net Zero targets.
- We understand the Inquiry will also consider alternative solutions to reduce, and manage residual waste produced by Greater Sydney, and this is an opportunity for NSROC to highlight potential solutions being considered in the region and how EfW can fit within an integrated waste management framework.

NSROC considers that EfW has a key role to play within an integrated waste management framework in NSW, however, strongly believes that any facilities developed in the state need to be designed, built and operated to meet or exceed international best practice. Our comments against each of the ToR below, are made within this context.

TERMS OF REFERENCE

(a) the performance of the technologies proposed for the Tarago and Parkes Energy Recovery Facilities as compared to leading thermal technologies employed in "state of the art" facilities internationally, noting such technologies as proposed are not employed anywhere else on the Eastern seaboard

Concern: Councils which host the facility along with those that send waste to it, rely on confidence that facilities at least match globally best available technology and are delivered within agreed budgets, timeframes with defects within normal industry standards for projects of this scale and complexity. Lack of demonstrated operation in Australia increases perceived risk.

When considering the approval and delivery of the Tarago and Parkes EfW projects, the NSW Government must take on board recent lessons learnt from the delivery of the two EfW projects in Western Australia (East Rockingham and Kwinana) and similar overseas EfW projects (e.g. NESS Energy Project in Scotland). Both projects in WA reportedly took significantly longer than anticipated to reach the final commissioning stage[2].

Even experienced engineering, procurement and construction (EPC) contractors appear to have handed over EfW plants with large defect lists[3] leading to poor early performance, along with significant cost and schedule overruns. These time and cost exceedances can potentially lead to

[2] ION Analytics (2024) John Laing preps EfW project exit amid litigation 13 August 2024. Available at: https://ionanalytics.com/insights/infralogic/john-laing-preps-efw-project-exit-amid-litigation/(accessed 31 October 2025).
[3] LetsRecycle (2025). £150 million NESS EfW facility temporarily closes. 11 July 2025. Available at: https://www.letsrecycle.com/news/150m-ness-efw-facility-temporarily-closes/ (accessed 31 October 2025).

significant impacts to Councils delivering waste to these facilities as they seek alternative disposal arrangements while issues are rectified.

Opportunity:

The Inquiry should recommend independent technical validation and stronger assurance to councils that these EfW plants are delivered to best available international standards. The regulator (EPA) should directly appoint a suitably qualified independent verification engineer (IVE), funded via cost-recovery from the proponent but reporting solely to the regulator. The IVE should have mandates to review design, witness critical factory and site tests, audit QA/QC, and sign off staged handovers (design → construction → commissioning → acceptance). This would provide strong assurance that the project design, construction and commissioning align with "world's best practice" and are not compromised by developer-driven shortcuts.

(b) the spread of the emissions predicted and the quality of emissions to be generated

Concern: Councils sending waste to these regional facilities must justify to residents why waste is transported to facilities hundreds of kilometres away. Community expectations are for very low emissions well within international standards / guidelines. Any uncertainty undermines social licence to operate.

Opportunity: Transparent emissions modelling could help councils defend EfW as preferable to landfill, provided emissions are demonstrably lower and monitored rigorously. Modelling of potential impacts must consider all potential scenarios including during start-up, shut-down, abnormal operating conditions and local worst-case meteorological conditions.

Post construction, commissioning acceptance should require third-party witnessed testing across a range of operating modes (including start-up/shut-down and abnormal conditions), not only steady state. Emissions and process guarantees must be validated under real operating profiles with no commercial handover by the EPC to the owner/developer, unless defect counts/values are below agreed thresholds.

(c) health impacts from currently operating older technology waste incinerators as compared to the proposed newer technology

Overseas older waste incinerators may have legacy issues, as they were designed and built to meet outdated emissions standards. Many of these plants have been upgraded to meet new standards or decommissioned. Comparisons between legacy old incinerators and modern EfW facilities should not be undertaken, as it is likely to confuse and unnecessarily alarm local communities, given the significant improvement in EfW technologies in recent years.

(d) Human health impacts incl. water, rainwater harvesting, soil contamination

Concern*:* While impacts are regional, councils sending waste could still face reputational backlash for contributing to perceived risks to local host communities.

Opportunity: Independent robust human health risk assessments (HHRA) will give councils confidence in procurement decisions and community communications. The HHRA should consider cumulative and long-term exposures. As part of the development approval, require robust plan for community health monitoring over time.

(e) Impact on agriculture locally and regionally

Concern: Negative agricultural outcomes could trigger criticism that Sydney is "exporting risk" to rural areas. International experience highlights that a significant environmental risk from EfW operations relate to the management of air pollution control residues (APCr) which can contain leachable heavy metals, and other hazardous pollutants.

Opportunity:

Require rigorous residue disposal/stabilisation plans especially for Air Pollution Control Residues (APCr), with long-term monitoring. Site suitability assessments for any residues disposed to land, must include soil/geology, flood risk, water table and future climate extremes. Inquiry should recommend independent oversight of waste residue treatment and classification, to allow long term safe disposal.

If potential impacts are confirmed as being below relevant local and international standard, councils can position EfW as environmentally sound, balancing urban waste challenges with regional economic growth.

(f) Alterations to Parkes Special Activation Precinct (SAP)

While it is not clear at this stage on the proposed alternations to the Parkes Special Activation Precinct (SAP), any changes should not compromise the need for rigorous environmental and social impact assessment, community engagement along with requirements for best practice environment/health protections in precinct plans.

(g) Impacts of historic waste-dumping in Tarago

It is not clear to NSROC what "historic waste-dumping" in Tarago is being referenced in this term of reference. The Woodlawn Bioreactor has been in operation at the Veolia Eco Precinct in Tarago for over 20 years, taking a significant quantity of greater Sydney's residual waste stream. The facility operates under an NSW EPA Environment Protection Licence (EPL), development consent conditions and landfill environmental management plan (LEMP). This facility is considered a well-engineered landfill facility critical to meeting the residual waste disposal needs of several Councils in NSW. Referring to "*historic waste-dumping in Tarago*" may create unwarranted local community concerns regarding the design and ongoing operation of the Woodlawn Bioreactor Landfill.

(h) Emission monitoring methodologies (Australia & international)

Concern: Councils need confidence that facilities will apply continuous, transparent monitoring, not just periodic spot checks. Weak monitoring would undermine confidence.

Opportunity: Strong monitoring requirements with live emissions data available 24/ 7 could allow councils to demonstrate due diligence in choosing EfW as a safe waste management pathway.

(i) Alternative solutions for Greater Sydney's residual waste

Concern: While NSROC acknowledges that EfW has a critical role to play in managing residual waste generated from the Greater Sydney region, EfW could lock councils into long-distance, costly long-term contracts, potentially undermining future recycling or circular economy initiatives.

***Opportunity**:* The Inquiry should encourage a balanced portfolio of alternative waste management solutions giving councils flexibility. The inquiry can argue that EfW should be part of the residual's strategy, not a replacement for waste avoidance, minimisation and recycling.

We understand that in WA, East Rockingham's commercial model was based on a "waste-arising" contracts for councils, where councils commit residual waste left after recycling, not fixed volumes. This model gives councils flexibility and limits locked in volumes which may undermine future waste minimisation and recycling efforts. The Inquiry should consider supporting similar feedstock supply models for the EfW projects in NSW.

With the Food Organics and Garden Organics (FOGO) mandate by July 2030 requiring Councils to implement organics collection services, together with the business FOGO mandate commencing in July 2026 there is an urgent need for development of infrastructure closer to urban waste sources for both transfer and processing of organic waste. This includes identifying suitable sites for establishing transfer stations and organics processing facilities. This should be a priority for the NSW Government, in parallel with the establishment of EfW plants to process residual waste.

(j) Any other related matters

***Concern*:** Cost impacts of long-haul transport to regional EfW are significant; NSROC councils may face community pushback over rising waste charges.

***Opportunity*:** Inquiry should consider the full life cycle cost including transport, processing and residuals management for the EfW facilities and how these costs compare to alternative options. Dedicated funding mechanisms are needed to support local government and industry investment, as councils have neither the assets nor the legislative powers to plan and resolve the challenges of waste management. **Greater hypothecation of the waste levy and critical actions to increase infrastructure investment are essential**. The inquiry could also press for state/federal investment in transfer infrastructure or rail freight subsidies, easing financial and carbon costs of regional transport.

Concern: Establishment of any EfW facilities in NSW must be done within a well thought out integrated waste management infrastructure plan. In June, NSROC made a submission to the NSW EPA on their Draft NSW Waste and Circular Infrastructure Plan Chapter 1. In this submission we raised our concerns that the plan is without strategic context and lacks clarity on how it fits within a broader, long-term infrastructure framework, or how it contributes towards net zero and circular economy. It is now October, and we are yet to see drafts of the subsequent chapters which were to deal with recycling infrastructure and challenges in regional NSW which is of direct relevance to this inquiry.

Opportunity: The Inquiry can recommend the NSW Government expedite release of the subsequent chapters of the NSW Waste and Circular Infrastructure Plan by the end of 2025 to give certainty to both Councils and industry that the planned EfW projects in Parkes and Tarago fit within a broader integrated waste and resource recovery infrastructure plan for NSW.

Conclusion

NSROC considers EfW to be an integral part of the suite of waste management options adopted in NSW and supports the overarching aim of the inquiry to assess whether the two EfW proposals are safe, fair and in line with best global practice. There must be clear transparency to local communities on the actual cost to residents of sending waste to these facilities and measures in place to ensure waste

minimisation and recycling efforts are not undermined by long term waste supply contracts to these plants. Our key recommendations to address these concerns are summarised below:

- The Inquiry should recommend independent technical validation and stronger assurance to councils that these EfW plants are delivered to best available international standards. The regulator (EPA) should directly appoint a suitably qualified independent verification engineer (IVE) and recover the cost of this from the proponent.
- Modelling of potential impacts must consider all potential scenarios including during start-up, shut-down, abnormal operating conditions and local worst-case meteorological conditions.
- Require comprehensive residue disposal/stabilisation plans especially for Air Pollution Control Residues (APCr), with long-term monitoring. Site suitability assessments for any residues disposed to land, must include soil/geology, flood risk, water table and future climate extremes.
- A feedstock supply model based on a "**waste-arising**" contract for councils, where councils commit residual waste left after recycling, not fixed volumes should be endorsed. This model gives councils flexibility and limits locked in volumes which may undermine future waste minimisation and recycling efforts.
- The Inquiry should consider the full life cycle cost including transport, processing and residuals management for the EfW facilities, how these costs compare to alternative options and the potential impact on rate payers sending waste to these facilities.
- The Inquiry should recommend the NSW Government expedite release of the remaining Chapters of the NSW Waste and Circular Infrastructure Plan by the end of 2025.