### 2025 consultation

Submission type	Guided submission
Submitter	Lake Macquarie City Council
Response ID	277524

#### Disclaimer

This document is a submission to the Net Zero Commission's 2025 consultation. As part of the consultation process, the commission has committed to publishing the submissions it receives. Submissions do not represent the views of the commission.

### 2025 consultation questions

1. What can you tell us about your experience of the impacts of climate change and how can the commission seek to reflect and respond to this in its work?	
2. What actions can the commission take to engage across the community to help drive the shifts needed for the net zero transition and for effective climate change mitigation and adaptation?	
3. How should the commission best engage with First Nations people to learn about cultural knowledge and practices to support adaptation, and what information and evidence should it draw on to inform its understanding of these practices?	
4. What additional mechanisms, support, or incentives can meaningfully empower and enhance First Nations people's involvement in climate mitigation, adaptation and environmental stewardship?	
5. What additional information and evidence should the commission consider when assessing progress towards NSW's targets for reducing net greenhouse gas emissions?	
6. The speed of deployment of electricity generation and	

- 13. What policies or programs at a sectoral level could complement the Safeguard Mechanism to support the accelerated decarbonisation of heavy industry in NSW?
- 14. What measures could accelerate industrial heat electrification in NSW, where technology is viable?
- 15. What short to medium term measures could be prioritised to address the systemic challenges regarding waste generation and resource recovery?

Lake Macquarie City Council staff recommend the following short to medium term measures that can accelerate progress toward reducing emissions from waste and enhancing resource recovery across NSW. As a local government actively pursuing innovation in circular economy and low-emissions waste management, we see clear opportunities for reform, collaboration, and targeted investment to unlock scalable impact.

Key priorities include:

- Support energy recovery for residual waste as a climate action strategy, recognising its proven capacity to reduce methane emissions compared to landfill and to generate reliable, dispatchable electricity from non-recyclable waste streams.
- Easing regulatory barriers will enable faster material recovery and help scale infrastructure needed to meet diversion and emissions targets. Planning frameworks should treat key resource recovery facilities as critical infrastructure and give greater weight to their public benefits, such as advancing state and national climate goals over localised impacts. A more consistent and proactive approach will improve investor confidence and support a solutions-focused planning environment.
- Prioritise regional planning and enable policy flexibility for Energy from Waste (EfW) infrastructure, particularly in areas such as Eraring and Tomago, where waste volumes from surrounding municipalities and existing industrial compatibility make them strategically appropriate locations. Supporting new EfW projects through coordinated regional planning will improve certainty for local governments and industry working to reduce reliance on landfill for residual waste.

Remove planning and approvals barriers to make it easier to recover more materials

Review approval pathways and make it easier to get approval for

waste processing and transfer of waste facilities.

- Strengthen the public narrative around EfW through clear, science-based communication that affirms its role in integrated waste management. Ambiguity in the current Government messaging risks eroding community confidence in a globally proven technology that offers superior outcomes to landfill in terms of emissions reduction, environmental protection, and human health. A transparent, evidence-led stance is crucial to counter misinformation, reduce perceived risk, and support responsible project proponents engaging with the community.
- Leverage policy instruments such as the NSW Waste Levy to help drive equitable market conditions between landfill and EfW, ensuring residual waste is directed to the option with the lowest lifecycle emissions and highest environmental benefit.
- Accelerate commercial-scale innovation for carbon-negative technologies, such as biochar from food and garden organics and thermochemical treatment of biosolids, by leveraging mechanisms like the EPA's Resource Recovery Innovation Pathway. These solutions offer greater environmental benefits and higher-value end products than traditional recycled organic compost, which is facing significant market uptake barriers and presents a significant risk to the success of the FOGO rollout under the NSW Waste and Sustainable Materials Strategy.
- Provide targeted funding and trial license pathways that enable councils and industry partners to validate emerging technologies and circular applications (e.g. biochar use in pollution absorbents, roads, revegetation and urban greening).
- Encourage inter-council collaboration and cross-sector partnerships with utilities and processors to address common challenges in managing organics, residuals and biosolids.
- Embed circular economy principles in infrastructure and procurement decisions to stimulate demand for recovered materials and reduce dependence on virgin inputs.
- Enhance regulatory frameworks to support modular, distributed recovery infrastructure and performance-based approvals backed by emissions and product data.

These measures contribute directly to state and national climate goals. With the right enabling settings, local governments like Lake Macquarie can help deliver practical, place-based solutions to one of the most systemic environmental challenges facing societies globally.

16. How could transparency of how coal mines meet their Safeguard Mechanism obligations be improved?	
17. What measures would lead to coal mines prioritising on-site abatement over offsetting?	
18. What measures should be considered beyond the Safeguard Mechanism to reduce emissions of the resources sector, particularly methane emissions, to meet NSW's emissions reduction targets?	
19. What additional measures could accelerate electrification and increase energy efficiency of new and existing buildings?	
20. How could social equity be better addressed in the transition to an electrified built environment?	
21. What approaches could NSW consider to eliminate refrigerants with a GWP >10 from buildings?	
22. What should be included in an emissions monitoring framework for NSW in the context of the transition to net zero, including any specific metrics and indicators?	Mandatory climate-related financial disclosures came into effect on January 1, 2025, for large business entities, with a phased introduction for smaller entities in the coming year. These disclosures are now a legal requirement, aligning with the broader global trend towards increased transparency in climate-related financial risks and opportunities. These disclosure requirements include information relating to governance, strategy, risk management and metrics and targets. The disclosure of metrics and targets will include reporting of Scope 1 and Scope 2 greenhouse gas emissions and eventually Scope 3. The estimation methodologies used for Scope 1 and 2 reporting will be consistent with the National Greenhouse and Energy Reporting (Measurement) Determination 2008, where applicable to these entities.

Lake Macquarie City Council staff believes that developing an approach to aggregating and reporting this information from these large entities in New South Wales, perhaps on a sector-by-sector basis will assist in developing local insights, action plans and sector specific measures and ultimately valuable to a transition to net zero. Reinvigoration of the The Central Resource for Sharing and Enabling Environmental Data in NSW (SEED), Net Zero Emissions Dashboard (website link) would be an ideal resource to build upon to capture and display this information.

Lake Macquarie City Council staff would also seek the assistance of the NSW Net Zero Commission to work with local governments and the Office of Local Government (OLG) to establish an appropriate and consistent methodology for local governments to report on their own city-wide and operational emissions and climate-related financial disclosures. Local governments typically report on these items in their annual reporting as part of their Integrated Planning & Reporting (IP&R) requirements, but they are not-consistent from council-to-council as there is no current applicable emissions framework or methodology that is suitable for a local government to report against, based on the activities they undertake. For instance, the NGER's methodology is focused on commercial entities and does not provide clear guidance (or scope boundaries) for a council seeking to report on their city-wide or operational emissions when they own/operate a waste management facility and the associated emissions. A similar situation arises for local governments with electricity generating power-stations within their locality, understanding where to attribute emissions utilised outside of the local government area.

23. The adaptation objective is for NSW to be more resilient to a changing climate. The Act allows for regulations to further define the adaptation objective. What does a more resilient NSW look like to you?

The objective for 'NSW to be more resilient to a changing climate' is sound. If the objective is further defined, it is important to take a holistic approach accounting for the range of avenues that would make NSW more resilient to climate change. These include:

- Capping density at current levels in at risk areas and not rezoning land that is at risk.
- Guidance for managed relocation of existing communities in at risk areas.
- Making the built environment including homes, businesses, infrastructure and the public domain more resilient to a changing climate.
- Making the agricultural sector more resilient to a changing climate.
- Making the natural environment more resilient to a changing climate.
- Making decisions based on up-to-date data that incorporates climate change projections.

In addition, Lake Macquarie City Council staff recommend that the regulations include clear and consistent objectives and benchmarks to inform adaptation planning, such as sea level rise projections/benchmarks.

## 24. What additional information and evidence should the commission consider when assessing progress towards the adaptation objective?

Lake Macquarie City Council staff recommend that the NSW Net Zero Commission considers information and evidence from all relevant NSW Government departments, as well as information and evidence from all levels of government. The Commission should also consider information and evidence from the Reconstruction Authority, as well as research institutes and organisations, such as the Commonwealth Scientific and Industrial Research Organisation, Natural Hazards Research Australia and the Australian Institute for Disaster Resilience.

Council staff recommend that the Commission considers information and evidence from the State Emergency Services and the Rural Fire Service and that the Commission considers scientific evidence and information from the Intergovernmental Panel on Climate Change, as well as other reliable sources.

It is also important that the Commission considers emerging scientific evidence, including new climate projections based on climate models that include the melting of ice sheets, and consider how and when this could be used to inform policies and guidelines at the state level.

## 25. How can adaptation planning better use the NSW Government's climate change projections (NARCliM)?

Lake Macquarie City Council staff believe the NARCLiM climate projections are a great resource, which can be very useful for adaptation planning. However, the NARCLiM projections currently sit outside of main risk reduction processes. For example, NARCLiM is not used to inform flood studies and flood studies and risk management plans, which are guided by the Australian Rainfall and Runoff guidelines and the NSW Flood Risk Management Manual. Moreover, NARCLiM climate projections are also not used to inform bushfire risk assessments/strategic bushfire studies or bushfire prone land mapping. The flood studies, as well as the bushfire prone land mapping and bushfire risk assessments or strategic bushfire studies are used to inform a range of risk assessments and processes, including strategic land use planning and development, as well as risk assessments for assets, etc. A recommendation would be to ensure that NSW Government publications such as the NSW Flood Risk Management Manual and NARCLiM are aligned in terms of their climate change extreme rainfall projections. It would also be beneficial if the NARCLIM projections could be embedded/incorporated into bushfire prone land mapping, bushfire risk assessments, strategic bushfire studies, as well as land use planning and risk assessments for assets. In addition, it is noted that the NARCLIM projections do not include sea level rise projections.

Noting that a large proportion of NSW is at risk of sea level rise, it would be great to have sea level rise projections to inform adaptation planning for sea level rise.

Overall, it would be beneficial to have clear and consistent projections for NSW, which can then be used in the different hazard/risk assessments. The upcoming regulations could be used to set up clear projections for NSW Government, Councils and others to use.

### 26. What other information or tools are needed to support decision-makers in NSW?

Lake Macquarie City Council staff believe the following information and tools would be useful to support decision-makers in NSW:

- Up to date natural hazard and risk data/information based on current hazard studies and risk assessments, such as flood studies and flood studies and risk management plans, bushfire management plans, bushfire risk assessments and strategic bushfire studies.
- Consideration of rarer hazard events in planning and decision-making, such as the 0.5% Annual Exceedance Probability (AEP) flood event, 0.2% AEP flood event, the Probable Maximum Flood.
- Incorporating climate change projections into hazard studies and risk assessments, such as bushfire risk assessments, strategic bushfire studies, bushfire prone land mapping, flood studies and flood risk management plans, etc.
- Sea level rise projections for NSW (or different areas in NSW) to inform decisions and planning in areas at risk of sea level rise
- Easier access to grants to fill in knowledge gaps and update existing hazard information.

# 27. What initiatives should the commission consider in assessing NSW's preparation and responses to extreme heat and humidity events in NSW?

Lake Macquarie City Council staff believe commission should consider a range of measures and initiatives to assess NSW's preparation and response to extreme heat in NSW. For example, the commission should consider the following:

- Planning and development controls that aim to reduce urban heat impacts
- Embedding urban heat considerations in master planning of areas, including the public domain, such as streets, plazas
- The use of cool materials, i.e. materials that absorb or emit no heat or less heat than other materials
- Having cooler places, i.e. places for people to go to stay cool in heatwaves and/or support Council in providing cooler places
- Street tree planting or supporting Council in providing street trees, as street tree planting is expensive
- Incentives to increase efficient cooling systems, especially for vulnerable people and/or people with low incomes
- Incentives to build more efficient homes that incorporate passive design and other measures to reduce heat inside the house.

	Requiring more efficient subdivision patterns, wherever possible, with lots oriented in a way that will reduce the amount of heat going into a house.
Are there any other pieces of evidence or feedback you would like to add?	