

2025 consultation

Submission type	Guided submission
Submitter	Suze Dunford
Response ID	277482

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

<p>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?</p>	<p>I work in a Sydney local council, and like communities all over the world, we face multiple risks from current and future changes in our climate. For our community, the key hazards that create climate change risks relate to increasing instances of extreme heat, planning for growing variation in our rainfall and coastal inundation. We are working to understand how these risks may affect our neighbourhoods and beaches and way of life, in order to take effective actions to manage, adapt and thrive into the future.</p> <p>Even with strong global action to reduce emissions, the impacts of climate change will continue to increase over the coming decades due to past emissions of greenhouse gasses, and impacts will be experienced, and paid for at the local scale. Its vital that the commission take necessary actions to</p> <ul style="list-style-type: none"> - Build capacity for monitoring, evaluation and reporting for climate change adaptation and the achievement of Net Zero emissions. - Help organisations and especially public administrators to embed climate change mitigation and adaptation actions across service and asset portfolios. - Work collaboratively to identify where services might be impacted in the future, and ensure communities and the organisations that serve them can protect and adapt public assets most at risk
<p>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?</p>	<ul style="list-style-type: none"> - Continue to provide monitoring and inform the community on progress or performance in the electricity & energy; built environment; and transport sectors to motivate greenhouse gas emissions reductions - Support for Local Government, commensurate to the resources currently provided to state agencies (as LG is defined as an agency under the NSW Climate Change Act - Obtain and publish LG reporting, as aligned to the annual Audit Office reporting request on Council climate risk assessment - Advocate for recommended regulatory changes to be implemented to ensure climate change action is embedded into the Land Use Planning system - Advocate to the State and Commonwealth Government to financially support local councils to address local climate risks, and ensure betterment planning and funding for roads, stormwater and public infrastructure. - Ensure climate action in outlined and reported on as part of the Integrated Planning and Reporting Framework required under section 406 of the NSW Local Government Act and the Regulation, and provide guidance for responding to climate change in Local Environment Plan (LEP) Standard Instrument - Monitor and report on the key directions for climate mitigation and adaptation included in Local Government Strategic Planning

	Statements, outlined in section 3.9 of the NSW Environmental Planning and Assessment Act 1979
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?	<p>In addition to the greenhouse benefits, the Commission could consider the additional benefits to electrification of housing stock including:</p> <ul style="list-style-type: none"> - Healthier homes with less indoor air pollution and less chronic diseases such as asthma, which has both an individual and societal cost. - Lower energy costs as houses electrify and supply their energy from cheaper renewable sources. - Avoiding future transition costs. Retrofitting gas infrastructure is more expensive than avoiding it in the first place. <p>The preferable regulatory framework for the removal of gas in new homes and alterations and additions is the State Environmental Planning Policy (SEPP) Sustainable Buildings through BASIX.</p> <p>The commission should support the use of future climate data in thermal comfort modelling software NatHERS</p> <ul style="list-style-type: none"> - Currently, the climate data underpinning the thermal modelling software NatHERS, used by the National Construction Code and the NSW Sustainable Building SEPP scheme is old (2017) climate data. - With funding through the NSW Government's now defunct Increasing Resilience to Climate Change project, three Eastern Sydney Councils investigated the use of future climate data to be used in NatHERS thermal comfort modelling and adopted in the National Construction Code. Implementing the Finding of the Future Proofing Residential Development to Climate Change

	<p>would ensure that our buildings are designed to stay safe and comfortable in a warming climate over the lifespan of the building (50 to 70 years). This data should underpin thermal performance provisions for both new homes and alterations and additions.</p>
<p>6. The speed of deployment of electricity generation and infrastructure is a key risk to emissions reduction targets. What more could be done to fast-track deployment?</p>	<ul style="list-style-type: none"> - Continued and active support for small scale battery incentives which will assist with managing increasing renewable energy generation - Accessible options for the community to purchase new renewable electricity generation that go beyond GreenPower or Power Purchase Agreements which have limitations or not accessible for many energy users. - Increase the energy targets in BASIX and the broader Sustainable Building SEPP 2022 to ensure that all new developments are installing onsite solar and maximum energy efficiency measures - Work with AusGrid to ensure they facilitate local substation upgrades, ensuring that this can occur in a space efficient manner and not overcharging developers and homeowners as part of electrification. - Support development of a billing system (possibly regulated) for centralised electric heat pump hot water systems, that would ensure that hot water consumption by individual tenants is metered and the consumption data is transferred to appropriate retailer, at low cost to the consumer, similar to gas counterparts. - Advocate for targeted education in the following areas: <ul style="list-style-type: none"> o How heat pumps work, for building professionals and the general public. o Costs and benefits and design solutions for apartment buildings for design and building professionals. o Industry transition planning and education away from fossil gas technologies and installation and benefits of technologies such as Heat pumps, induction cooktops and battery storage. - Support for deployment of Electric Vehicle (EV) chargers, continued maintenance of tax incentives for novated leases, removal of barriers in organisations to access novated leases for EVs.
<p>7. Are the measures now in place sufficient to ensure community engagement and benefit sharing from the build out of infrastructure for the energy transition?</p>	
<p>8. Are First Nations communities adequately engaged and included in sharing the benefits of the transition? What</p>	

more could be done, and by whom?	
9. What are likely to prove the most effective approaches to accelerate rapid decarbonisation across freight and passenger transport?	<ul style="list-style-type: none"> - Support public EV charging at the local scale - Maintenance of existing FBT tax exemption for EVs through a novated leases and removal of barriers in organisations to access novated leases for EVs. - Financial support to Councils to electrify their heavy vehicle fleet, including garbage trucks and associated charging infrastructure to accelerate market transformation - potentially through accessing some Waste Levy monies - Enable fleet providers such as local Councils to offset higher capital costs for fleet electrification through business models that support vehicle to grid (V2G) - Support for the implementation of local bike strategies - Rapid electrification of all public transport powered by 100% renewable electricity. - Support for local Councils to ensure that electric bikes are accommodated safely for both cyclists and pedestrians through delivery of critical cycling infrastructure, education and regulation.
10. What specific actions or policies could increase uptake of emissions reduction strategies in agriculture, both in the short and long term?	
11. Given the uncertainties in land-sector net emissions, how should NSW incorporate this sector into the states climate policy and emissions profile?	
12. What specific actions could increase carbon storage and resilience of the existing carbon stock in the land sector and meaningfully enhance the application of First Nations people's knowledge and practices?	
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?	<ul style="list-style-type: none"> - Ongoing support to programs that reduce waste generation and promote circular economy, including support for Product Stewardship. - Prioritise linking resource recovery to greenhouse gas emission reduction
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?	<ul style="list-style-type: none"> - NSW Government require all new homes and commercial buildings to be all electric with solar, delivered through the NSW Sustainable Building SEPP. - NSW Government to require all new replacement hot water systems in NSW are electric heat pump, solar with electric, electric resistance. - NSW Government to require all existing social housing meets minimum requirements for increased thermal performance (e.g. insulation, weatherproofing, ceiling fans), removal of gas (electrification), and provision of solar when roof is < 15 years old. - Review and update the BASIX tool that is a regulation under the Sustainable Building SEPP, to deliver electrification and energy efficiency and solar. In particularly reviewing the Alterations and Additions policy which is 20 years old.

	<p>Introduction of the BASIX Materials Index with mandatory targets for embodied carbon.</p> <ul style="list-style-type: none"> - Review and update the National Household Energy Rating tool e.g. NatHERS thermal modelling tools to ensure that climate files are based on future climate and not historic climate, to ensure that heating and cooling performance in new buildings is maximised. - Funding Council programs such as energy audits and implementation support for retrofitting apartments on a large scale. Currently our Council can assist up to 10 buildings per year and we consistently deliver 20% energy savings in common areas. It would be good to scale this to 150 per year. - Support for continual increased energy efficiency performance in the National Construction Code. - Require any new roof replacement (of existing dwellings) is either mandated to put solar on, or encouraged through incentives, such as grants to reduce costs for MSB upgrades, solar and batteries, particularly for apartments. - Mandate solar for all new builds and support urban centres as Renewable Energy Zones - Implement a raft of measures to ensure adoption of electric vehicles is fast tracked, including maintaining existing tax exemptions, toll road discounts, access to bus lanes, and public charging infrastructure support.
<p>20. How could social equity be better addressed in the transition to an electrified built environment?</p>	<ul style="list-style-type: none"> - Support for upgrading social housing <ul style="list-style-type: none"> o Mandate energy efficiency and solar for new social housing through existing planning controls o NSW Government to require all existing social housing meets minimum requirements for increased thermal performance (e.g. insulation, weatherproofing, ceiling fans), removal of gas (electrification), and provision of solar when roof is < 15 years old. - Support for renters <ul style="list-style-type: none"> o Incentives for landlords e.g. promote tax breaks to landlords for sustainability upgrades, including electrification and solar on rental properties.
<p>21. What approaches could NSW consider to eliminate refrigerants with a GWP >10 from buildings?</p>	<p>For new products/installations, mandate that only <10 GWP refrigerants are used for HVAC and HW and other systems for the installation into industrial/ commercial and residential settings.</p> <p>For existing HVAC/HW refrigerant systems. Work with manufacturers to identify alternative <10 GWP refrigerants and when identified mandate the replacement of these refrigerants with <10GWP refrigerants. Much of this work was commenced over a decade ago and thus alternatives already exist, for example. https://hychill.com.au/ A program of replacement works can be led and instigated at NSW government owned and tenanted sites as well as SOC's.</p>

	<p>Learnings from NSW government works can then lead NSW local government agencies to undertake the same works as above.</p> <p>Corporations can then follow.</p> <p>End of Life HVAC and HW refrigerant systems require the safe removal of refrigerant gas as per AS/NZS 5149:2016 prior to disposal. Many appliances end up for kerb side recycling and Councils requires adequate resourcing to establish systems that meet appropriate degassing standards.</p> <p>Include refrigerant appliances in Product Stewardship programs</p>
<p>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?</p>	<ul style="list-style-type: none"> - The current Resilient Sydney tool and net zero app is currently being used by Metropolitan Councils to monitor greenhouse emissions and uptake of solar. Metrics used in this tool, include tonnes CO2 p.a, kW solar installed p.a, VKT of residential travel, tonnes of waste p.a. - As transport will be the largest source of emissions by 2035 - it is vital that transport data and monitoring is improved in NSW. By either increasing the size and frequency of the Household Transport Survey, to ensure that data is rigorous and statistically significant down to a local level or funding a different method of analysis. - It is also imperative that Commercial and Industrial, and Construction and Demolition waste generation in urban environments is adequately measured and reported.
<p>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?</p>	<ul style="list-style-type: none"> - Our Council has a Resilience framework that reflects regional resilience aspirations and enables us to work in a multidisciplinary way to ensure we enhance resilient by capacity building and addressing identified climate risks. - A resilient community - at any scale, is socially inclusive and cohesive, with affordable, energy-efficient housing, diverse economic activity. It has safe, walkable neighbourhoods where people can access open space, public transport, employment, education, and services. Public and infrastructure meets basic needs, and volunteers and expert practitioners work side by side in planning and preparing for emergencies, as well as responding and supporting recovery efforts. Ecosystems are protected and being restored, natural resources are used sustainably, and land use policy is future-focused and flexible to enable adaptation. Government leadership and management is transparent and strategic, and innovation is encouraged.
<p>24. What additional information and evidence should the commission consider when assessing progress towards the adaptation objective?</p>	<ul style="list-style-type: none"> - Consider performance, policy or progress benchmarking (Huggins 2010) outlined in Measham, T., Jacobs, B., and Brown P.R. (2014). Meta Learning from past adaptation. Node for Adaptive Communities report to New South Wales Office of Environment and Heritage. - Consider other outputs from the NSW Adaptation Research Hub Adaptive Communities Node

	<ul style="list-style-type: none"> - Review and report on the outputs of the Audit Offices annual assessment of Local Government Climate change readiness, and other recommendations of the 2021 Audit Office report Managing Climate Risks to Assets and Services
25. How can adaptation planning better use the NSW Government's climate change projections (NARClIM)?	<ul style="list-style-type: none"> - State government should facilitate the application of climate projections data, for example it should provide a concierge or peer review service to ensure Community and Council interpretation of the data is correct - Timing the release and presentation of data with reporting requirements under the Local Government Act (for example the Integrated planning and reporting Framework) - State Government should set expected scenarios to support the application of Narclim Data - Climate projections are translated into usable climate files to assess future development (for use in NatHERS) - Community level consultation and education (two-way discussions) and Tools for GIS users to understand and apply projections
26. What other information or tools are needed to support decision-makers in NSW?	<ul style="list-style-type: none"> - Information on how the NSW Reconstruction Authority Disaster Adaptation Plans are integrated into the Adaptation programs already underway at state and Local level - Ensure training for Councillors and General Managers to access, understand and report on climate risks - Including identified climate risks in guidance climate mitigation and adaptation included in Local Government Strategic Planning Statements, outlined in section 3.9 of the NSW Environmental Planning and Assessment Act 1979 and in guidance for Local Environment Plans currently the only mention is in relation to flooding
27. What initiatives should the commission consider in assessing NSW's preparation and responses to extreme heat and humidity events in NSW?	<ul style="list-style-type: none"> - Support Councils to protect, maintain and enhance tree canopy, including through the implementation of proposed changes to the Illegal Land clearing and tree vandalism frameworks - Support community development staff in Councils to contribute and participate in Heat Wave Subplan activities and committees.
Are there any other pieces of evidence or feedback you would like to add?	<p>Not only are local council indispensable to adapting to climate change (thank you to the excellent report published by ALGA last month) it is just what we do.</p> <p>In a subsidiary system, like our Federation, decisions and actions should be driven by those most affected, with higher levels of government providing support, and coordination when local capabilities are insufficient or when impacts can be addressed at regional or broader scales</p> <p>Local Council's have access to strategic, operational and regulatory tools and skills to adapt key systems to risks or</p>

	threats.... but even doing a climate change risk assessment is completely voluntary - which threatens the resilience of the entire state. Please focus your next year on assisting and requiring adaptation from the community level up
--	---