2025 consultation

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Disclaimer

Submission in response to the NSW Government's Net Zero Commission consultation paper

The University of Technology Sydney (UTS)'s Business School welcomes the opportunity to provide a response to the NSW Government's Net Zero Commission (the Commission) consultation paper. We have chosen to respond to a selection of the questions posed in the paper most relevant to our work.

The UTS Business School is a globally recognised institution known for its progressive approach to business education, research, and industry engagement. Its vision is to be a socially-committed Business School focused on developing and sharing knowledge for an innovative, sustainable and prosperous economy in a fairer world. The UTS Business School brings together skills and knowledge from diverse fields to tackle the critical problems faced by businesses and other public and private organisations today. Research efforts are focused on developing knowledge that is not just characterised by scholarly excellence, but also contributes more broadly to address the grand challenges of our time, such as inequality, climate, disaster, and populist extremism. The UTS Business School works closely with businesses, policymakers and public institutions to produce socially responsible and economically fair outcomes, and use education and research as a pathway to individual mobility, social diversity and economic equality.

1. **What can you tell us about your experience of the impacts of climate change and how the commission seek to reflect and respond to this in its work?**

The UTS Business School has considerable research expertise in several key areas of this consultation paper through its Centre for Climate Risk and Resilience (CCRR), which is dedicated to helping businesses address the physical and transition risks brought on by climate change. The CCRR is uniquely positioned to support businesses in taking urgent and immediate collaborative action to decarbonise the economy and regenerate Country and planetary health. CCRR's research covers adaptation and resilience; decarbonisation; sustainable finance; climate analytics; metrics, targets and disclosure, and policy impacts and responses. The over 40 academics associated with the CCRR come from many different disciplines, Institutes and Centres across UTS, including Change for Good @ UTS, the Centre for Business Intelligence and Data Analytics, Living Lab Northern Rivers, the Green Infrastructure Lab, the Institute for Sustainable Futures, Climate-KIC, and the Jumbunna Institute for Indigenous Education and Research.

Work conducted by CCRR has shown how extreme events such as bushfires, floods and heatwaves increasingly disrupt business operations, supply chains, capital flows and financial markets, as well as local communities. In parallel, slow-onset changes such as sea level rise and biodiversity loss are generating long-term planning challenges that outpace conventional risk assessment methods. Informed by this evidence base, we advocate for climate risk to be recognised not only as an environmental issue but as a systemic threat to economic stability, social cohesion and institutional trust.

We believe that the Commission has a critical opportunity to reflect this understanding in its work by embedding cross-sectoral risk analysis and highlighting interdependencies across adaptation, mitigation and resilience pathways. Australian policy responses and community planning will require a much stronger focus on the indirect and compounding impacts of climate change, and responses would require more coherent policy settings, especially where social vulnerability, infrastructure exposure and financial risk intersect.

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?**

Achieving an equitable and effective net zero transition requires more than technological readiness or regulatory alignment. It demands a fundamental shift in how communities, businesses and governments engage with climate risk and opportunity. The work of the CCRR has found that climate action is most successful when it is locally grounded, socially inclusive and underpinned by sustained dialogue. Many community members and smaller organisations still remain unclear about how climate action will benefit them, and how broader net zero targets translate into specific, actionable pathways. As such, there is a need for tailored engagement strategies that connect high-level goals with the lived experience of households, councils and enterprises. The Commission is well placed to foster this engagement by serving as a trusted, independent convener across sectors. This could include facilitating regional listening forums, supporting climate capability-building initiatives and amplifying community-led solutions that emerge from Indigenous land management, rural adaptation or youth-led climate advocacy. The Commission should also promote transparent, evidence-based communications to address misinformation and build social licence for change. Partnering with education institutions, local governments and civil society will be critical to embedding climate literacy and ensuring that mitigation and adaptation efforts are not seen as abstract or imposed, but rather as shared commitments towards a viable and just future for NSW.

CCRR strongly recommends the Commission consider the successful Living Lab model for community engagement, that has been established in the Northern Rivers by UTS,

Southern Cross University and the NSW Government in the wake of the devastating 2022 floods. By operating in the crucial space between community, industry, academia and government, Living Lab Northern Rivers (LLNR) has brought world-class expertise and local knowledge together to drive real change. LLNR have created new ways to integrate local knowledge with technical expertise and foster collaborative processes and knowledge-sharing initiatives, which have supported communities with the tools to meaningfully participate in rebuilding efforts.

5. **What additional information and evidence should the Commission consider when assessing progress towards NSW's targets for reducing net greenhouse gas emissions?**

Accurate and timely evaluation of progress towards net zero targets requires a multidimensional evidence base that goes beyond headline emissions data. The CCRR supports the development of a monitoring framework that integrates emissions accounting with economic, financial and governance indicators. Tracking changes in capital expenditure on decarbonisation, uptake of transition-aligned financial instruments, and disclosure practices under the new Australian climate reporting regimes provide valuable insights into institutional momentum and private sector alignment. However, beyond standard climate reporting and emissions measures, a more holistic set of indicators is required to capture the full scope of the net zero transition. This includes metrics that extend across economic, environmental, social and health domains. For instance, the work undertaken by the CCRR examines the intersection of climate change and public health, showing that rising temperatures, poor air quality and extreme weather events are already affecting population wellbeing. These impacts are not evenly distributed and disproportionately affect vulnerable groups. Including health-related indicators in the monitoring framework would help ensure that the broader co-benefits and trade-offs of the transition are systematically assessed.

There is also a need for deeper integration of sector-specific risks and place-based vulnerabilities, particularly in relation to industry, transport and the built environment. Metrics such as asset-level emissions intensity, insurance affordability in high-risk areas, and alignment with science-based targets can provide insight into whether change is embedded or superficial. The Commission should also support integrated community planning efforts that link decarbonisation with resilience, accessibility and economic development objectives. This would allow for a more comprehensive picture of progress and ensure that transition pathways are responsive to local needs and capacities.

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?**

Fast-tracking the deployment of electricity infrastructure requires not only regulatory streamlining but also deliberate strategies to enhance social acceptance and equitable participation. For example, research by the CCRR has highlighted the importance of equitable solar uptake as a lever for accelerating decentralised renewable generation. Programs that support low-income households, renters and regional communities to access rooftop solar and shared battery storage do not only address energy affordability but also build broader social licence for the clean energy transition. Without such inclusive measures, efforts to scale renewable infrastructure risk reinforcing existing energy inequities.

In parallel, a more coordinated whole-of-government approach to planning, permitting and grid integration would help reduce project bottlenecks. Greater visibility over the timing, location and sequencing of infrastructure rollouts (e.g., Renewable Energy Zones) is essential to investor confidence and workforce planning. The Commission could further support deployment by advocating for stronger local benefit-sharing arrangements and transparent engagement processes that anticipate and respond to community concerns. Ultimately, acceleration will depend on shifting from a technically driven model of energy transition to one that places communities, equity and participation at its core.

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?**

Many communities lack the resources or support to navigate planning processes or advocate for local benefits in a substantive manner. To ensure legitimacy and long-term support, benefit-sharing mechanisms must extend beyond one-off payments or short-term incentives. They should include structured opportunities for co-ownership, ongoing revenue participation and long-term capacity-building. This is particularly important for communities hosting large-scale renewable generation or transmission infrastructure, who may otherwise bear disproportionate environmental or social burdens. The Commission can play a key role in evaluating the effectiveness of benefit-sharing models across jurisdictions and promoting standards that reflect principles of justice, consent and local development. Strengthening accountability mechanisms and ensuring transparent distribution of benefits will be critical to maintaining social licence for the transition.

13. What policies or programs at a sectoral level could complement the Safeguard Mechanism to support the accelerated decarbonisation of heavy industry in NSW?

Heavy industry presents a particular decarbonisation challenge due to capital intensity, long asset lifespans and limited commercial availability of substitutes. While the Safeguard Mechanism establishes a baseline compliance framework, it does not in itself incentivise first-mover investments in innovation or systems change.

Sectoral decarbonisation strategies should include support, including for demonstration projects and low-emissions industrial clusters. These investments are unlikely to materialise without public co-funding and credible, long-term market signals. Regulatory certainty and institutional coordination are also essential. This includes aligning state-level planning, permitting and development processes with climate targets and enabling rapid deployment of enabling infrastructure.

Sector-specific transition plans that outline technology pathways, investment needs and workforce implications would provide greater predictability to firms and financiers. The Commission could also encourage voluntary initiatives that go beyond compliance to help shift industry norms and reduce the risks of uneven or delayed decarbonisation across regions and subsectors.

22. What should be included in a monitoring framework for NSW in the context of the transition to net zero, including any specific metrics and indicators?

A robust monitoring framework should include not only emissions inventories but also transitional, financial and social indicators that reflect the complexity of the net zero journey. From a technical standpoint, the framework should track emissions reductions by sector, disaggregated by source and technology, with time-bound benchmarks aligned to the state's 2030 and 2035 targets. However, emissions data alone provide a lagging indicator and do not capture early shifts in institutional practice or risk exposure.

To supplement this, the Commission should incorporate metrics such as the uptake of low-carbon technologies, transition-aligned investment flows, or changes in workforce composition. Indicators on community impacts, equity outcomes and First Nations participation are also essential to ensure the transition is not only fast but fair. Transparent reporting, regular public updates and the ability to compare progress against peer jurisdictions will support accountability and enable adaptive governance. The framework should be flexible enough to evolve with new data and policy settings, while remaining consistent enough to provide a stable basis for evaluation and course correction.

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?

A more resilient NSW is one in which institutions, communities and systems are not only capable of withstanding climate shocks but are also equipped to adapt, transform and thrive under conditions of uncertainty. Resilience in this context is not limited to physical infrastructure but encompasses institutional capacity and social cohesion and well-being. It requires governance arrangements that anticipate compounding risks, embed adaptive learning and centre the voices of vulnerable groups in decision-making.

From the perspective of the CCRR, a resilient NSW would be characterised by risk-informed planning across all levels of government, with climate adaptation embedded into infrastructure planning, health, the economy and emergency services. It would include forward-looking climate disclosure by public and private entities, localised vulnerability assessments and sustained investment in community capability and recovery systems. Importantly, resilience should not be framed as a return to past conditions but as the capacity to navigate emerging risks and develop adaptive pathways.

The UTS Business School appreciates the opportunity to contribute and would welcome further engagement regarding the climate change and adaptation advice the Commission gives to the NSW Government. Please do not hesitate to contact Professor Martina Linnenluecke, Director of the Centre for Climate Risk and Resilience (Martina.Linnenluecke@uts.edu.au) should you wish to discuss this submission further.