

Decarbonisation Pathways for NSW

Call for Evidence: June-July 2026

About the project

NSW has legislated targets to cut emissions by 50% by 2030 and 70% by 2035, both relative to 2005 levels, and achieve net zero by 2050. The Net Zero Commission is working with CSIRO and Climateworks Centre to develop the first set of NSW-specific decarbonisation pathway scenarios (pathways) that will show how sectors across the economy can practically work together to achieve these targets. This will assist government policy development, the tracking of progress, and help inform stakeholders, including business investment decisions. To build these properly, we need evidence and data from the people and organisations who know their sectors and communities best. Through our previous engagement activities we have received a broad range of feedback on NSW's approach to decarbonisation. These responses are being used to inform our work. We welcome new or further responses from interested stakeholders, including from research bodies, industry, businesses and local communities. More information on the project is available on the Commission's [website](#). Submissions are due 31 July 2026.

Purpose of the Commission's pathways development

 Translate targets into options for actions: • Translate legislated targets into practical guidance on options for sector-level actions and timelines • Illustrate how emissions reductions can be achieved and where different actors can contribute	 Inform better decisions and investment: • Provide long-term context to support policy, infrastructure and investment decisions • Help clarify opportunities and risks, with different pathways illustrating how different choices may play out • Highlight where government may help catalyse action
 Monitor and track progress: • Provide a consistent benchmark to assess NSW's emissions reductions across sectors over time • Identify where we are <u>on-track</u>, ahead, or falling behind	 Support an orderly and transparent transition: • Provide information to businesses, communities and government, enabling time to prepare and adapt • Illustrate trade-offs and the impacts of different choices

Decarbonisation pathways will help guide emissions reduction actions across all sectors

Pathways model a range of inputs to identify different options for how NSW could reach its emissions reduction targets. In doing so, they compare the impacts, opportunities and challenges to decarbonising depending on choices the government, businesses and community make. The integrated modelling includes availability of emissions reduction technologies, costs, trade-offs, policy and economic drivers, and dependencies between decisions.

All sectors have a role to play in NSW reaching net zero. The pathways will be designed to achieve net zero by 2050 but each one will have different actions and timelines. For each pathway scenario, the results will indicate emissions reductions required from each sector over time based on the availability and cost of technology, behaviour change and other factors. Figure 1 shows an example of an illustrative pathway to net zero by sector. By comparing against the current trajectory (indicative baseline), pathways also highlight where further action is needed to achieve targets.

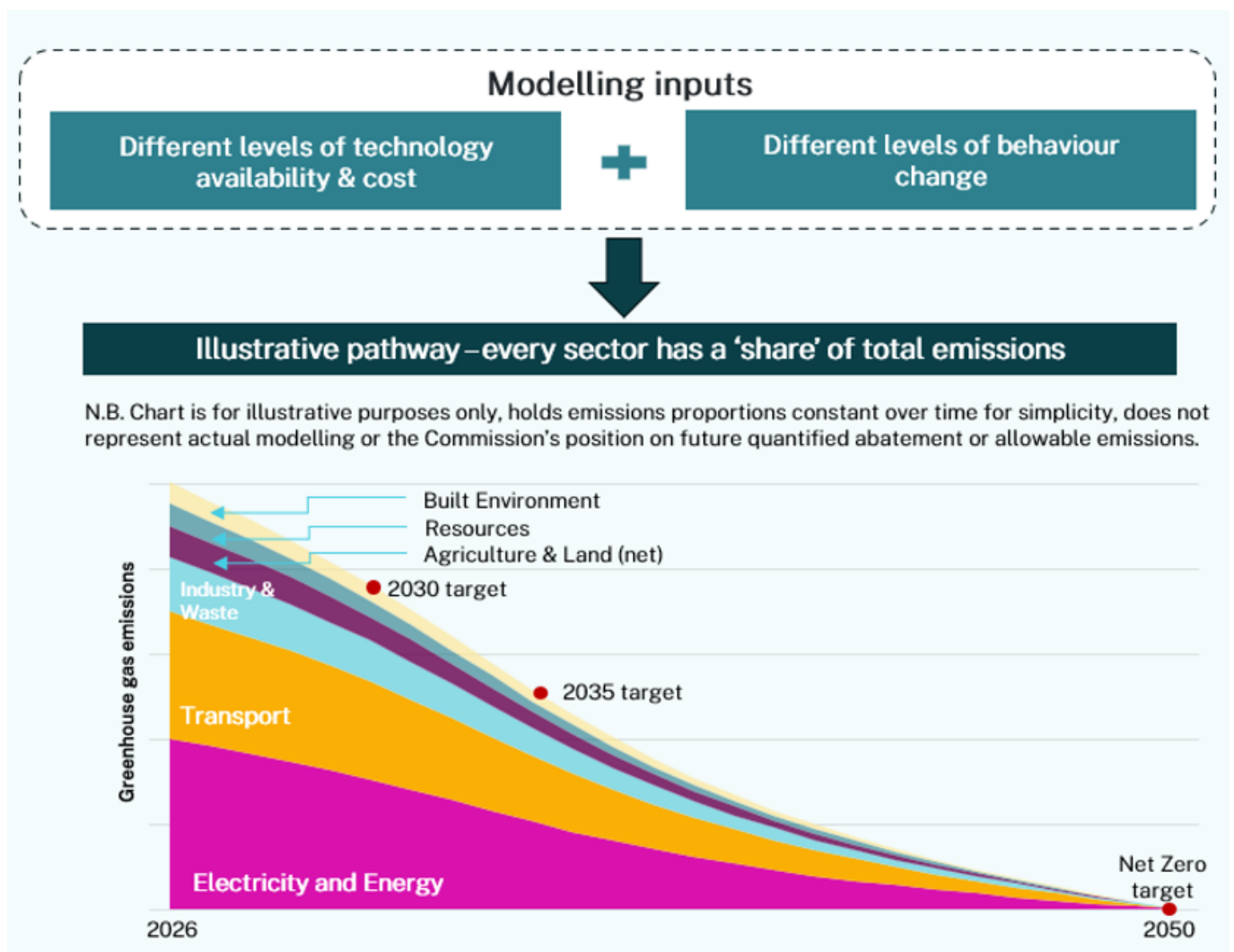


Figure 1: Illustrative overview of pathways modelling and output

The Commission is developing three pathway scenarios

1. Balanced

This pathway will reflect a middle-of-the-road scenario for technology uptake and behaviour change, representing a plausible route to net zero by 2050 for NSW that draws on evidence and insights from across the economy and community.

2. Delayed

This pathway explores what a net zero by 2050 transition looks like if barriers to technology uptake and behaviour change are higher. It will illustrate what staying on track to net zero by 2050 would require of sectors in the face of those challenges.

3. Fast tracked

This pathway will demonstrate an optimistic scenario, with fewer barriers to uptake and behaviour change. It will help show the conditions and choices that could accelerate progress.

Questions

We are gathering evidence to inform the different inputs and assumptions that will be used across the pathway scenarios. The below questions are non-exhaustive key interest areas; you may choose which questions to respond to. We welcome insights beyond the scope of these questions.

In addition to the questions below, we welcome specific evidence relevant to the development of pathways, including data, modelling, deployment experience or on-the-ground evidence. We recognise that some of the most valuable evidence such as facility-level cost data, investment pipeline information and commercially sensitive deployment plans cannot be shared in a public submission. Submissions can be marked confidential, in which case they will be used only to inform the modelling assumptions, and will not be shown in any public documentation. We encourage anyone with relevant data, including commercially sensitive data, to provide it. Please note in your submission if you would like all or part of your content to remain confidential.

Policies and market mechanisms

1. What opportunities or barriers could improve the effectiveness of NSW's transition to net zero?
 - a. What policies or market mechanisms could accelerate emissions reductions in specific sectors or communities? What barriers or opportunities exist for their adoption, including any evidence from businesses, industry and/or comparable jurisdictions?
 - b. How could the NSW Government better stimulate private finance at the scale and pace needed for the net zero transition?
 - c. What are the drivers and risks to reaching NSW's interim targets in 2030 and 2035, and net zero by 2050?
 - d. What are the opportunities or barriers for collaboration across sectors to support the transition?

Technology and behaviour change

2. What are the opportunities and barriers to technology development, deployment for each sector? This may include:
 - a. What technologies are available or emerging in your sector, and what is their current state of readiness?
 - b. What constraints exist around technology uptake and deployment?
 - c. What does the evidence say about current and future costs?
 - d. What role could the NSW Government play in strengthening technology development and deployment?
3. What are the opportunities to foster demand reduction and behaviour change?

Economic impacts and just transition

4. What are the likely economic effects on NSW of different emissions pathways to net zero, relative to NSW's current level of ambition?
 - a. What are the most significant economic or workforce pressures the pathways should account for in your sector or community?
5. What are the opportunities and barriers to addressing socio-economic priorities for a just transition, including equitable outcomes for First Nations peoples and rural, regional and remote communities?

Evidence and other considerations

6. What evidence can you provide to inform pathway inputs and assumptions? For example, cost curves, deployment rates, or sector-specific data, include commercially sensitive data where relevant.
7. Beyond emissions reduction, what outcomes should be considered? For example, impacts on business, jobs, land-use, water and biodiversity.
8. Do you have any other comments or information you would like to provide?

Sector specific

The Commission's definition of sectors is provided in Appendix 1.

Sector	Key focus areas
Electricity & Energy	Opportunities, barriers and timelines for: • Deployment of renewable energy generation assets and transmission infrastructure build-out, including Renewable Energy Zone delivery • Adoption of Consumer Energy Resources, including rooftop solar, household batteries and vehicle-to-grid, as well as other distributed solutions such as community batteries • Electricity demand, including new sources like data centres, industrial demand management, load shifting and battery deployment and their market impacts • Equity in the electricity transition, including strengthening community engagement in infrastructure deployment and benefit-sharing • Infrastructure, market, policy and demand-side conditions needed to support the orderly closure of coal-fired generation assets in NSW • Any other issues
Transport	Opportunities, barriers and timelines for: • Transitioning to electric vehicles, considering passenger and heavy vehicles, and autonomous/shared ownership models, including rollout of charging infrastructure • Transitioning and mode shifting for freight and the infrastructure and fuel supply needed, including for road freight, shipping and aviation • Adoption of renewable and low emission fuels, including hydrogen • Increasing public transport, cycling and walking • Any other issues
Industry	Opportunities, barriers and timelines for: • Electrification of smaller industrial facilities and low to medium temperature process heat, including supply chain considerations • Significant process changes needed to decarbonise key large facilities • Key interactions and synergies between industries, facilities and regional hubs, such as electricity, clean fuel, waste or supply chain infrastructure, including embodied emissions of infrastructure and power generation • Any other issues

Resources	Opportunities, barriers and timelines for: • The areas explored and recommendations in the Commission’s recent Coal Mining Emissions Spotlight Report • Potential emissions and other aspects of new minerals and metals mining, including critical minerals • Driving effective workforce changes and a just transition • Any other issues
Built Environment	Opportunities, barriers and timelines for: • Electrification of residential and commercial buildings, including demand-side measures • Improving energy efficiency measures, including technology upgrades and improvements to thermal shells (e.g. insulation) • Addressing fugitive emissions from refrigerants • Reporting, tracking and addressing embodied carbon and supply chain emissions, including upstream industrial and transport emissions • Systemic changes to how people live, work and the design of the built environment • Any other issues
Land & Agriculture	Opportunities, barriers and timelines for: • Agricultural practices that support high permanence carbon storage and/or reduce emissions • Driving shifts to land uses for high permanence carbon storage and improved environmental outcomes, including how to balance necessary other land uses • Potential changes to production mix, and to domestic and export markets, that impact land and agriculture across different products (e.g. meat, fibre, cropping, timber and others) • Government action to promote land regeneration and conservation, including e.g. land buy-back • Any other issues
Waste	Opportunities, barriers and timelines for: • Increasing landfill gas capture • Driving circular economy principles (e.g. reducing waste, increasing recycling, etc.) • Any other issues

Carbon management	Opportunities, barriers and timelines for: • Maintaining or expanding high permanence carbon stored in land and aquatic systems • Engineered carbon removals, such as direct air capture • Carbon capture, use and storage and permanence considerations • Any other issues
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How to make a submission

Submissions to this consultation can be made via [our website](#) until 5pm 31 July 2026. Submissions will be published on our website unless you request otherwise. Please indicate in your submission if you would like all or part of your content to remain confidential.

If you have any questions on the Call for Evidence process and developing your submission, you can [register](#) for our virtual information session on Monday 29 June 2026 or reach out to contact@netzerocommission.nsw.gov.au.

We greatly appreciate the time taken to engage with the Commission.

Next Steps

Following receipt of submissions, the Commission will analyse responses and may reach out for further information. The Commission aims to complete pathways development by mid-2027.

Appendix 1: Net Zero Commission Sector breakdown

A breakdown of how the Commission defines sectors is noted below:

Sector	Inclusions, mapped at a high level to IPCC sectors
Electricity & Energy	• Electricity generation • Petroleum and coal product manufacturing, petroleum refining and electrical equipment used in the transmission and distribution of electricity
Transport	• Cars • Heavy duty trucks and buses • Light commercial vehicles • Domestic aviation • Other – domestic shipping, railways, pipelines (transport of gases and liquids) and mobile refrigeration and air conditioning
Industry	• Metal industries, mineral industries, food and beverages industries, chemical industries and other industries • Fuel combustion from these industries
Resources	• Fuel combustion in mining – coal mining and other mining • Fugitive emissions from coal mining • Fuel combustion and fugitive emissions from oil and gas
Built Environment	• On site fuels – commercial/institutional and residential • Refrigeration – fugitive emissions from domestic and commercial refrigeration, and stationary air conditioning • Other – aerosols and construction
Land	• Croplands • Deforestation – converted forestland, grassland and cropland • Existing forests – carbon stock exchange, wildfires, controlled burning • Grasslands • Reforestation and afforestation – conversion to forest lands • Other – harvested wood products and wetlands
Agriculture	• Agricultural soils – direct and indirect soil emissions including fertilisers, urine and dung deposited by animals, crop residues • Enteric fermentation • Manure management • Fuel use and other – fuel combustion, rice cultivation, liming and field burning
Waste	• Solid waste disposal and treatment • Incineration and biological treatment of waste • Wastewater treatment and discharge