

The Hon Penny Sharpe MLC

Minister for Climate Change, Minister for Energy,
Minister for the Environment, Minister for Heritage,
Leader of the Government in the Legislative Council



Your ref: DF25/013725
Our ref: MD25/1611

Mr Steven Reynolds
Clerk of the Parliaments
Parliament House
Macquarie Street
SYDNEY NSW 2000

By email: lc.clerk@parliament.nsw.gov.au

Dear Mr Reynolds *Steve,*

Please find attached the Government's response to report no. 1 of the Joint Standing Committee on Net Zero Future entitled, *2024 Annual Report of the Net Zero Commission*, for tabling in the Legislative Council. This also responds to the Net Zero Commission's 2024 Annual Report.

I appreciate your assistance in ensuring this response is tabled at the first available opportunity.

Sincerely

Penny Sharpe MLC

Minister for Climate Change, Minister for Energy,
Minister for the Environment, Minister for Heritage

25/6/25

*Received at 8.45a ~ Thursday
26 June 2025*

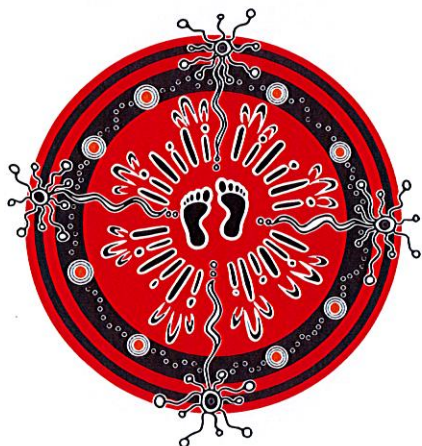


NSW Government Response to Net Zero Commission 2024 Annual Report and the Parliamentary inquiry report by the Joint Standing Committee on Net Zero Future

Department of Climate Change,
Energy, the Environment and Water



Acknowledgment of Country



Department of Climate Change, Energy, the Environment and Water acknowledges the traditional custodians of the land and pays respect to Elders past, present and future.

We recognise Australian Aboriginal and Torres Strait Islander peoples' unique cultural and spiritual relationships to place and their rich contribution to society.

Artist and designer Nikita Ridgeway from Aboriginal design agency – Boss Lady Creative Designs, created the People and Community symbol.

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Response to the Net Zero Commission 2024 Annual Report and the Parliamentary Joint Standing Committee on Net Zero Future's Inquiry

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Minister's introduction

The Net Zero Commission's 2024 Annual Report and the Parliamentary Joint Standing Committee on Net Zero Future's Inquiry make it clear that action on climate change is urgent.

The NSW Government acknowledges this urgency and the need to remain steadfast in taking action on climate change.

Legislating ambitious emissions reduction targets, setting up the Net Zero Commission (the Commission), and making climate change a strategic priority of government are the first steps not the last.

The Commission has been created to give frank, independent advice on the steps needed to meet our targets.

It has delivered on this role with its first annual report, which was produced just a few months after being established. The report provides a marker for how progress is tracking as well as laying a foundation for future work.

I would like to thank the Commission for the effort that went into producing this report so expediently and its ongoing work giving trusted advice.

I would also like to thank the members of the Joint Standing Committee on Net Zero Future (the Committee) for their Inquiry, and the stakeholders who participated in it.

To bring together these processes, this document outlines the government's responses to both the Commission's report and the Committee's recommendations.

It is clear from the Commission's report, and NSW emissions modelling, that NSW needs to accelerate its actions to meet the state's emissions reduction targets. We are not on track to reach our targets and must do more to reduce emissions.

“

In response, I'm pleased to confirm that we will develop a new Net Zero Plan for NSW.

”

The new plan will chart a path for emissions reduction across the NSW economy, focusing on the decade from now until 2035. It will outline ambitious climate action to get us back on track to achieve our 2030 and 2035 emissions reduction targets – and reach net zero by 2050.

The NSW Government will also consult on new adaptation regulations under the *Climate Change (Net Zero Future) Act 2023* (Climate Change Act) before the end of 2026 and complete the first NSW climate change risk and opportunity assessment by the end of 2025.

I am also pleased to confirm that the government supports all 4 of the Committee's recommendations.

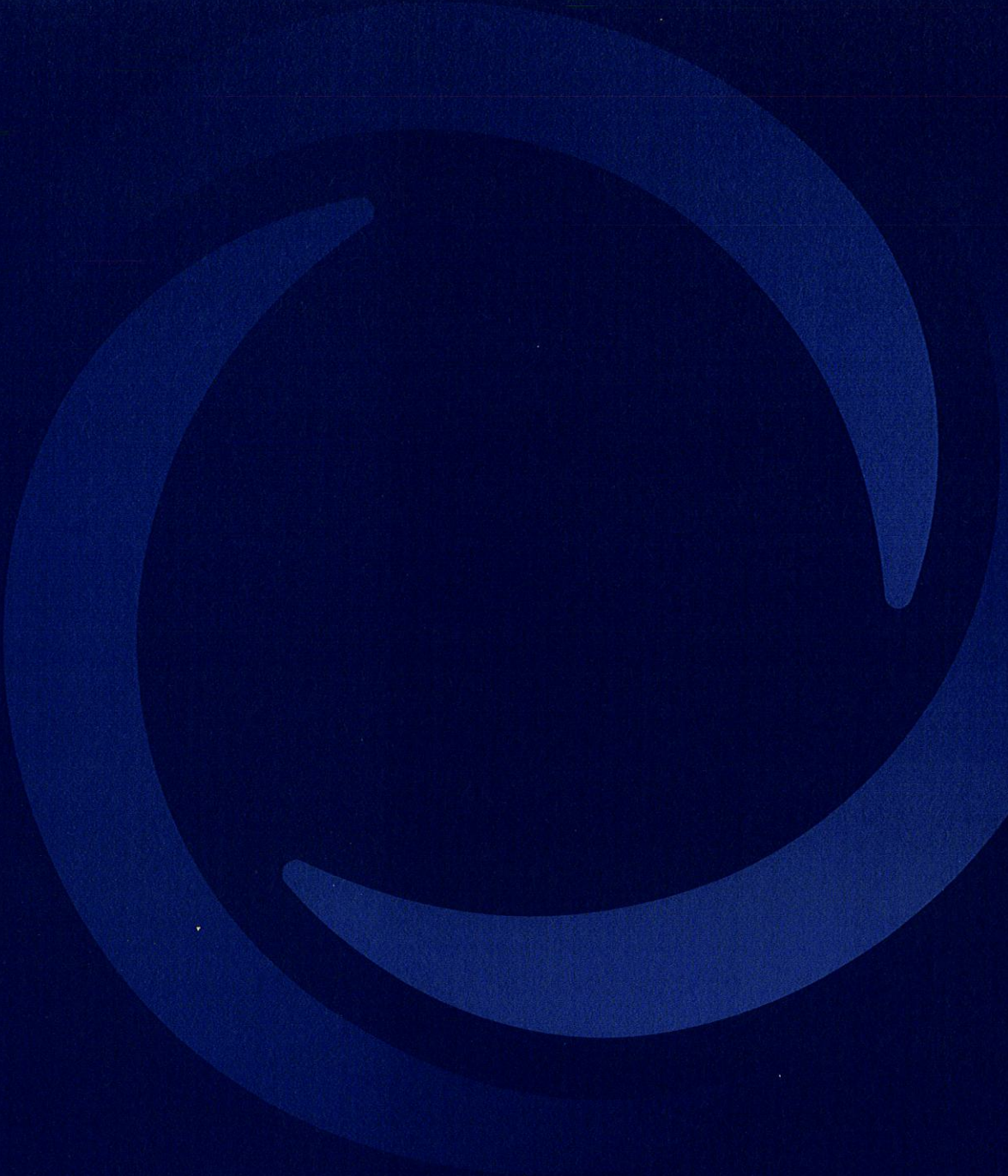
I look forward to working with the Commission as we continue to take action to address climate change and work towards a sustainable future for NSW.



Hon. Penny Sharpe, MLC

Minister for Climate Change, Energy,
the Environment, and Heritage

Leader of the Government in the
Legislative Council

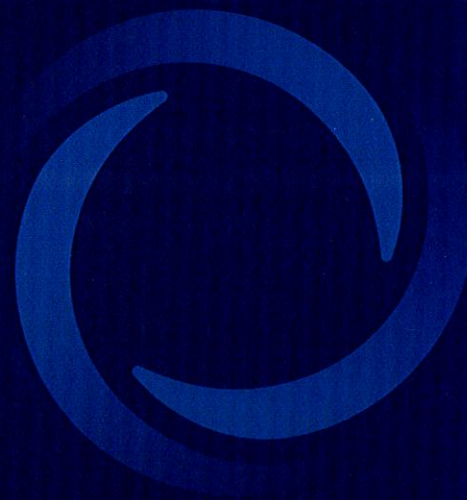


Response to the Net Zero Commission's 2024 Annual Report



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Section 1: Mitigation



The NSW Government recognises the urgent need to address climate change and is committed to accelerating action to meet the emissions reduction targets set in the Climate Change Act.

What the Commission found:

While many of the foundational elements of the transition to net zero emissions are in place and considerable progress has been made, achievement of the emissions targets (50% below 2005 levels by 2030 and 70% below 2005 levels by 2035) in the Climate Change Act is not assured unless action is accelerated.



Building a clean reliable electricity system is key to decarbonisation across all sectors.

©DCCEEW / Mike Terry

Key points



All areas of government have been brought together to prioritise action on climate change

The NSW Government has made climate change action a strategic priority. It is taking a whole-of-government approach to drive coordinated action to reduce emissions and make NSW more resilient to a changing climate. Climate change considerations are also being embedded into government decision making to ensure the government's actions and investments are aligned with the state's climate change objectives.

A whole-of-government Climate Change Network has been established to drive accountability, collaboration and progress towards emissions reduction and adaptation targets. The network brings together all NSW Government portfolios to develop clear actions, track progress, share data and insights, and build capacity.



Climate change is being embedded into decision making

Since December 2024, the government has factored carbon into large capital projects to encourage lower emission options. NSW Treasury's policy and guidelines set the carbon values that NSW Government agencies must use to calculate carbon emission impacts in cost-benefit analysis for capital projects of \$100 million or more, or projects where a carbon value may materially impact decision making. This will deliver a clear advantage for project options that release fewer emissions.

NSW Government agencies must also manage and measure carbon emissions at each stage of public infrastructure projects, from raw material supply through to installation. The NSW Government Decarbonising Infrastructure Delivery Policy, released by Infrastructure NSW in April 2024, applies to building projects of more than \$50 million and all other infrastructure projects of more than \$100 million. Government agencies are also encouraged to assess embodied carbon across the whole of a project's life and carry out climate change risk assessments as a part of disclosure requirements.

A new Net Zero Plan to get NSW back on track

The NSW Government will develop a new, ambitious Net Zero Plan for the next 10 years that will chart a path for NSW to achieve its 2030 and 2035 emissions reduction targets, and stay on track for net zero by 2050. The new plan will refocus and reset our priority actions.

In its report, the Commission highlighted the need for all areas of government to be involved. The government agrees that all Ministers and departments will need to play their part in meeting NSW's targets.

The NSW Government is establishing a model for all Ministers to drive climate action and accountability in their portfolios. This will enable departments and other government agencies to identify and take advantage of opportunities across the economy.

As part of the new Net Zero Plan, Ministers and their departments will develop commitments for their respective sectors to reduce emissions. This will include consulting stakeholders to determine what commitments are suitable.



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Transport and Built Environment will be the focus areas for the new Net Zero Plan

In addition to the existing Electricity Infrastructure Roadmap and the Waste and Sustainable Material Strategy, the new Net Zero Plan will identify transport and built environment as priority sectors for emissions reductions to meet the 2030 and 2035 targets.

Transport is the second-highest emitting sector in NSW and has been a growing source of emissions since 2005. There are huge opportunities to use electricity and renewable fuels to reduce the sector's emissions, while maintaining or improving services. Many of these opportunities would also reduce consumers' transport running costs.

Emissions from the built environment have doubled in NSW since 2005. However, technologies to decarbonise our buildings are already commercially available, while processes to decarbonise construction are maturing quickly. As in the transport sector, the implementation of many new building technologies and processes would not increase costs, and some could even reduce costs.



Government will work with all sectors to improve capability

The NSW Government recognises that sectors of the economy will decarbonise at different rates. The availability and affordability of emissions reduction technologies differs across sectors, while sectoral planning for emissions reduction is at varying stages of maturity.

Nevertheless, the government's policy is that all sectors need to ratchet down their emissions to meet the state's legislated targets, and the targets that will be established for 2040 and 2045.

The NSW Government will continue to work with sectors across the entire economy to progress NSW's emissions reduction capability. The Net Zero Industry and Innovation Program and the Primary Industries Productivity and Abatement Program (PIPAP) are examples where government is helping the industrial, agriculture and land sectors address the challenges they face in reducing their emissions.

The government acknowledges there is more to do. The new Net Zero Plan to 2035 will contribute to ensuring all parts of government are working towards the same goal, so that all sectors of the economy can contribute to NSW meeting its ambitious emissions reduction targets.



The EPA will continue to regulate greenhouse gas emissions

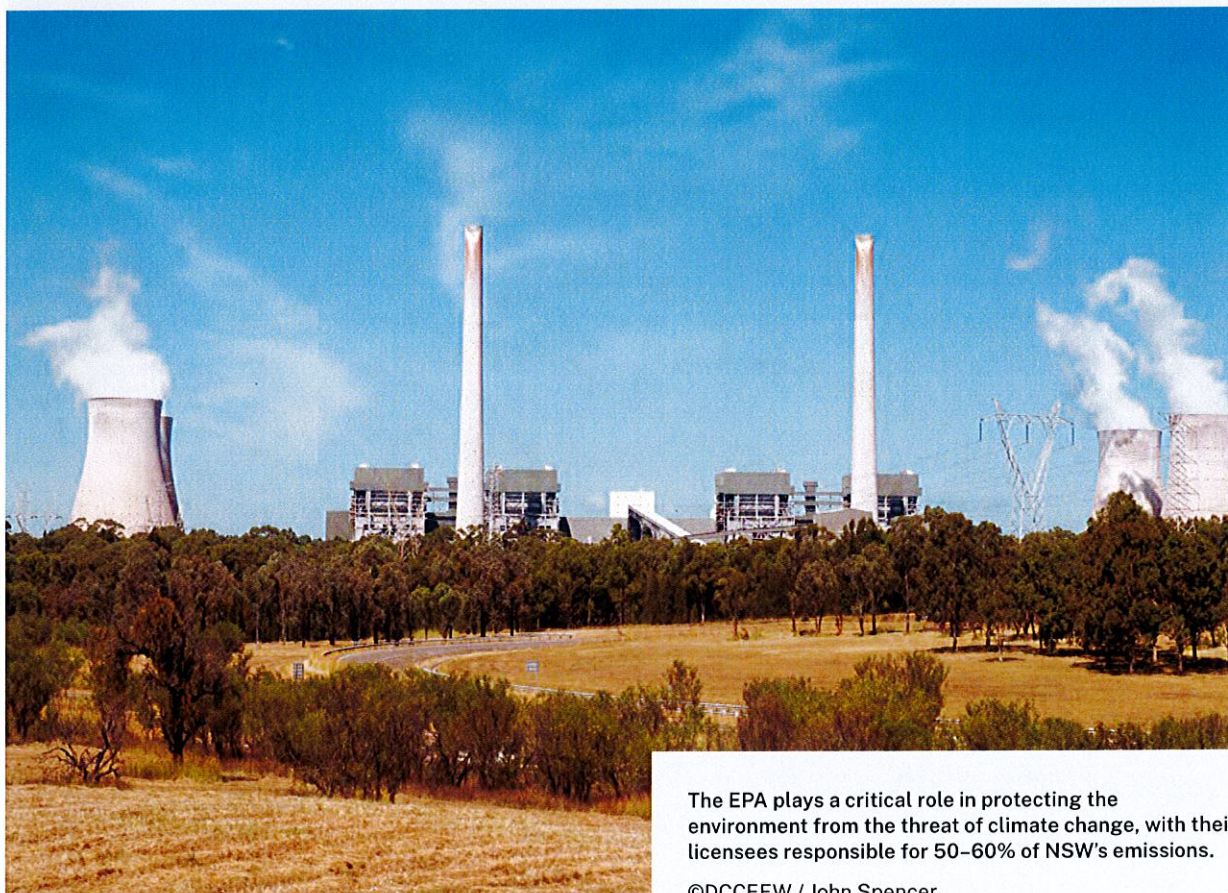
The NSW Environment Protection Authority (EPA) plays a critical role in protecting the environment from the threat of climate change and delivering actions that will support NSW to achieve net zero emissions by 2050.

As a regulator, the EPA's remit crosses several sectors, with its licensees responsible for emitting 50 to 60% of the state's emissions. The EPA's Climate Change Policy and Action Plan sets out a comprehensive program of increasing regulatory requirements to reduce emissions.

These requirements include emissions reporting, and requirements to develop plans to reduce emissions and mitigate climate change's risks to the environment. They also include monitoring and measurement where emissions are uncertain, such as for fugitive methane emissions.

The EPA will release sector-specific guidance on emissions reduction and climate risk reduction to set the baseline expectation. The EPA will consult on its first mitigation guide, for the coal sector, in mid-2025.

The EPA will soon implement climate change requirements for activities that are regulated through Environment Protection Licences. The EPA will also begin to consider regulatory levers for broader parts of the economy. This will help bring incentives and regulatory requirements together.



The EPA plays a critical role in protecting the environment from the threat of climate change, with their licensees responsible for 50–60% of NSW's emissions.

©DCCEEW / John Spencer

Recent progress and future actions

Since the Commission's report was released, the NSW Government has launched significant new policies and programs across sectors, in addition to ongoing work, to continue to reduce emissions.



The Net Zero Government Operations Policy ensures government agencies reduce their energy use, and decarbonise their buildings and vehicles under long-term net zero transition plans.

©NSW Health

Government sector

NSW Government agencies will lead the way through efforts to reduce our own operational emissions and encourage wider action. Although only comprising 3% of NSW emissions, the NSW Government plays an important role in leading by example.

Existing action

- The Government Resource Efficiency Policy was in place since 2014 (superseded by the Net Zero Government Operations Policy in March 2025).
- The NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW) houses specialised teams that act as a centre of excellence within the government to assist government agencies and councils to improve resource efficiency, develop net zero emission pathways and generate renewable energy from government-owned assets.

Action since the Net Zero Commission report

Net Zero Government Operations Policy

The Net Zero Government Operations Policy ensures government agencies reduce their energy use, and decarbonise their buildings and vehicles under long-term net zero transition plans.

Key commitments in the policy include:

1. The NSW Government will reduce its emissions in line with NSW target trajectories of 50% by 2030 and 70% by 2035.
2. The NSW Government will look at opportunities to host grid-scale renewables on government land.

3. From 1 July 2026, all new office buildings commissioned for or by the NSW Government must be all-electric. All new and existing government-owned and leased office buildings are required to achieve and maintain minimum National Australian Built Environment Rating System (NABERS) ratings.
4. NSW Government agencies must replace gas-fired plant and equipment with electric or other fossil fuel-free alternatives at end of life, or earlier if cost-effective.
5. NSW Government agencies must report their performance against this policy and publish their results against the key performance indicators (KPIs) for each financial year.

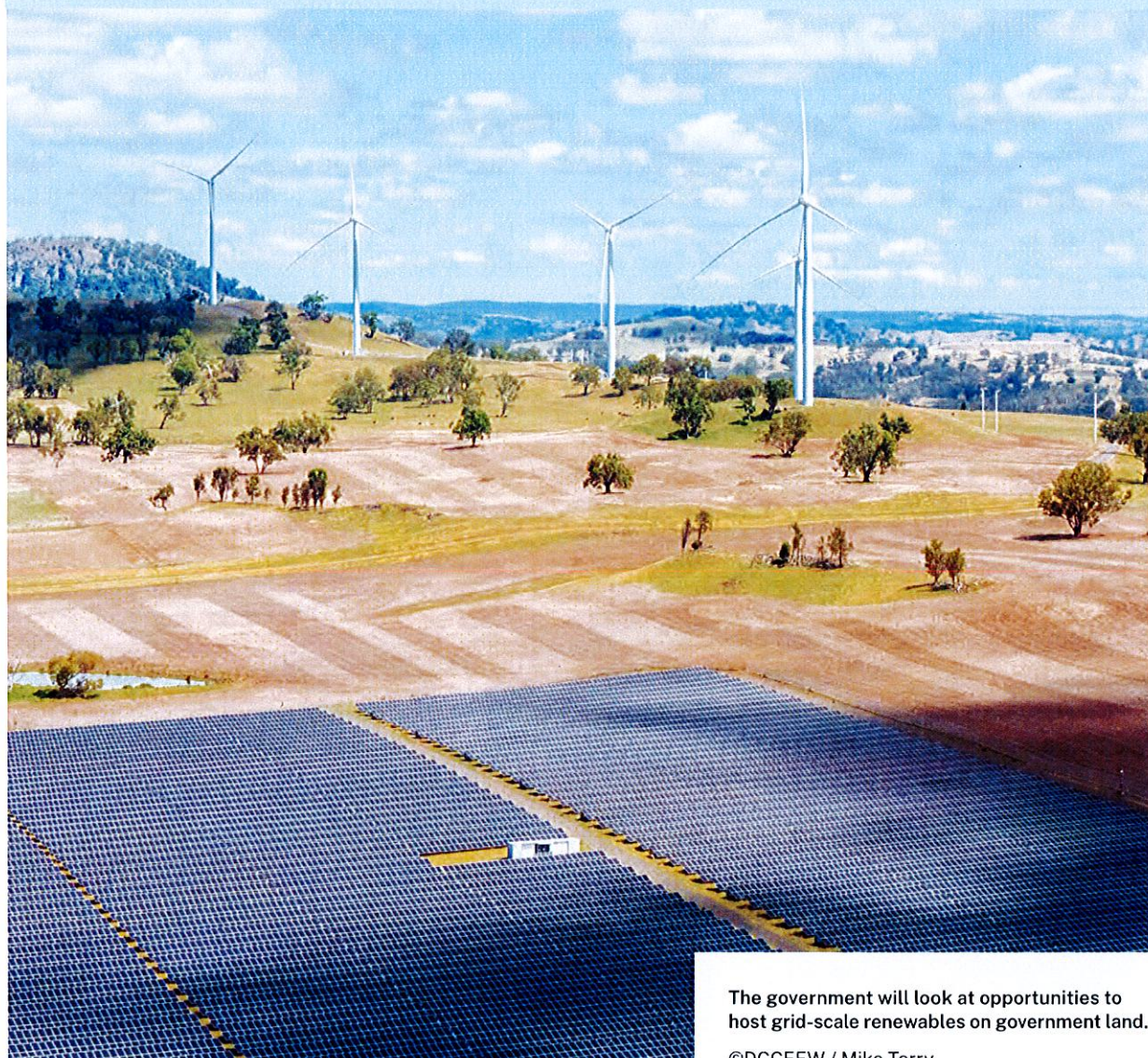
Importantly, emissions reduction reporting is now mandatory for departmental secretaries to ensure their agencies contribute to reducing emissions in government operations. This elevates emissions reduction in line with other key KPIs for department secretaries.

Electricity

Successfully transitioning our electricity sector to renewables will continue to contribute the biggest cuts in NSW emissions in the coming years. Building a clean, reliable and affordable electricity system is also key to unlocking decarbonisation opportunities across the NSW economy.

What the Commission found:

The rapid decarbonisation of the electricity and energy sector is critical for NSW to achieve its emissions reductions targets. There are ongoing risks to the delivery of the Electricity Infrastructure Roadmap, particularly regarding transmission projects, that require close ongoing monitoring and attention. A sustained focus on streamlining processes and addressing barriers to implementation is required to ensure critical electricity infrastructure is delivered as fast as possible.



The government will look at opportunities to host grid-scale renewables on government land.

©DCCEEW / Mike Terry

Existing action

- The Electricity Infrastructure Roadmap is supporting the private sector to deliver at least 12 gigawatts (GW) of new renewable electricity generation and 2 GW of long-duration storage by 2030, and an additional 12 gigawatt hours (GWh) of long-duration storage by 2034.
- The Energy Security Safeguard, which includes the Energy Savings Scheme and the Peak Demand Reduction Scheme, offers financial incentives to purchase energy-efficient equipment and reduce energy consumption during periods of high demand.

Action since the Net Zero Commission report

Capacity Investment Scheme commitments

The Commonwealth's Capacity Investment Scheme (CIS) is underwriting renewable energy generation and clean dispatchable capacity to support its national '82% renewable electricity by 2030' target. In November 2024, NSW and the Commonwealth agreed that the scheme will support 7.1 GW of renewable energy projects and a minimum of 1.3 GW/5.2 GWh of dispatchable capacity projects in NSW. In the first round in NSW, six battery and virtual power plant projects were selected, totalling over 1 GW of capacity.

Energy Security Corporation

The Energy Security Corporation's first investment mandate was issued in February 2025. The mandate supports decarbonising the electricity grid by prioritising investment in:

- utility scale storage projects with the following capacities:
 - 8 hours or more to cover long periods of lower-than-expected variable renewable energy availability

- between 4 to 8 hours long
- up to 4 hours long, connected to a distribution network
- energy generation, storage and end-use equipment located on the customer side of the electricity meter, including, but not limited to, virtual power plants
- system security and network infrastructure.

NSW Transmission Planning Review 2025

The Electricity Supply and Reliability Check Up recommended an expert review of transmission planning arrangements in NSW to reduce duplication and improve coordination between Electricity Infrastructure Roadmap bodies. The expert panel published a consultation paper in February 2025. The review is scheduled to conclude by September 2025.

Priority Transmission Infrastructure Projects to cover system strength

The NSW Government amended the *Electricity Infrastructure Investment Act 2020* in November 2024 to allow system strength projects to be directed or authorised as a priority project if necessary. An Infrastructure Planner has been appointed to support the Minister's consideration of a Priority Transmission Infrastructure Project to reduce the risk of a system strength shortfall in 2027–28.

The Australian Energy Market Operator and Transgrid are forecasting a shortfall in system strength in 2027–28. This is related to the exit of coal-fired power stations and means that synchronous condensers are needed to support the increased penetration of renewable energy and prevent blackouts. This specialist equipment has long production lead times and there is only a handful of global manufacturers.

Progress on renewable energy zones (REZs)

Since the Commission's report, the NSW Government has:

- signed a project deed with ACERES and reached financial close on the Central-West Orana REZ transmission project. This landmark project will power more than 2 million homes each year by connecting solar and wind farms and energy storage to the NSW electricity grid
- signed a commitment deed with Transgrid to develop the Hunter Transmission Project
- signed a commitment deed with Ausgrid to develop the Hunter-Central Coast REZ network project (proposed to establish an additional 1 GW of new network capacity)
- commenced the procurement process for a network operator to deliver the New England REZ transmission project
- awarded access rights for the South West REZ to four wind, solar and battery projects (3.56 GW)
- announced support for three projects representing 1.03 GW (13.79 GWh) of long-duration storage capacity, providing a major boost to reliability in a decarbonising grid.

Home batteries in Peak Demand Reduction Scheme

In November 2024, the NSW Government introduced household battery incentives through the NSW Peak Demand Reduction Scheme (PDRS). From launch until 1 May 2025, more than 11,000 batteries have been installed in homes and businesses across NSW with PDRS incentives. The PDRS also provides incentives for households and small businesses to register their battery as part of a virtual power plant (VPP) to sell spare energy to the grid. Batteries provide the ability to store solar energy for later use and export any spare energy, reducing the need for coal and gas generation to meet peak demand for electricity.

From 1 July 2025, the Australian Government's Cheaper Home Batteries Program is set to commence and provide discounts to install a battery equivalent to around double the existing PDRS incentive. In response, the NSW Government will remove its incentive for battery installations, but increase its available incentive for a battery to join a VPP.

Consumer energy initiatives

More consumer energy initiatives are covered below in the discussion of the built environment.



More than 11,000 batteries were installed in NSW between November 2024 and May 2025 under the NSW Peak Demand Reduction Scheme.

©DCCEEW / Silvia Liber

Transport

Capturing the opportunities to decarbonise the way we move can improve the quality of life of drivers, passengers and pedestrians by delivering cheaper transport costs and cleaner air.

What the Commission found:

The transport sector has been a growing source of emissions in NSW since 2005 and will take over as the largest emitting sector by 2030. Despite positive steps in 2023–24, emissions in this sector are not yet on a consistent reduction trajectory, and further policy action will likely be needed in coming years. This includes taking a holistic approach that accelerates the uptake of zero and low emissions transport for people and freight.



The NSW Electric Vehicle Strategy aims to increase electric vehicle penetration to 52% of new car sales by 2030–31.

©DCCEEW / Jeremy Park

Existing action

- The NSW Electric Vehicle Strategy is supporting the decarbonisation of passenger and light commercial fleet, which represents over 50% of the transport sector's emissions. The strategy includes a target to increase electric vehicle penetration to 52% of new car sales by 2030–31 and significant funding to provide charging infrastructure.
- The government continues to invest in Sydney's public transport network to encourage mode shifting from passenger vehicles, including an investment of \$20 billion towards the new Sydney Metro. This will deliver the Metro West line and the extension of Metro's City section.
- Transport for NSW (TfNSW) has two policies that support the decarbonisation of buses and road-and-rail freight, which represent about 25% of the sector's emissions:
 - TfNSW's Towards Net Zero Freight Policy sets out a clear pathway to help the road and rail freight transport sector significantly reduce its emissions.
 - TfNSW's Net Zero and Climate Change Policy sets out a target of net zero transport sector emissions by 2050. This policy also includes the Zero Emission Buses Transition Plan for NSW's 8,000-plus bus fleet. Under this plan, NSW Government buses will produce zero emissions in Greater Sydney by 2035, in Outer Metropolitan regions by 2040, and in Regional NSW by 2047.

Action since the Net Zero Commission report

Heavy transport

The NSW Government continues to explore solutions for alternative fuels for heavy transport through the new Renewable Fuel Strategy. The strategy will outline a roadmap to seed development of a sustainable renewable fuel industry for NSW to support decarbonising hard-to-abate sectors. It is expected to be finalised in mid-2025. The government is also exploring opportunities to electrify the heavy vehicle fleet.

Public transport

In December 2024, the NSW Government ordered 319 battery electric buses as part of the department's Zero Emission Buses Program.



Passenger and light vehicles are responsible for more than half the transport sector's emissions.

©DCCEEW

Agriculture and land

Climate change represents a risk to the agriculture sector's ability to produce food and fibre through a warming climate and more significant disaster events. Decarbonising the sector's emissions and acting on climate change is key to protecting the future prosperity of the sector.

The land sector plays a key role as a carbon sink and could be better managed to offset emissions. The impacts of climate change, particularly fire, on our landscapes' existing carbon stocks and the ability to absorb carbon will also need to be closely monitored and managed.

What the Commission found:

Without accelerated efforts from governments and agricultural producers, the agriculture sector is unlikely to significantly contribute to the state's primary emissions reduction targets for 2030 and 2035, and is likely to be the largest source of emissions by 2050.

Reductions in net emissions from the land sector since 2005 could make major contributions to the state's 2030 and 2035 emissions reduction targets. However, these reported emissions reductions and their potential to continue over time is subject to significant uncertainty. Increased focus now needs to be placed on reducing emissions in other sectors.



By integrating carbon abatement into the farm business, farmers can increase drought resilience and farm productivity.

©DCCEEW / David Wayland

Existing action

- The Primary Industries Productivity and Abatement program (PIPAP) is investing \$105 million to support farmers and land managers across the state to reduce emissions while maintaining productivity, creating new jobs and enhancing biodiversity on their land.
- The Land and Primary Industries Network is part of the NSW Decarbonisation Hub. It consolidates industry, government, community and research expertise in emissions reduction, fostering innovation, technology adoption and commercialisation opportunities.
- The NSW National Parks and Wildlife Service (NPWS) Fire Management Program is a strategic approach to managing fires in national parks. Since the 2019-20 fires NPWS has significantly bolstered the program to address the increasing risk from climate change.
- The NSW National Parks and Wildlife Service Carbon Positive by 2028 Plan sets net zero targets for operational emissions by 2028. NPWS has registered carbon projects with the Australian Carbon Credit Unit Scheme to increase carbon sequestration and reach its carbon positive target by 2028.
- The NSW Government has committed to creating a Great Koala National Park, and is assessing 175,000 hectares of public state forests to connect with existing national parks.
- The Department of Primary Industries and Regional Development continues to promote research and development, including in animals and livestock, biosecurity and food safety, cropping and horticulture, and soil and water research.

Action since the Net Zero Commission report

Emissions reduction roadmap for the primary industries and land sector

The Department of Primary Industries and Regional Development is working with PIPAP and the NSW Land and Primary Industries Network to finalise an emissions reduction roadmap for the sector this year. This roadmap will identify measures for each industry sub-sector to abate emissions in the short-term. It will estimate abatement potential where data is available, identify key data and knowledge gaps, and highlight barriers to adoption.



PIPAP is helping farmers and land managers to reduce emissions while maintaining productivity, creating new jobs and enhancing biodiversity.

©DCCEEW / Matt Beaver

Industry

A strategic approach to decarbonising industry can position NSW as a leader in the low-carbon economy of the future and ensure good, sustainable jobs for future generations, especially in regional NSW.

What the Commission found:

While there are opportunities to reduce emissions this decade, many industrial processes currently lack viable short-term abatement options. Investment and planning are required to enable significant parts of the sector to reduce their emissions in the 2030s and 2040s.



The Net Zero Industry and Innovation Program helps industries reduce their emissions, establish low-emissions industries and develop new technologies.

©DCCEW

Existing action

- The Net Zero Industry and Innovation Program provides more than \$1 billion to help industries reduce their emissions, establish low-emissions industries and develop new technologies.
- The Renewable Fuel Scheme sets an annual target for green hydrogen production.
- The NSW Hydrogen Strategy is a \$3 billion pathway to develop a green hydrogen industry in NSW. It includes providing incentives of up to \$4 per kg of green hydrogen and actions to help deliver the NSW Renewable Fuel Scheme.
- The Net Zero Manufacturing Initiative is helping NSW businesses and industries transition to net zero by increasing their competitiveness, attracting investment and opening new growth opportunities. The initiative is providing up to \$275 million of funding in its current round.



The NSW Industry Policy reinforces the NSW Government's commitment to a thriving low-carbon industrial sector.

©DCCEEW / Leo-Pol Letronnier

Action since the Net Zero Commission report

The government recognises that a focus on long-term planning is needed to support NSW industries to capture the opportunities of a low-carbon future. Many processes that drive NSW industry are considered hard-to-abate and face high investment costs and long lead times to reduce emissions.

Climate change mitigation plans for large emitters

The EPA is preparing requirements for large greenhouse gas emitters to develop climate change mitigation and adaptation plans to develop a path towards decarbonisation. They will need to publish transparent plans to decarbonise their operations. These emitters produce about half of NSW's current greenhouse gas emissions.

In February 2025, the EPA released the NSW Guide for Large Emitters to support project proponents to assess the greenhouse gas emissions associated with their development proposals.

NSW Industry Policy

The NSW Industry Policy sets local manufacturing targets for the period to 2040. It reinforces the NSW Government's commitment to a thriving low-carbon industrial sector. With a focus on housing, local manufacturing, and the net zero and energy transition, the policy sets a clear direction. It aims to help NSW become a globally competitive clean energy, sustainable and low-carbon economy.

Waste

NSW is implementing an ambitious agenda to significantly reduce the emissions from and impact of waste. This includes diverting organics away from landfill to significantly reduce emissions and funding new approaches for circular economy to more effectively manage waste and materials.

What the Commission found:

Reductions in waste emissions have largely been driven by landfill gas capture. Increasing the landfill gas capture rate will further reduce emissions. But complementary actions, such as diverting organics from landfill and avoiding waste, will be important for long-term decarbonisation.



NSW is aiming to reduce waste generation by 10% per person by 2030.

©DCCEW / Rosie Nicolai

Existing action

- The NSW Waste and Sustainable Materials Strategy outlines actions to transition NSW to a circular economy. These actions are backed by \$356 million in funding to help deliver priority programs and policy reforms.
- The EPA's Carbon Recycling and Abatement Fund supports innovative circular economy approaches to reduce emissions, and manage waste and materials more efficiently.
- NSW has agreed to a set of targets under the National Waste Policy Action Plan to reduce waste generation by 10% per person by 2030.

Action since the Net Zero Commission report

Food organics and garden waste

The NSW Government passed legislation in February 2025 to mandate collecting food organics and garden organics (FOGO) from households by 2030, and food organics from large businesses from July 2026.

With this legislation, roughly 1 million tonnes of organic waste should be diverted from landfill each year. This would put NSW on track to at least halve its organic waste to landfill by 2030. Reducing food waste in landfills also reduces emissions in the waste sector.

Resources

Coal mining plays a key role in the NSW economy, however, it will face adjustments as the world shifts to low-carbon alternatives. The NSW Government is committed to helping the resources sector reduce emissions as the role of coal mining is reduced, and as critical mineral mining increases.

What the Commission found:

The Commission is concerned about the risks to the state's targets from increased emissions in the resources sector. There are pressures for increased emissions associated with new coal mining projects, with a sizeable pipeline of projects already submitted for consideration and determination through the planning process. If NSW is to meet its emissions reductions targets, other sectors would need to meet the shortfall to counter emissions increases associated with extended or expanded coal projects.



Coal mining plays a key role in the NSW economy but will need to adjust as the world shifts to low-carbon alternatives.

©DCCEEW / John Spencer

Existing action

- In 2024, following the Minister for Climate Change's policy statement on emissions reduction, the Minister for Planning wrote to the Independent Planning Commission to emphasise the need to consider NSW's emissions reduction targets when examining new developments, including coal mine expansions.
- The NSW High Emitting Industries fund offers grants to NSW's highest emitting mines to implement emission reduction technologies such as Ventilation Air Methane Abatement. The NSW Coal Innovation Fund co-invested in the Ventilation Air Methane Abatement Pilot at Appin Colliery, which tests the commercial viability and safety requirements of the technology to support future commercialisation and uptake in NSW.

Action since the Net Zero Commission report

Emissions monitoring network

The NSW Government will establish a regional monitoring network for greenhouse gases, starting in the Hunter region. This will help to validate emission inventories, inform the regulation and mitigation of emissions, and improve our understanding of emissions and emissions reductions over time.

Coal mine mitigation guide

The EPA is developing a coal mine mitigation guide, which will be released in mid-2025 for public consultation. This guide will set out expectations for the specific mitigation actions that coal mines should implement by specific dates. Signalling these regulatory requirements now, with ample lead time, will stimulate the market to respond with new technologies and allow the government to address regulatory and safety concerns.

Strategic Statement on Coal

The NSW Government is reviewing the Strategic Statement on Coal Exploration and Mining in NSW. The government's position on coal exploration and mining will outline the role that coal will play in the NSW economy, and the role for the sector in reducing its emissions in NSW.



The NSW Government is reviewing the role that coal will play in the NSW economy and in reducing its emissions in NSW.

©DCCEEW / Jeremy Park

Built environment

Acting to reduce emissions from the built environment can reduce costs and lead to healthier living. A focus on embodied emissions from construction will ensure emissions are being considered across the entire value chain.

The Commission's report focussed on three areas of emissions from buildings: energy, refrigerants and construction. Given the Australian Government regulates refrigerants, the NSW Government is acting on construction and energy.

What the Commission found:

Emissions in the built environment sector have nearly doubled since 2005. Most of the technologies needed to reduce and even eliminate emissions in this sector are already commercially available, with scope for significant policy action by governments and greater action by industry and households. The release of the NSW Consumer Energy Strategy in September 2024 is a positive step.

Existing action

- The NSW Government is supporting households and small businesses to reduce their energy emissions from the built environment by implementing the 50 actions in its ambitious 2024 Consumer Energy Strategy.
- Incentives for replacing gas boilers with heat pumps have been introduced in the NSW Energy Savings Scheme to reduce the upfront cost of electrifying for households and businesses.
- The NSW Sustainable Buildings State Environmental Planning Policy has introduced embodied carbon reporting requirements for new building developments to encourage low-carbon building materials.



The NSW Consumer Energy Strategy includes 50 actions to help householders and small businesses reduce their energy emissions.

©DCCEEW / Sylvia Liber

Action since the Net Zero Commission report

NABERS for embodied carbon

NSW led the development of the national standard for measuring and reducing embodied carbon in buildings. The standard was developed in conjunction with all government jurisdictions through NABERS and released in November 2024. NABERS is a world-leading program to increase building sustainability and reduce emissions from the sector.

Low-carbon concrete

In January 2025, the NSW Government released guidance for the use of low-carbon concrete in construction projects. While cement makes up only 10-15% of concrete, it contributes up to 95% of its embodied carbon. The carbon footprint of cement can be significantly reduced by using prescribed amounts of cement alternatives or the use of more sustainable energy processes by cement manufacturers. The guidance covers all phases of a construction project from inception to design and implementation.

Requirements for NSW Government buildings

The Net Zero Government Operations Policy has new requirements for the built environment sector. This includes requiring that from 1 July 2026, all new office buildings commissioned for, or by, the NSW Government must be all-electric.



The built environment will be a focus area of the new Net Zero Plan.

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Sustainable construction

The government consulted on a proposed Sustainable Construction Protection of the Environment Policy in early 2025. The proposed policy aims to promote a circular economy in NSW and decarbonise the infrastructure delivery sector.

The policy will create a monitoring mechanism and strengthen the existing NSW Government Decarbonising Infrastructure Delivery Policy, which already applies to projects as of April 2025. The new proposed policy would add requirements for agencies to preference the use of recycled materials in public infrastructure projects and report on recycled materials used.

The Sustainable Construction Protection of the Environment Policy is proposed to apply to major public infrastructure projects by, or on behalf of a NSW Government agency with a cost of over:

- \$50 million for building sector projects
- \$100 million for all other infrastructure types.

The EPA is reviewing stakeholder feedback before the policy will be finalised.

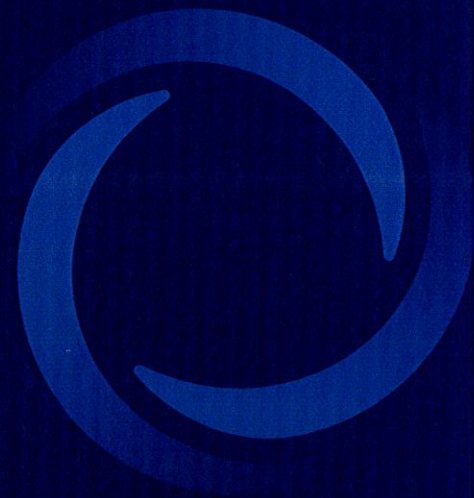
Decarbonising Infrastructure

In May 2025, Infrastructure NSW and Transport for NSW released an update of the joint Decarbonising Infrastructure Roadmap. This includes a commitment to expand the Decarbonising Infrastructure Delivery Policy to cover whole life carbon related to infrastructure.



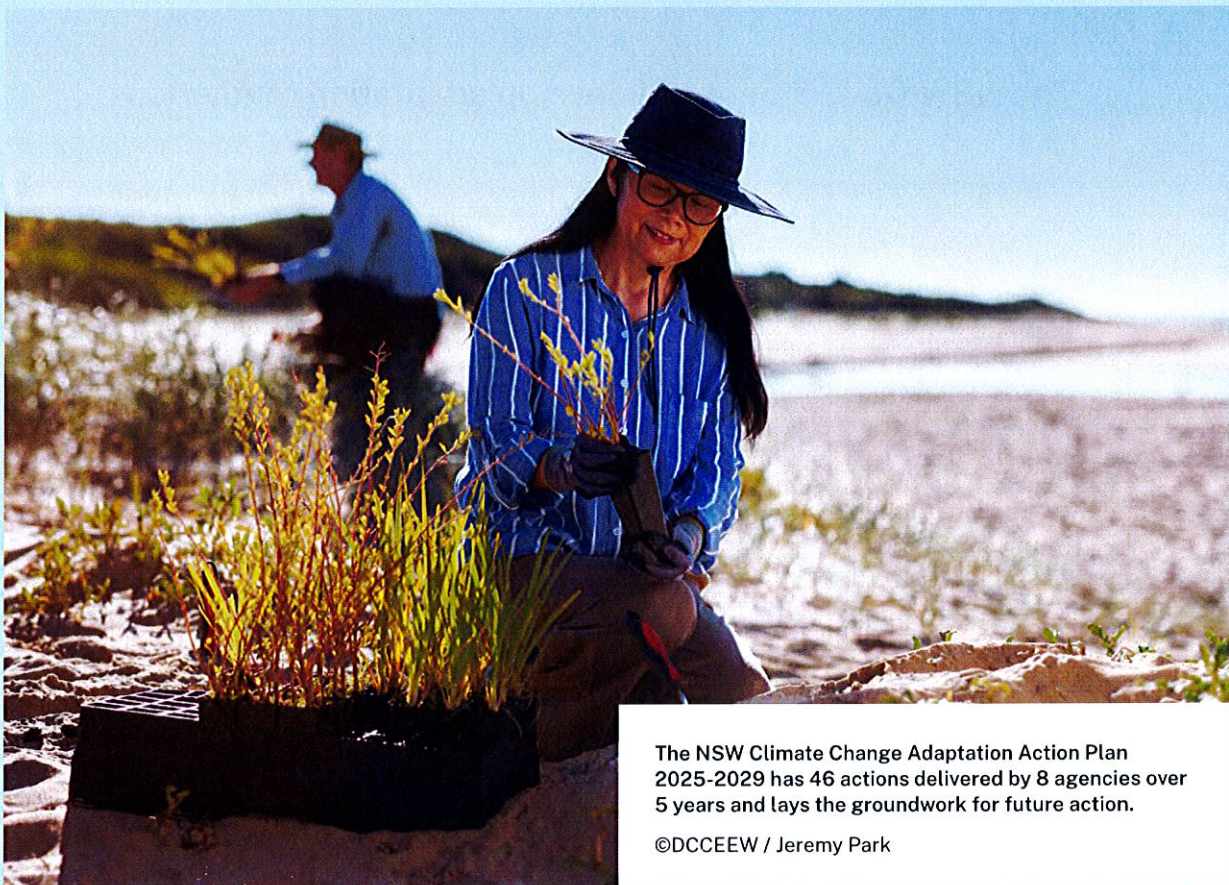
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Section 2: Adaptation



NSW is already living with climate change and a level of further change is already locked in, driven by past emissions and any future emissions.

By adapting now, the NSW Government can maximise opportunities, minimise harm and help secure the state's ongoing prosperity. For these reasons, the government is committed to adapting. The Climate Change Act includes an objective to make NSW more resilient to a changing climate. The NSW Climate Change Adaptation Strategy is the government's key policy to help deliver that objective.



The NSW Climate Change Adaptation Action Plan 2025-2029 has 46 actions delivered by 8 agencies over 5 years and lays the groundwork for future action.

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The NSW Government released the NSW Climate Change Adaptation Action Plan 2025-2029. This plan is the first action plan under the NSW Climate Change Adaptation Strategy, which requires the release of a new action plan for the state at least every 5 years.

The plan has 46 actions delivered by 8 agencies over 5 years and lays the groundwork for future action.

The *NSW Reconstruction Authority Act 2022* (The Act) requires the preparation of a State Disaster Mitigation Plan (SDMP), which must be reviewed every 5 years, and establishes arrangements for preparation of Disaster Adaptation Plans (DAPs). Under the Act both the SDMP and DAPs must include or identify:

- (a) potential strategies and actions for mitigating the impact of disasters on the State, priority areas or regions
- (b) an assessment, and consideration, of the impacts of climate change on disasters
- (c) the basis on which the Authority will monitor and report on the implementation of strategies and actions to mitigate the impact of disasters.

The NSW Government published the first SDMP in 2024 which was informed by a multi-hazard approach, taking into account the impacts of climate change. Implementation of the SDMP 2024–2026 is well progressed with 28 out of a total of 37 actions underway. Preparation of an SDMP monitoring and evaluation plan is also underway and is due for completion in June 2025.

Key points

The NSW Government will develop adaptation regulations



What the Commission found:

The Commission noted that vital elements of NSW's adaptation cycle have not yet progressed. It emphasised that legislating the adaptation cycle of risk assessment, adaptation planning, implementation, monitoring and evaluation, as recommended by the Paris Agreement, could help ensure an adequate state-wide adaptation response for NSW.

In response to the Commission's findings, the NSW Government will consult on regulations to legislate the adaptation cycle (risk assessments, adaptation plans, implementation, monitoring and evaluation) under the Climate Change Act. The regulations may include other requirements that help achieve the objectives of the Climate Change Act before the end of 2026.



The first NSW climate change risk and opportunity assessment

What the Commission found:

The Commission highlighted the importance of completing the first climate change risk and opportunity assessment for NSW as soon as possible.

Understanding climate change risks and opportunities provides the critical information needed to adapt to climate change. As these risks and opportunities are not static, the NSW Government is committed to releasing a new climate change risk and opportunity assessment for NSW at least every 5 years under the NSW Climate Change Adaptation Strategy.

The NSW Government will complete the first assessment by the end of 2025. As part of the assessment, 8 stakeholder workshops were held in November and December 2024 with more than 240 people from state and local government, the private sector and academic backgrounds attending.

Completing the first assessment before the end of 2025 will inform the mid-term 2026 review of the NSW Climate Change Adaptation Action Plan 2025–2029, helping ensure it focuses on key risks and opportunities.



Making climate change part of disaster risk reduction

The NSW Government established the NSW Reconstruction Authority under the *NSW Reconstruction Authority Act 2022*. Part of the Authority's role is to proactively reduce the impact of future disasters on the state and to help communities recover from them faster.

Under the *Reconstruction Authority Act 2022*, the Authority must consider the role that climate change plays in disasters. The Authority released its first State Disaster Mitigation Plan in 2024 and is currently developing Disaster Adaptation Plan Guidelines to help organisations better prepare for disasters.

The guidelines outline a coordinated, place-based and community-centred approach to disaster adaptation planning.



Improving projections and increasing their use in decision making

What the Commission found:

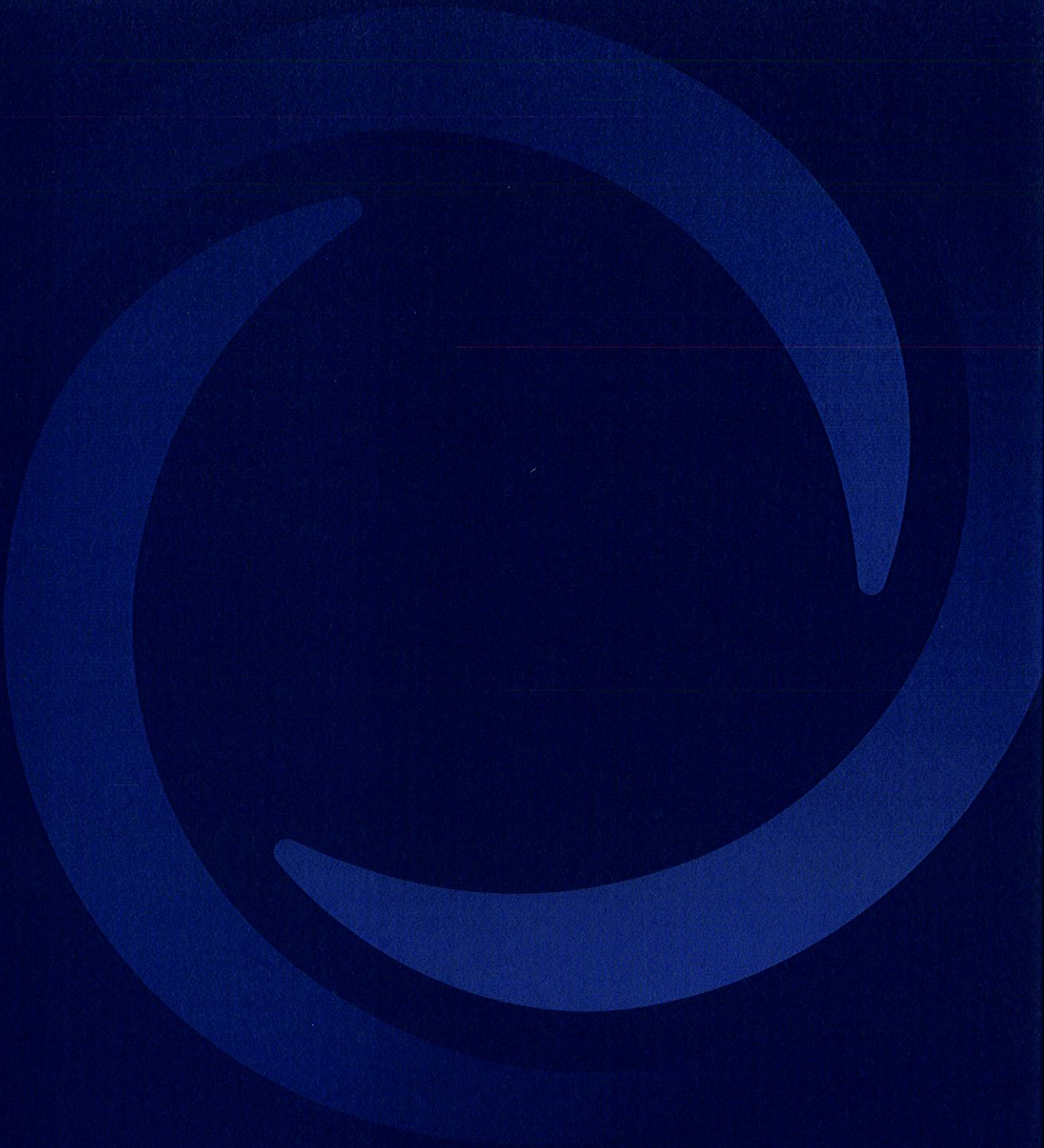
The Commission noted NSW Government agencies should make greater use of the latest projections to ensure decisions address the future vulnerability of NSW communities to climate change. The Commission also noted there may be capability and capacity barriers to the use of climate change projections by NSW Government agencies and other users.

Climate change projections help us understand our potential future climate. They are critical for informing decisions about how to adapt.

The NSW Government is committed to continuously improving its projections. In mid-2025, the government will launch projections for a third greenhouse gas emissions scenario for NSW and Australian Regional Climate Modelling (NARCLiM), which will align with the world's current global emissions trajectory. This will be based on current policy settings according to the United Nations Environment Program Emission's Gap Report 2024. In the second half of 2025, the NSW Government will also release data on how heatwaves, floods, bushfires and storms are likely to change with climate change.

The NSW Government is also committed to providing new support and resources to help decision makers use projections to adapt. Since the Commission's report, more NSW Government agencies are using climate change projections to inform decisions. For example, NARCLiM is being used to:

- estimate the impact of heatwaves on labour productivity in an upcoming edition of the NSW Treasury's NSW Intergenerational Report
- inform Land iQ, a tool designed to help government agencies streamline planning and pre-development processes
- develop the Reconstruction Authority's Disaster Risk Data and Insights Platform which analyses the modelled costs of current and future risk posed by natural hazards under a range of population growth and climate change scenarios.



Response to the Parliamentary Committee Inquiry

Response to the Parliamentary Committee Inquiry

Established in June 2024, the Joint Standing Committee on Net Zero Future monitors and reviews the Commission's functions under the Climate Change Act. The Minister asked the Committee to inquire into and report on the Net Zero Commission's 2024 Annual Report.

The findings of the inquiry were published in a report on 28 March 2025. The report included four recommendations in response to the Commission's report, input from the public hearing and submissions received during the inquiry process.

Recommendation 1

That the government:

- ensures the Commission is well resourced and supported by other departments and agencies in order to deliver its legislated objectives for the state of New South Wales, and
- responds with careful consideration to the observations and advice of the Commission.

Government response to recommendation 1: support

The government is ensuring that the Commission is well resourced and supported to complete its mandated work. It is also carefully considering the Commission's observations and advice. For example, officials have engaged and consulted across government on the response to the Commission's report to ensure a whole-of-government approach.

As discussed above in response to the Commission's annual report, the government will develop a new Net Zero Plan to get the state back on track to achieve its legislated 2030 and 2035 emissions reduction targets.

Recommendation 2

That the government supports the Commission to use its legislated functions to provide a further report on the resources sector, including methane abatement technology and fugitive emissions, as a matter of urgency.

Government response to recommendation 2: support

The Minister for Climate Change will ask the Commission to advise on developing a new Net Zero Plan, which will include advice on the resources sector.

The EPA will be releasing a Greenhouse Gas Mitigation Guide for the Coal Mining sector for public consultation in mid-2025. The Commission will be asked for feedback as part of the public consultation process to help reduce duplication and meet the intent of the inquiry's recommendation.

Recommendation 3

That the government consider implementing regulatory changes to encourage the earlier adoption of low emissions technologies.

Response to recommendation 3: support

The NSW Government's new Net Zero Plan will consider all policy levers available to government, including regulation.

Recommendation 4

That the government implement changes in regards to energy ratings for existing homes that could be disclosed at point of sale or lease to provide buyers or renters information on energy efficiency before making the decision to buy or lease the property.

Response to recommendation 4: support

As part of the NSW Consumer Energy Strategy, the NSW Government has committed to introducing voluntary disclosure of home energy ratings at the point-of-sale or during leasing in 2025, beginning with trials. A review of the voluntary scheme will inform when to transition to a mandatory scheme.



The NSW Government will introduce voluntary disclosure of energy ratings for homes to provide renters and home buyers with information on thermal efficiency of buildings.

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For more information

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