#### INQUIRY INTO CLIMATE CHANGE (NET ZERO FUTURE) BILL 2023

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#### Climate Council of Australia

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Addressed to:	Portfolio Committee No. 7 - Planning and Environment
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### **About the Climate Council**

Climate Council is Australia's own independent, evidence-based organisation on climate science, impacts and solutions.

We connect decision-makers, the public and the media to catalyse action at scale, elevate climate stories in the news and shape the conversation on climate consequences and action, at home and abroad.

We advocate for climate policies and solutions that can rapidly drive down emissions, based on the most up-to-date climate science and information.

We do this in partnership with our incredible community: thousands of generous, passionate supporters and donors, who have backed us every step of the way since they crowd-funded our beginning as a non-profit organisation in 2013.

To find out more about the Climate Council's work, visit <u>www.climatecouncil.org.au</u>.

# **1. Introduction**

The Climate Council welcomes the opportunity to comment on the New South Wales' *Climate Change (Net Zero Future) Bill 2023.* 

Legislating climate targets and establishing a framework for monitoring progress towards them is a critical step in advancing climate action. It provides communities, businesses, and investors with a clear roadmap for decarbonisation and ensures that regions can reap the benefits of early and decisive action. To fully realise this potential, the *Net Zero Future Bill* should outline a comprehensive plan for significant and rapid emissions reductions in this current decade, aligning with the urgent scientific imperative to avert the most devastating impacts of climate change.

The Climate Council's recent report, titled <u>"Mission Zero: How Today's</u> <u>Climate Councils Will Reshape Australia"</u> (2023a), underscores the urgency of this mission. We are already witnessing the devastating effects of climate change on New South Wales, including unprecedented wildfires, destructive floods, and extreme heat waves. A predicted hot, dry and dangerous 2023-24 summer will further emphasise the importance of mapping out a strong pathway for emissions reduction in New South Wales.

New South Wales as a significant emitter in terms of domestic emissions and the most populous state, it bears a responsibility to take swift and decisive action to reduce emissions in this crucial decade. The Climate Council's analysis of the latest climate science and available carbon budgets shows that effective action means reducing emissions by 75% from 2005 levels by 2030 and achieving net-zero emissions by 2035 nationally. New South Wales can play an important role in achieving these targets to protect its residents - and all Australians - from further climate harm.

Mission Zero highlights that further delays in taking action will lead to irreversible damage to ecosystems, economies, and public health. We urge all Australian governments to accelerate the transition to renewable energy and clean technologies, cease the approval and funding of fossil fuel projects, and facilitate a significant shift towards electrified public transport and active transportation, such as walking and cycling. The *Net Zero Future Bill* can guide these efforts throughout the New South Wales economy.

This transition also brings substantial opportunities for New South Wales, particularly in its new energy potential, with wind and solar creating jobs in the regions and cheaper energy driving down bills for households.

Given that climate change is already jeopardising lives and livelihoods in New South Wales, and coupled with the immense potential in renewable energy, the *Net Zero Future Bill* should establish a strong pathway that sees the state plays its part in limiting global warming as close as possible to 1.5°C. This submission outlines how the *Net Zero Future Bill* can be strengthened to achieve this goal.

# Climate change is already threatening lives and livelihoods in NSW

All of NSW has warmed since 1910. The average annual temperature has increased by 1.4 °C since 1910 (BoM and CSIRO 2022) and New South Wales is now experiencing a range of weather extremes. According to CSIRO and BoM (2022), in the south-east of Australia, there has been a decrease of around 10 per cent in April to October rainfall since the late 1990s. Whilst New South Wales is getting less rain, it is more intense, leading to more flash flooding. The number of days with dangerous weather conditions for bushfires has also increased across the region. We saw this in the 2019-20 'Black Summer' as fires and heat devastated the East Coast and the 'Great Deluge' in 2022 with heavy flooding sweeping through parts of the State.

New South Wales faces an uncertain future of rising temperatures and increased climate risks. Under a high emissions scenario, the state can expect to see average temperature rises of up to 2.3°C by 2050, leading to more than double the number of hot days (>35 °C) in Sydney. The state would also experience approximately 40% more fire days in this scenario (CSIRO 2021). Sea levels are also expected to rise by around 27 cm along the NSW coast, which may cause significant erosion, inundation and large storm surges (CSIRO 2021).

Climate change is already threatening iconic species such as the Koala and they will be further affected by rising temperatures, impacting their food and habitat (DAWE 2021). The Mountain Pygmy Possum, a species extraordinarily vulnerable to climate change, may also disappear (Lee et al. 2015). Biodiversity hot spots like our Gondwana Rainforests will similarly be deeply affected (Climate Council 2023a).

These forecasts underscore the urgent need for strong climate action to mitigate these risks. The future climate of New South Wales will be determined by the effectiveness of our shared efforts to reduce greenhouse gas emissions. Strong and effective climate legislation can underpin these efforts, so it is vital to get this right.

# NSW's Net Zero Future Bill can guide the way for strong state action

Laws such as the *Net Zero Future Bill* are being enacted globally at national and subnational levels to codify emission reduction goals and organise efforts to achieve these. The World Bank (2020) has analysed dozens of framework laws in place and identified a range of features considered best practice. These include:

- enacting long-term targets, including net zero;
- enacting interim and sectoral targets;
- mandating climate risk and vulnerability assessments;
- requiring climate change strategies and plans;
- enabling policy instruments;
- sourcing independent advice;
- establishing co-ordinations mechanisms for government;
- requiring stakeholder engagement;
- aligning financing implementation;
- requiring measurement and reporting; and
- providing parliamentary oversight.

The proposed *Net Zero Future Bill* shares many of these features, but there is room to make it more effective. A strong law can help to protect the New South Wales community from climate harm and ensure we seize the opportunities that come with transitioning the state's economy.

See below for a side-by-side comparison of the proposed Bill to best practice design:

Optimal design structure				
Best practice	NSW			
Long term science-aligned target	Х			
Science-aligned interim targets	Х			
A climate change risk assessment	Х			
Coordination mechanism for government	Х			

Financing implementation	X
Adaptation and mitigation plans	X
Policy instrument development	1
Requiring stakeholder engagement	1
Monitoring and reporting	1
Parliamentary oversight	$\checkmark$

In light of this, the Climate Council recommends the Bill be improved in the following specific ways.

#### 2030 and 2050 target

Climate Council's research, using a fair and equitable carbon budget approach, shows that reaching net zero by 2050 is too late and a 50% reduction by 2030 is too low. Owing to decades of failure to adequately reduce emissions, the remaining global carbon budget for a high chance of limiting warming to 1.5°C by the end of this century is either now extremely small or is already exhausted. Table 1 below outlines the remaining carbon budget at different probabilities of temperature rise.

#### Table 1: Global carbon budget.

	Two in three chance (67 percent probability) of limiting warming to 1.5°C		Two in three chance (67 percent probability) of limiting warming to 1.7°C	
Base budget from 1 January 2020 (IPCC 2021a)	400 Gt CO <sub>2</sub>		700 Gt CO <sub>2</sub>	
Emissions for 2020, 2021, 2022 (Friedlingstein et al. 2022)	-121 Gt CO <sub>2</sub>		-121 Gt CO <sub>2</sub>	
Accounting for non-CO <sub>2</sub> greenhouse gases	Our best estimate -90 Gt CO <sub>2</sub> (Climate Council 2021b)	IPCC range ±220 Gt CO <sub>2</sub> (IPCC 2021a)	Our best estimate -90 Gt CO <sub>2</sub> (Climate Council 2021b)	IPCC range ±220 Gt CO <sub>2</sub> (IPCC 2021a)
Carbon cycle feedbacks	Our best estimate -97 Gt CO <sub>2</sub> Taking the upper end of IPCC's range, based on a precautionary approach to carbon cycle feedbacks.	IPCC range $26 \pm 97$ Gt CO <sub>2</sub> 39 Gt CO <sub>2</sub> ( $26 \times 1.5$ ) is already included in the base budget. (IPCC 2021a).	Our best estimate -97 Gt CO <sub>2</sub> Taking the upper end of IPCC's range, based on a precautionary approach to carbon cycle feedbacks.	IPCC range $26 \pm 97$ Gt CO <sub>2</sub> 44 Gt CO <sub>2</sub> ( $26 \times 1.7$ ) is already included in the base budget. (IPCC 2021a).
Remaining budget to net zero emissions	Our best estimate 92 Gt CO <sub>2</sub>	IPCC range 280 <u>+</u> 317 Gt CO <sub>2</sub>	Our best estimate 392 Gt CO <sub>2</sub>	IPCC range 580 <u>+</u> 317 Gt CO <sub>2</sub>
Date at which net zero emissions must be achieved globally, assuming linear rate of decline (based on our 'best estimate' figures above)	2027		2043	

#### (Climate Council 2023a)

As a developed country with high emissions and significant opportunities for renewable energy and other climate solutions, we need to reduce emissions at a rate faster than the required global average and achieve net zero emissions sooner than much of the rest of the world. In 2014, the Climate Change Authority, using a modified version of a framework known as 'Contraction and Convergence', concluded that to play its part in global emissions reduction efforts, Australia could use no more than 0.97 percent of the available global carbon budget.

In line with this approach, Australia would need to achieve net zero emissions by 2038 to align with a global carbon budget that provides a 67 percent chance of limiting warming to 1.7°C, and 2027 for a 67 percent chance of limiting warming to 1.5°C. Net zero by 2035 represents a point in this range (2027-2038) that balances the maximum rate of emissions reductions we believe is possible for Australia with the need to limit warming as much as possible and with the highest probability of success. The *Net Zero Future Bill* should set an earlier target for achieving net zero than currently proposed in the consultation paper to see New South Wales play a part in this significant national effort.

The *Net Zero Future Bill* should be amended to increase the 2030 target to a 75% reduction on 2005 levels. This target represents a downscaling of a science-aligned national target, taking into account the abatement potential across sectors in different states and territories, and the relative emissions produced in each state.

This is the make-or-break decade for action to tackle harmful climate change. If we do not rapidly drive down emissions before 2030, we risk locking in escalating global warming for decades to come and potentially triggering devastating ecological tipping points (Climate Council 2023a).

#### A ratchet mechanism

This Bill should adopt a ratchet mechanism similar to that included in the Federal *Climate Change Act 2022*. This mechanism would mandate regular reviews of climate targets, including the 2030 and net zero targets, to consistently strengthen them over time. Crucially, it would ensure that targets can be increased as technology improves and the State gains momentum with its decarbonisation pathway. It would also guard against backsliding by ensuring these targets cannot be revised downwards.

#### A coordination council

The Bill could be strengthened by having a council consisting of the Premier and Minister responsible for climate action, together with Ministers of other portfolios. Such a body would coordinate and streamline actions across multiple government departments and portfolios, ensuring a unified approach to tackling climate challenges. This body could improve oversight, speed decision-making, and enhance department communication.

# Regular adaptation and mitigation planning and a climate risk assessment

The Bill could be strengthened by requiring the Government to produce mitigation and adaptation plans at regular five-year intervals in line with the guiding principles. The advice of the Net Zero Commission would inform these plans. The adaptation plan should be underpinned by a comprehensive Climate Change Risk Assessment that identifies risks across the economy, environment and communities. By requiring the periodic production of these plans, the NSW Government can ensure a systematic and well-informed approach to climate action, promoting transparency, accountability and certainty for industry, business and communities.

#### Link targets to decisions made under other legislation

The Federal *Climate Change Act 2022* has an important schedule that links the legislated targets to decisions made under other legislation, including decisions made to finance fossil fuel projects. This broadens the scope and effectiveness of the Act in driving emissions reduction outcomes. The schedule requires that federal decision-makers give consideration to Australia's national emissions reduction targets and the need to address harmful climate change when making decisions under the acts nominated by it.

Climate Council recommends the *Net Zero Future Bill* do the same, particularly linking this bill and its emissions reductions targets to decisions made in relation to planning, forestry, infrastructure and government financing. This will make the Bill more effective at transitioning the state and ensuring we do not add to the emissions burden.

#### **Other important amendments**

Several other amendments should be considered to strengthen the *Net Zero Future Bill:* 

- 1. **Paragraph 8(4)(a)** sets out that: "Action to address climate change should be taken in a way that...is fiscally responsible..." This term is often used by opponents of climate action to delay or weaken the response. It is recommended that the term 'fiscally responsible' be substituted with the words "fiscally responsible, recognising the impact climate change will have on State's finances, environment and community wellbeing." This acknowledges that climate change has the potential to significantly disrupt the Australian economy (Kompas 2020: Treasury 2023), so any inaction would be economically irresponsible.
- 2. Paragraph 8(8)(b) sets out that: "Action to address climate change should take into account the following— the best available science..." This consideration is amongst ten other factors. It dilutes its importance by relegating science to just one consideration amongst many. The science should be pre-eminent in Part 2 of this Bill. Action on climate change should be grounded in the best available scientific knowledge to ensure that policies and measures are effective and based on sound evidence. Also, emphasising the importance of science in the legislation communicates the government's commitment to making evidence-based decisions.

- 3. **Paragraph 8(8)(f)** states that: "Action to address climate change should take into account...the impact of the action on consumer costs in New South Wales, including energy costs." A well-thought-out and carefully planned transition strategy can ensure that consumers benefit from cheaper energy provided by abundant wind and solar resources. Energy costs are also not the only relevant consideration for consumer costs related to climate action. For example, insurance costs are already skyrocketing in many communities due to the increased risk of floods, fires and other extreme weather brought about by climate inaction. Climate Council recommends this paragraph be removed, or otherwise augmented to read: "Action to address climate change should take into account...the impact of the action on consumer costs in New South Wales, including both higher costs likely to be paid as a result of climate inaction and potential costs of abatement or mitigation.".
- 4. Section 9, sets out targets for reducing greenhouse gas emissions. Climate Council recommends this section include a duty for the relevant Minister of the day for ensuring that the targets are met. Implementing a duty on the Minister - and through them, the government as a whole - can enhance accountability and commitment to the Bill's goals. This may lead to better environmental, economic and social outcomes for New South Wales.
- 5. Section 12, outlines the membership and appointments of the Net Zero Commission. Thisshould explicitly exclude individuals with affiliations or work history in the fossil fuel industry. The Net Zero Commission is poised to play a critical role in shaping New South Wales' transition towards net zero, and its members will inevitably influence this guidance. Therefore, ensuring that no individuals with vested interests in the fossil fuel industry are involved in charting this direction is crucial. By excluding such affiliations, the Net Zero Commission can maintain its impartiality and prioritise the State's transition to net zero.
- 6. **Subsection 14(2)** states that the Net Zero Commission: "may provide advice and make recommendations to the Minister..." It lists a range of things the Net Zero Commission can recommend or advise. Climate Council recommends the word 'may' be substituted with 'must.' This would ensure the Net Zero Commission can be more proactive in providing its advice to the government. Changing the language to 'must' sets a clear expectation that the Net Zero Commission is obliged to offer advice, leaving no room for ambiguity or inaction.

7. **Paragraph 14(2)(e)** sets out that the Net Zero Commission: "may provide advice and make recommendations to the Minister: on emissions budgets for New South Wales, having regard to Commonwealth emissions budgets and nationally determined contributions..." Determining emissions budgets on already generous Commonwealth budgets may require the Net Zero Commission to provide advice that may not be aligned with New South Wales' fair and equitable share of the global emissions budget. Instead it infers that New South Wales takes whatever emissions path the Commonwealth takes. The sentence should be substituted for "may provide advice and make recommendations to the Minister: on emissions budgets for New South Wales, taking into account the state's fair and equitable share of effort required to hold warming as close as possible to 1.5 degrees Celsius."

### **Summary of recommendations**

#### **Recommendation 1: Earlier targets**

The Climate Council recommends revising the net-zero target to an earlier date, such as 2035, in line with the latest scientific findings and international commitments. By changing the net-zero target to 2035, the Government can demonstrate a commitment to science-based climate action. The New South Wales Government should also take the opportunity presented by this bill to set and work towards a 75% emissions reduction target for 2030.

#### **Recommendation 2: A ratchet mechanism**

The Climate Council recommends incorporating a ratchet mechanism akin to the one in the Federal Climate Change Act 2022 into the Bill. This mechanism would require periodic evaluations of climate targets, ensuring they are continually strengthened. Importantly, this mechanism would preclude any backsliding or regression in setting targets.

#### **Recommendation 3: A coordination council**

Chaired by the Premier of the State, the Government should establish a Ministerial Council on Climate Action to serve as the central coordinating body for climate-related initiatives across all governmental portfolios in New South Wales. This high-level council would ensure the State's climate policy is cohesive and science-aligned.

#### **Recommendation 4: Mitigation and adaptation planning and a climate change risk assessment**

The Climate Council recommends that the NSW Government enhance the Climate Change Bill by incorporating provisions mandating the development of mitigation and adaptation plans at regular intervals. These intervals should align with each budget period, occurring at intervals of 5 years and should be underpinned by a climate change risk assessment.

# **Recommendation 5: Link legislated targets to decisions under other Acts**

The Climate Council recommends that the *Net Zero Future Bill* follow the example set by the Federal *Climate Change Act 2022* by establishing a mechanism that links its targets to decisions made under other legislation. By establishing these linkages, the Bill can ensure that emissions reduction targets are not isolated but integrated into other types of decision-making and policy implementation, ultimately driving better climate and economic outcomes for New South Wales.

#### **Recommendation 6: Additional positive amendments**

The Climate Council recommends amending these clauses within the Bill to strengthen it, in line with the discussion at pp.9-11:

- Paragraph 8(4)(a)
- Paragraph 8(8)(b)
- Paragraph 8(8)(f)
- Section 9
- Section 12
- Subsection 14(2)
- Paragraph (14(2)(e)

# Conclusion

With these improvements, the *Net Zero Future Bill* can provide a strong and effective framework guiding climate action in New South Wales. It is more urgent than ever before that all governments around Australia work to cut emissions rapidly. It is also *more possible* than ever before as technologies and solutions are now available which can see us decarbonise our energy, transport and industrial systems. The *Net Zero Future Bill* should chart a course for the deep decarbonisation of New South Wales' economy. This will protect communities from escalating climate harm and seize the opportunities renewable energy and clean industry will create to power the next era of the State's prosperity.

## References

Beyond Zero Emissions (2021) *Export Powerhouse: Australia's \$333 billion opportunity.* 

https://www.bze.org.au/research/report/export-powerhouse#:~:text=Beyond %20Zero%20Emissions%20research%20shows,we%20have%20to%20move%20 guickly.

BoM (Bureau of Meteorology) and CSIRO (Commonwealth Scientific and Industrial Research Organisation) (2022) *State of the Climate.* <u>http://www.bom.gov.au/state-of-the-climate/</u>

Climate Net Zero Commission (2014) Steffen W, Hughes L. *The Critical Decade: New South Wales Impacts and Opportunities* 

Climate Council (2023a) Gergis J, Arndt D, Dean A, Hughes L, Karoly D, Bradshaw S, Wakefield J, Rayner J. *Mission Zero: How Today's Climate Choices Will Reshape Australia.* 

https://www.climatecouncil.org.au/wp-content/uploads/2023/09/Mission-Ze ro\_Updated-190923\_IL\_2.pdf

Climate Council (2023b) Croucher A, Dean A, Hutley N, Flannery T, Morgan W, Bradshaw S, Rayner J. *Australias Clean Energy Future: Making Things Here in a Net Zero World* 

https://www.climatecouncil.org.au/resources/australias-clean-industry-futu re-making-things-in-a-net-zero-world/

CSIRO (Commonwealth Scientific and Industrial Research Organisation) (2021) *New South Wales' and ACT's Changing Climate.* <u>https://www.climatechangeinaustralia.gov.au/en/changing-climate/state-climate-statements/new-south-wales-act/</u>

Commonwealth Treasury (2023) *Intergenerational Report: Australia's Future to 2063. <u>https://treasury.gov.au/sites/default/files/2023-08/p2023-435150.pdf</u>* 

Department of Agriculture, Water and the Environment (2021) *Conservation Advice for Phascolarctos cinereus (Koala) combined populations of Queensland, New South Wales and the Australian Capital Territory* <u>https://www.environment.gov.au/biodiversity/threatened/species/pubs/8510</u> <u>4-conservation-advice-12022022.pdf</u> Lee J, Maginni R, Taylor M, Fuller R (2015) *Mapping the Drivers of Climate Change Vulnerability for Australia's Threatened Species.* Plos One. https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0124766

University of Melbourne (2020) Kompas, T. *What are the full economic costs to Australia from climate change?* 

https://sustainable.unimelb.edu.au/news/what-are-the-full-economic-coststo-australia-from-climate-change

World Bank (2020) *World Bank Reference Guide to Climate Change Framework Legislation* 

https://openknowledge.worldbank.org/server/api/core/bitstreams/a668497eba39-5831-88f4-547c567686de/content