

Submission to the NSW Parliamentary Committee on Environment and Planning - Climate Change (Net Zero Future) Bill 2023

25 October 2023

Rewiring Australia congratulates the NSW Parliament on introducing the Climate Change (Net Zero Future) Bill 2023 (the Bill) to parliament. We support the passing of the Bill with the suggested amendments outlined in the following sections.

About Rewiring Australia

Rewiring Australia advocates for rapid electrification to address climate change, create jobs, green exports and save households money. Rewiring Australia is a non-profit research and advocacy organisation dedicated to representing the people, households, and communities in the energy system. We deliver practical climate progress by working with government, industry, and communities to electrify everything. We empirically demonstrate and communicate the cost savings, emissions reductions, and energy system benefits of electrification. The research of Rewiring Australia's chief scientist, Dr Saul Griffith, has been influential on energy policy in Australia and the United States of America. Rewiring Australia has reached millions of Australians with our work. Our work has four core pillars: education and communications, advocacy, data-driven research and deployment projects.

We are in a climate emergency

The world is seeing an alarming rise in global temperature and extreme weather events. NASA's Goddard Institute of Space Studies announced that 2023 was Earth's hottest summer since records began in 1880¹.

A 2020 UN report found a sharp increase in climate-related natural disasters and extreme weather events. Between 2000 and 2019, disaster events claimed over 1.2 million lives and affected 4.2 billion people, costing almost US\$3 trillion in economic loss globally². In Australia, the CSIRO's 2022 State of the Climate report predicts an increase in dangerous fire weather days, extreme heat days, drought and heavy short-term rainfall events leading to flooding³. It is clear that we need to reduce emissions urgently, and it is well established that the energy system needs to move first. Globally, 80% of the climate problem is an energy problem⁴, and for the vast majority of that energy economy, electrification is the solution.

If we want to achieve anything like the 1.5°C outcome, which is what our coral reefs, glaciers need for survival and what our children demand of us; we need a combination of early retirement of the heaviest emitters and large-scale retrofit of our homes and businesses.

¹ Goddard Institute of Space Studies, (2023) 'Summer JJA (2023) global temperature anomaly', GISS Surface Temperature Analysis (GIS TEMP v4), New York, National Aeronautics and Space Administration, [.nasa.gov](https://data.giss.nasa.gov/surface/).

² Centre for Research on the Epidemiology of Disasters CRED and UN Office for Disaster Risk Reduction (2020), *Human Cost of disasters: An overview of the last 20 years 2000-2019*.

³ Commonwealth Scientific and Industrial Research Organisation, (2022) *State of the Climate 2022*.

"To truly pivot towards a sustainable future, household electrification must be central to this strategy. Electrification is the rapid, cost-effective and proven path to significantly cut emissions while permanently slashing energy bills."⁴ IEA, (2022). *World Energy Outlook 2022*. International Energy Agency. Retrieved from www.iea.org.

To hit a 1.5°C target, we must retrofit our inefficient appliances and cars, intervene in the market, change many energy market rules, and provide incentives to shift the market faster than it would otherwise go. The kids are right when they say it is an emergency.

Economic opportunities of electrification

Through our modelling, Rewiring Australia has demonstrated that electrification is the fastest way to decarbonise our economy while unlocking a huge range of benefits for Australian households and businesses. It is estimated that millions of dollars would be kept in the community in an all-electric future where we generate half of our energy needs at the local level from small and medium-scale solar. It is money that households instead spend in the local government area. Therefore, we advocate for a coordinated electrification and retrofit strategy as the most cost-effective clean energy transition or, as we prefer, the opportunity to '*electrify everything*'.

Accelerating household and commercial Electrification is the fastest and lowest-risk pathway to deliver the NSW Government's 2030 energy and emissions targets and unlocking the economic opportunities of the clean energy transition. An electrification strategy optimises behind-the-meter solar generation by retrofitting inefficient and gas-fuelled appliances with efficient appliances. It is action that supports replacing coal and gas use and generation with renewable energy. The goal must be to make Australia a renewable energy powerhouse that generates several hundred per cent additional and ultra-low-cost electricity, that leverages new industries and enhances productivity across the economy.

In establishing the Net Zero Commission, the NSW government has the opportunity to propel NSW towards a zero-carbon economy and the economic opportunities of electrification. Rewiring Australia calls on the NSW government to place Electrification at the centre of its plans and commit the equivalent focus and funding to create "Community Energy Zones" (CEZ) as was done with "Renewable Energy Zones".

Target, interim Target and Review Mechanism

The Bill proposes to enshrine the NSW government's greenhouse emission reduction targets into law. While the NSW government may be confident in exceeding the current targets of 50% by 2030 and net zero by 2050.

As one of the wealthier states, NSW's efforts should represent a fair contribution to Australia's commitment to limiting global warming to 1.5 degrees Celsius, as set by the Paris Agreement. Rewiring Australia strongly recommends that the reduction target be in line with the science and increased to 75% reduction by 2035.

It is recommended that any review mechanism within the legislation includes a ratchet mechanism so it may be adjusted to support any changes resulting from the National Determined Contribution (NDC) mechanism which would allow NSW to support national efforts. *The Victorian Climate Change Act 2017* (Victoria)⁵ allows the Victorian government to set emission reduction goals for each five-year period. A similar approach is recommended for the

⁵ Victorian Climate Change Act 2017.

NSW government. In doing so, the NSW government's existing 70% emissions reduction target by 2035 could be strengthened and enshrined in law.

Net Zero Commission and Cross Sectoral Approach

Rewiring Australia supports the creation of the NZC and recommends that it be allocated additional responsibilities. There is an opportunity for the NZC to be responsible for climate change planning and policy and offer interdepartmental and intergovernmental coordination. It is recommended that the Bill embed action across all NSW government departments and that climate impacts be considered in all government policies and decisions, similar to the Victorian government approach⁶.

The Bill proposes establishing a Net Zero Commission (NZC) responsible for monitoring and reporting progress on these targets. We call for the NZC to address sectoral linkages between transport, gas, electricity, exports, energy performance, and housing so that the NCZ can assess the impact on the reduction target of new emissions-intensive developments and expansions to existing fossil fuel projects and make recommendations to government.

Such an approach provides the NZC with a reporting and auditing framework and support for government agencies and departments in identifying emissions reduction opportunities—for example, the government and community gas substitution roadmap.

Transparency of decision making and publication of data

The NZC must drive a new framework that empowers households, businesses and industry to generate, store, and share clean electricity. The NCZ needs to be resourced to have the capability to provide independent expertise and advice over the long term and beyond the limitations of the electoral cycle. Members of the Commission should have experience and knowledge of clean energy, investment, technology innovation and public policy. They should have Reserve bank-style independence to encourage honest feedback.

Rewiring Australia also calls for transparency in decision-making and making data publicly available. We call for data to be made available at the local government level, with information provided on progress toward community-level decarbonisation and estimates of its benefits. The aim is to improve decision-making at the community level so they may make informed decisions in the public interest. For example, the NZC could communicate progress toward the target and the pipeline of renewable energy projects via a dashboard. It could include social and investment metrics and provide the consumer with unbiased information, including: the amount of money invested at the household and industry level, the number of fully electrified homes with solar panels, a measure of the carbon abated, and progress in delivering cross-sectoral regulatory reform, job opportunities, and workforce development.

⁶ Victorian Climate Change Act (2017) (Part 3)