

**Submission
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SUSTAINABILITY OF ENERGY SUPPLY AND RESOURCES IN NSW

Organisation: Bathurst Community Climate Action Network

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Bathurst Community Climate Action Network (BCCAN) is a non-profit incorporated community group. Formed in 2006, we have been lobbying for climate action for over ten years. Our group is affiliated with the Central West Environment Council (CWEC), the Nature Conservation Council (NCC) and the Climate Action Network of Australia (CANA). Many of our members are parents & grandparents committed to ensure that their descendants inherit a sustainable world. We welcome the opportunity to press our recommendations to the Inquiry into the sustainability of energy supply and resources in NSW.

There is no more important issue facing the planet than climate change. It is impacting on everyone's life from the global level like geo-political conflicts over water, droughts and migration to the personal issues. From the costs associated with adapting public and private gardens to cope with the changing range of insect pests to the destruction of gardens in islands across the Pacific due to the increased frequency and severity of cyclones. Already we see evidence of rising sea temperatures and sea-levels impacting on the viability of small island nations and coral reefs.

According to the United Nations Convention on Bio Diversity, climate change and habitat loss is causing the accelerating extinction of plants and animals and to our shame Australia leads the world in the extinction of biodiversity. <https://www.cbd.int/gbo/gbo4/publication/gbo4-en.pdf>

Locally, in a country used to 'droughts & flooding rains', despite massive expenditure on flood prevention, coastal protection, bush-fire fighting and water management, we are having difficulty coping with extreme weather events of greater frequency and severity. The recent experience of Townsville has directly impacted across the nation in the form of increased insurance premiums. In NSW where drought has combined with de-forestation, we can anticipate massive loss of topsoil and increased desertification in western NSW when eventually the rains do come.

Most recent IPCC forecasts are sanguine about our prospects of holding temperature increases to 1.5 degrees celsius. Apart from massive tree planting, there are no credible technological strategies on the horizon for reducing the amount of carbon accumulating in the atmosphere. However, renewable energy can a major part along with energy efficiency, changes in transport, agricultural practices. diet and reforestation in slowing the rate of temperature increase. A climate emergency has been recognised across the world. From the national level where Great Britain's Conservative government declares climate emergency to the state and local government level where many cities like Sydney and Melbourne & local government authorities across Australia have supported the Climate Emergency call. Your committee's role is a pivotal one at a critical time. There is no room for delay in addressing climate change! IN 2014 the previous Baird government declared that NSW would be renewables capital of Australia, 'Australia's California'..

<https://www.smh.com.au/environment/renewable-energy-nsw-to-be-australias-answer-to-california-20140722-zvl60.html>

In 2012. Rob Stokes, then Parliamentary Secretary for Renewable Energy, introduced the Draft NSW Renewable Energy Action Plan. Overall it was an impressive plan and many of its recommendations are still valuable, but there has been little 'action" despite its title. In practice, NSW has lagged behind other states in implementing renewable energy. By 2018 only 12.8% of NSW's energy was renewable. Only Queensland, WA and NT had a poorer record.

<https://www.climatecouncil.org.au/leaders-laggards-states-renewable-energy/>

This matters not just because NSW citizens are amongst the world's highest contributors to carbon emissions. A solution to global emissions requires massive international cooperation. Any attempts by Australia to convince other countries to reduce their emissions will be hypocritical and seen as such unless we walk the talk.

All forms of energy have their benefits and short-comings but, apart from their impact on climate change, and their contribution to jobs growth. particularly across rural Australia, renewables have two outstanding advantages.

1. They don't use or pollute water, Australia's most precious resource.

2. They don't pollute air. Recent studies into the mining, transport and burning of coal suggest that coal emissions contribute to premature deaths, diabetes & respiratory diseases. In his 2018 study of the impact of coal fired power stations in NSW, Ewald calculated that...

'Based on the current expected closure date of the NSW power stations, it is estimated that 3,429 additional deaths will occur in NSW between the present day and the closure of the last station' due to the stations' emissions [https://www.envirojustice.org.au/wp-content/uploads/2018/11/Ewald B 2018 The health burden of fine particle pollution from electricity generation in NSW.pdf](https://www.envirojustice.org.au/wp-content/uploads/2018/11/Ewald_B_2018_The_health_burden_of_fine_particle_pollution_from_electricity_generation_in_NSW.pdf)

For these reasons, NSW must move, as a matter of urgency, to phase out coal-fired power stations and move to 100% renewables. This is not only critical but achievable, as evidenced by, for example, the Zero Carbon Australia Stationary Energy Plan developed by University of Melbourne and Beyond Zero Emissions in 2010

<https://bze.org.au/wp-content/uploads/stationary-energy-plan-bze-report-2010.pdf>

There are, of course costs, associated with the transition to 100% renewable energy but these are dwarfed by the savings. For example, the International Monetary Fund (IMF) estimated that Australian fossil fuel subsidies were equivalent to about \$41 Billion in 2015 alone, or \$1,712 per person in that year or 2% of GDP!! <https://reneweconomy.com.au/global-fossil-fuel-subsidies-reach-5-2-trillion-and-29-billion-in-australia-91592/> As pointed out above, inaction in the face of climate change is expensive not only to health, agriculture and the environment but in all aspects of our life. In rapidly transitioning to 100% renewable energy BCCAN makes the following recommendations. Recommendations:

1. The implementation strategy for the transitions should, as far as possible, be bi-partisan, nationally consistent and have ambitious targets. There is a high level of support across the community for this as demonstrated in opinion polls.

<https://www.environment.nsw.gov.au/research-and-publications/our-science-and-research/our-research/social-and-economic/sustainability/community-attitudes-to-renewable-energy>

and arguably in the last Federal election results in the seat of Warringah.

In the past, the unpredictability of policy changes, and the inconsistency of state and Federal policies has been a minefield for companies and investors working in the renewable energy industry. Many reputable companies failed or moved out of the industry.

2. The NSW government should encourage massive investment in renewables and smooth the path to their construction & operation. Our current power stations are ageing and becoming less reliable. Current Federal attempts to extend Liddell's life is repairing your car with gaffer-tape. Not only will we need sufficient renewables to replace these aging stations but sufficient to meet the demands of an electric car fleet, an increasing dependence on de-salination plants as rainfall becomes less reliable and, hopefully, a new hydrogen export industry.

3. The government should encourage diversification of types of renewable energy and avoid over reliance on wind and solar photo-voltaic. To assist the reliability of the grid, research and development of solar thermal, geo-thermal, wave and tidal energy should also be encouraged.

4. Security of energy supply also depends upon storage. The Federal Snowy Hydro Mark 2 will have a powerful national impact on energy reliability, but so would the expansion of a regionally dispersed system of pumped hydro. Disused former coal mines should be investigated for suitable sites.

<https://energy.anu.edu.au/research/highlights/anu-finds-22000-potential-pumped-hydro-sites-australia>

The NSW government could provide a stimulus to the battery industry to encourage the achievement of economies of scale by systematically purchasing batteries for public buildings like schools, hospitals and public housing.

5. Grid ready: The NSW government liaising with neighbouring states must ensure that the electricity grid is modernised to provide access to dispersed energy sites

Conclusion: Transition with fairness.

Coal has made a major historic contribution to Australian development. It has powered Australian industrialisation. Coal miners have been at the heart of the Australian Labor Party and the trade union movement. Impressive communities based around coal mining have developed throughout the Hunter Valley, Wollongong and Lithgow areas. Historically coal's contribution came at some cost to the environment and to public health, but we were prepared to accept those costs because they were localised and there were few alternatives. The situation has changed and today the coal industry is placing the health of the entire planet at risk and renewables represent cheaper, cleaner alternatives. For the future of the planet, the mining transport and use of fossil fuels must be phased out urgently. But any costs associated with the transition from fossil fuel to renewables must be shared equally. It is unfair and divisive for coal communities to face the transition without support and the opportunity to participate in the process. There are international precedents. In Germany for example there has been a substantial reduction of coal mining across the Ruhr valley without any loss of jobs. <https://www.smh.com.au/environment/climate-change/how-germany-closed-its-coal-industry-without-sacking-a-single-miner-20190711-p526ez.html>

The NSW government should work with coal communities to explore varied alternative sources of employment. Examples include locating solar farms and pumped-hydro storage in former coal regions, developing recycling and mine rehabilitation industries and ensuring high quality internet access in former coal mining areas to enable re-location of government on-line service operations and technology start-ups. Tourism initiatives like the proposed Gardens of Stone conservation area near Lithgow which would draw tourists from Sydney to explore conservation values on a par with Kakadu National Park should be supported.

<https://www.colongwilderness.org.au/campaigns/the-gardens-of-stone/about-gardens-of-stone>
e wish the committee every success in your important task and urge you to act with urgency in promoting a just, sustainable energy transition.

Your sincerely,
Jack Fry
President BCCAN