Supplementary Submission No 146a

SUSTAINABILITY OF ENERGY SUPPLY AND RESOURCES IN NSW

Organisation: Caldera Environment Centre Inc.

Date Received: 6 May 2020

Caldera Environment Centre Inc.

a. 4 Queen Street Murwillumbah NSW 2484
p. PO Box 5090 South Murwillumbah NSW 2484
t. (02) 66 721 121 e. caldera@calderaenvironmentcentre.org
w. calderaenvironmentcentre.org

Inquiry into the Sustainability of Energy Supply and Resources in NSW

Addendum to previous submission

6th May 2020

We have recently been notified that the inquiry's terms of reference have been updated to reflect new economic challenges facing NSW in light of the COVID-19 pandemic and that in addition to the existing terms of reference, the Committee will also consider the capacity and economic opportunities of renewable energy for workforces, industries, and the wider economy impacted by COVID-19.

We wish to strongly applaud the committee for this initiative. Investing in renewable energy will respond to the urgent need to look after the planet. Australia needs to source a minimum of 50% of its power from renewable sources by 2030 to achieve emissions reductions consistent with a 2°C pathway (https://www.climateworksaustralia.org/resource/pathways-to-deep-decarbonisation-in-2050-how-australia-can-prosper-in-a-low-carbon-world/). Investing in coal is no longer ethical or economic and gas, with its fugitive methane emissions, is also now known to be a dead end road.

Happily it has also been shown that investment in renewable is the way to future prosperity in our state. Development of the renewable energy sector is ideally situated to stimulate the NSW economy after the terrible economic collapse due to the Covid 19 virus lockdown. Australia, being one of the sunniest and windiest countries in the world, has enormous potential to develop renewable energy. Indeed other states, especially South Australia, have begun to tap this vast resource. If NSW begins immediately to position itself within the sector, the state is well placed to take part in a very bright future market. According to reports by The Climate Council and The Climate Institute, a goal of 50% of electricity from renewable energy for New South Wales would yield 41% net job increase (after losses from the coal industry) of 6000 jobs (https://www.climatecouncil.org.au/uploads/7b40d7bbefbdd94979ce4de2fad52414.pdf; http://www.climateinstitute.org.au/verve/_resources/cleanenergyjobssnapshot_newsouthwales.pdf). These reports outline and explain in careful detail the expected positive effects on the various components of and contributors to the renewable energy sector and the resulting positive effects on the whole economy. There is also the huge bonus of the avoidance of the terrible effects of runaway climate change.

As a nation we have responded to the Covid19 pandemic by listening and responding to expert advice. The effects of climate change will create crises at least as urgent and possibly

much worse than that created by Covid 19. It is encouraging to see NSW government bodies, including this committee, begin at last to respond to this great challenge of our generation.

Thank you for this opportunity to add this addendum to our original submission.

Regards

Nola Firth
Committee member
Caldera Environment Centre

Submission Inquiry into the Sustainability of Energy Supply and Resources in NSW

13th September 2019

Caldera Environment Centre is pleased to have the opportunity to present a submission to the Inquiry into the Sustainability of Energy Supply and Resources in NSW. In particular we wish to urgently alert the Inquiry to the need to avoid using wood as a biofuel energy source in New South Wales.

Chair of the Inquiry, Alex Greenwich, notes in his preparatory video that a goal of the Inquiry is to ensure that sustainable energy impacts positively on our environment and our communities. While we strongly support a move towards use of renewable energy such as solar and wind, there is substantial evidence that wood as fuel is not a sustainable energy source. Instead, the burning of wood will accelerate climate change and precipitate highly negative outcomes for both the environment and the community.

In 2017 The Department of Primary Industry in New South Wales identified more than a million tonnes of wood from private and State Forests for burning. Unfortunately this report, wrongly and worryingly, stated there will be 'no adverse environmental impacts' from such use of forests.[1]

However studies have now shown that burning wood creates more carbon than burning coal. This is because much more wood than coal has to be burned to create equivalent heat and also because of higher water content in wood (despite being made into pellets)[2]. Further, the idea that wood is renewable takes little account of the time involved for trees to grow or the urgency with which we need to reduce our carbon emissions.

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1 North Coast forests offer untapped bioenergy opportunity
https://www.dpi.nsw.gov.au/about-us/media-centre/releases/2017/north-coast-forests-offer-untapped-bioenergy-opportunity accessed 11/9/19.

2 Laganière, J., Paré, D., Thiffault, E. & Bernier, P. Y. Range and uncertainties in estimating delays in greenhouse gas mitigation potential of forest bioenergy sourced from Canadian forests. *GCB Bioenergy* **9**, 358–369 (2017).

Additionally, the belief that we can both burn wood and also preserve our forests is unsound. More than 800 climate scientists and ecologists have written to various international agencies urgently outlining the risk to global forest caused by burning wood as biofuel[3]. We have already lost much of the world's forests and are losing more daily due to increased frequency and extent of bushfires and extensive illegal and legal land clearing. Forests are carbon sinks. They also play a critical role in the hydological cycle, attracting and generating precipitation, and are crucial habitat for many of the million endangered species. Loss of habitat due to clearing is one of the main causes of loss of species[4].

The premise that burning only 'waste' wood avoids harm to forests also fails to stand up to scrutiny. It has been calculated that we would need three times the forests that still exist to power only 3% of global energy.[5] Furthermore, studies have shown that wood pellets from the USA and Canada have come largely from whole trunks not offcuts as claimed[6].

There are already two electricity generators in north-east NSW consuming 140,000 tonnes of wood a year and selling the electricity produced as 'GreenPower'[7] under incentives of Renewable Energy Credits. Recent changes to the forestry laws in NSW have opened up incentives for increased clearing of native forest. For example definitions of old growth forests have been watered down such that creek buffers in some areas have decreased from 10 to 5 meters, private land clearing is now in many cases subject only to self assessment, clear felling (e.g. 140,000 hectares from Taree to Grafton) is now allowed and logging intensity has been increased. If such forest can be also used for biofuel there will be pressure for it to be so used. The value of forest in this time of climate change is not in removing and burning it. Its value is, and will increasingly be, in its role in carbon storage, in native habitat and biodiversity preservation, and its natural beauty (and related tourism).

The promotion of burning wood for fuel sends a message around the world that removing forests is acceptable and safe when clearly it is not. There is already a highly active global movement to preserve forest. Landcare groups and many private landowners spend countless hours on forest regenerating or on planting trees. The recycled paper industry is well established for the same reason. Promotion of burning of wood is completely counter to such movements. Once countries and powerful private companies become invested in burning wood for fuel further expansion will become hard to stop. It is essential Australia is not complicit in such an activity.

Climate scientists around the world are warning of global catastrophe if we fail in slowing the warming of the planet. Climate emergencies are being declared in countries such as the UK and Canada, in local councils and cities in Australia, including in Sydney. We are already experiencing the drying of major rivers, mass fish kills, unprecedented bushfires even in September, as well as over a million species having been recently declared vulnerable to

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[3] LETTER FROM SCIENTISTS TO THE EU PARLIAMENT REGARDING FOREST BIOMASS (updated January 11, 2018), https://tinyurl.com/y5xqbdxe accessed 11/9/19.

[4] WWF. 2018. Living Planet Report - 2018: Aiming Higher. Grooten, M. and Almond, R.E.A.(Eds). WWF, Gland, Switzerland.

[5] LETTER FROM SCIENTISTS TO THE EU PARLIAMENT REGARDING FOREST BIOMASS (updated January 11, 2018), https://tinyurl.com/y5xqbdxe accessed 11/9/19.

[6] Walker, S., Lyddan, C., Perritt, W. & Pilla, L. *An Analysis of UK Biomass Power Policy, US South Pellet Production and Impacts on Wood Fiber Markets* (RISI, 2015).

[7] The M. J. Smith Group, accessed 11/9/19: http://www.mjsmithgroundprep.com.au/projects/

extinction. According to the UN Intergovernmental Panel on Climate Change we have about a decade to avoid going above 1.5 degrees warming and risking catastrophic change for the planet and for humanity[8]. Such an occurrence will definitely impact regional communities, their economy and their environment. The stakes are high and far beyond immediate profit. We urgently need NSW to invest only in truly renewable energy alternatives such as solar and wind.

Nola Firth

Committee member

Caldera Environment Centre

[8] https://www.theguardian.com/environment/2018/oct/08/global-warming-must-not-exceed-15c-warns-landmark-un-report