

**Submission
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SUSTAINABILITY OF ENERGY SUPPLY AND RESOURCES IN NSW

Organisation: Earth Learning

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Address: [REDACTED]
Phone: [REDACTED] or [REDACTED]
Email: [REDACTED]
Website: www.earthlearning.org.au

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I make these comments on behalf of Earth Learning – a NFP group dedicated to the conservation of environmental biodiversity. We welcome this inquiry into the sustainability of energy supply and resources and we urge this committee to hold firm and deliver an honest and factual exploration of the terms of reference regarding truly renewable and sustainable energy outcomes for NSW. Earth Learning has worked tirelessly for over a decade to conserve biodiversity in our region and we are dismayed at the general dereliction of stewardship of this precious resource.

Renewables are a major source of economic growth in Australia. Industry research group “Macromonitor” has recorded a \$9 billion increase in investment in renewables in 2019-20. This increase is more than either transport or construction – and it is *increased investment* rather than overall investment that drives GDP growth. An ANU engineering report* from Feb this year concluded that shifting to 100% renewables by 2023 is technically and economically feasible. Enough wind wave and solar could be built to provide Australia’s power needs if the Government and conflicting interests were not in the way. They make the point however that this will not happen without a **plan**. More co-ordinated investment in storage and electricity transmission is desperately required as the National Electricity Market Rules take no account of environmental outcomes.

However – even as Australia and the rest of the world faces an ever growing urgency to take action on climate change by moving quickly to renewable energy the current EU renewable energy policy has been shown to be making global warming worse** The renewable energy market in Europe and all industrialised countries has become dominated by “biomass power”. More than half of all renewable energy is now derived from crops and forests. In the early 2000’s the EU applied a flawed accounting formula to classify the burning of trees for biomass power as “carbon neutral”. This calculation failed to measure the Co2 stored and captured by the trees whilst alive and it failed to measure the greenhouse gas (GHG) emitted in the process of *burning the wood to make electricity*. The negative consequences for the planet are compounded even further as this form of electricity generation was *highly subsidised* by governments across the world displacing support for truly renewable energy forms like wind, wave and solar.

*“Australia: the renewable energy superstar” ANU school of engineering Feb 2019

**“The EU renewable energy policy is making global warming worse” New Scientist 212215

This global development has damaging consequences for Australia’s energy future. We are in serious danger right now of following the path of Europe, the US and others where demand for woody biomass has grown at an alarming rate at the expense of native forests and forest ecosystems (which would otherwise not be so intensely harvested).

In the decades after the EU classified forest biomass as a renewable source of energy the global demand for industrial wood pellets has doubled and is predicted to grow a further 250% in the next decade. Australia is expected to supply 3 million tonnes of this demand.* European demand has greatly impacted the intensity and the area of logging in the forests of the US and Canada. Although woody biomass is described as “Forest Residues” in practice 90% of wood pellets come from the **main stems of trees** - mostly pulpwood quality that would otherwise have had a lesser market incentive.**

The loss of native forests and unsustainable plantation harvesting is ecologically damaging for wildlife habitat and waterways (via weeds and pollutant runoff) but is also a major contributor to global Co2 emissions. An independent report was commissioned by the UK government after its production of wood biomass energy soared -creating protests from the scientific community. This “BEAC” report*** is particularly glaring as it admits that “Biomass energy is not carbon neutral”. It sets out to measure the *total greenhouse gas emissions* (GHG) from the burning of biomass from US forests for electricity in the UK - including the carbon storage function of these forests. It looks in detail at every possible source of woody biomass – from sawmill to forest to plantation “residues”. In almost all of the scenarios involving native forest harvesting the GHG emissions are shown to be close to or greater than burning coal for the same megawatt output. In some cases these emissions were *many times that of coal*.

In 2013 Australia added woody biomass to the list of renewable fuels. The NSW DPI has recently stated over 1 million tonnes of “forest residue” could be used for bio-energy. We already have scenarios from the peak of the woodchip industry in the Eden area where multi- diverse forests were turned into single age regrowth with very little biodiversity or native species habitat value. WWF and NCC**** studies have recorded a tripling of native forest clearing in 2017 in parts of N.W. NSW. Most of this clearing was prime habitat for native species. A NSW government review just released shows that in 2017-18 forest clearing for agriculture tripled from the previous two years. It is highly possible that the economic incentive of the burgeoning biomass energy industry is making it profitable to both forestry and private landowners to clear forested areas. The biomass power plants in my own area use cleared private plantation timber as a main source of their fuel. They burn at least 140,000 tonnes of wood per year for electricity that is then sold as “green power”

At the same time as this inquiry NSW is planning to remap old growth forest to open up for logging. We are heading in a disturbing direction that may well be mirroring the experience in other countries where genuine renewable energy is displaced by an energy program that is delusional and dangerous for our environment and our future.

Sincerely,

Marion Riordan, (Earth Learning)

*"Are Forests The New Coal" Environmental Paper Network Nov 2018

**"Letter from scientists to the EU parliament regarding forest biomass" J. Beddington Nov 2017

***"Use of N American woody biomass in UK electricity production" Ricardo Energy & Environment Report for the DECC Dec 2014

****"Towards Zero Deforestation" NCC of NSW 2018