

Submission from Melanie Mildner

I support the Australian Government's current commitment to generate 20% of Australia's electricity supply from renewable energy sources by 2020. I do not wish to see a decrease to the 20% commitment to generate 20% of Australia's electricity supply from renewable energy sources by 2020.

The state, in which I live, Queensland, has the highest greenhouse gas emissions per person in Australia and among the highest in the world, with over 43 tonnes of greenhouse gases emitted per person each year compared to the national average of 28 tonnes per person. This is due to Queensland's use of coal-fired electricity generation; a large, energy-intensive industry base, and a dependence on road transport. At the same time, there are boundless renewable energy resources within Queensland. I believe we need to do more to take advantage of these resources within Queensland and Australia.

Globally, the level of investment in solar and wind energy projects is increasing and there is a rapid rate of development in renewable energy technologies and products. At the same time there is a growing understanding of the need for increased efficiency in generation and transmission, and for demand management. There is the potential to increase the capacity of existing assets as well as supplement with new assets. There are a number of wind farms currently proposed in Australia, highlighting the attractiveness of Australia for renewable energy investment. Another incentive to generate renewable energy in Australia is the distance from current power stations which results in high transition losses. Australia has a large electricity distribution network and as a result incurs significant transmission losses in the distribution of the electricity in regional and remote locations across Australia. The Renewable Energy Target Review should set up a clear business case for the Australian Government to increase the amount of renewable energy generation in Australia as this has the potential to significantly reduce the transmission loss subsidies provided by the Australian Government, drive investment in the Australia and create jobs and reduce Australia's carbon emissions.

The Renewable Energy Target Review should address the barriers and opportunities of investments in renewable energy within Australia to increase economic efficiency of the RET as well as its environmental effectiveness, equity and have a positive impact on the Australian community and business. The major barrier to investment in renewable energy projects in Australia is the lack of certainty in government policy relating to the industry. This includes the Renewable Energy Target, Renewable Energy Certificates and the Carbon Price. This uncertainty discourages investment in the industry as businesses have no assurance that any level of support will continue for a given length of time. In addition, the lack of certainty and continuity in the feed in tariffs generates confusion and discourages investment. In order to promote the rapid growth in the renewable energy industry within Australian, the government will need to pass federal legislation to demonstrate strong and ongoing support for the industry. One mechanism that has been suggested as a way to provide equitable and reliable assistance to the industry is government-back loan schemes for companies establishing large-scale renewable energy plants. This would enable renewable energy projects get off the ground, jobs created and the Renewable Energy Target met.

Large scale installations of renewable energy are not well supported by the Climate Change Authority. Access to the electricity grid and the need for grid reinforcement is currently a limiting factor for large scale renewable energy projects as well as the ability of the equipment supply chain to deliver the specialist components. Large scale projects are therefore taking a number of years to progress from concept to operation. However, large scale renewables generally produce orders of magnitude more energy and as a result of their scale have better economics. The Renewable Energy Target Review Issues Paper should provide support to large scale renewable investments.

The Renewable Energy Target Review Issues Paper should address and take ownership for:

- Strategically identify the locations in the distribution network with the highest transmission losses
- Identify the most appropriate renewable energy technology that should be installed in these locations
- Identify areas where the efficiency of existing infrastructure can be optimised both for generation and distribution

- Develop appropriate demand management strategies that educate and change consumer behaviour to reduce peak demand and the increasing cost of electricity infrastructure
- Identify political and legislative blockages that prevent feed-in tariffs being provided for micro hydro, mini wind turbines, waste to energy plants etc
- Quantify the savings for the Australian Government due to reduced line losses and any other savings to the electricity subsidy

The Renewable Energy Target Review Issues Paper should provide:

- Reliable data on the amount of renewable energy produced in Australia, both current and projected, with actual real-time production figures
- Identification of areas in the network that have high transmission losses and high demand and are therefore key locations for new sources of renewable energy generation
- Analysis of how the carbon tax and other market pricing mechanisms will affect investment in renewable energy
- Analysis of the key issues and opportunities associated with improving efficiency and capacity of existing renewable energy assets in Australia

The Renewable Energy Target Review Issues Paper should ensure that any new power generation projects in Australia should:

- Reduce the Australia's reliance on fossil fuelled base power generation for base load power
- Provide a reliable and resilient source of low-carbon electricity
- Improve the efficiency and capacity of existing renewable energy assets in Australia

The Australian public supports renewable energy. Voluntary uptake of GreenPower, a Government program initiated in 1997 whereby people can pay extra for electricity that is generated from renewable sources, increased from 132,300 customers in 2005 to 904,716 customers in 2009. Australia has the potential for vast renewable energy capabilities. Solar and wind energy sources are being harnessed on a comparatively small scale and are at the stage of commercialisation. Other sources are being investigated and considered, although these sources are not yet used on a large commercial scale in Australia. The Australian results from the 1st Annual World Environment Review, based on a survey of 1,007 people in 2007, found that:

- 88% of Australians think that the Government should do more to increase the use of solar power.
- 78% say the government should do more to boost wind power, 58% hydro power, 50% tidal power, and 38% geothermal power, while only 25% think that the Government should do more to increase use of nuclear power.
- 84% of Australians think that the Government should make it easier for people to buy renewable electricity.
- 89% think that all electricity should contain a minimum 25% of power generated from renewable energy sources. Only 3% disagree.
- 82% think that the Government should make it easier for people to buy solar panels.
- 80% think that the Government should make it easier for people to buy energy efficient products, such as energy-saving light globes, water-saving shower heads and insulation etc.
- 85% think that the Government should raise national fuel efficiency standards for cars and light trucks.
- 87% think that the Government should do more to increase the number of cars that don't use petrol.

Significant investment in renewable energy will increase the diversity and resilience of the Australian economy by attracting new innovative, low carbon industries to Australia. It will also provide a significant competitive advantage to the tourism and agricultural industries by reinforcing the clean, green identity of Australia. The Climate Change Authority should address all the key issues and barriers facing investment into renewable energy. The Renewable Energy Target Review Issues Paper should highlight the transition to renewable energy and highlight the commitment by State and Federal Government to support the renewable energy industry.