



Climate Change Authority 2014 Renewable Energy Target Review

Recurrent Energy welcomes the opportunity to provide information to the Climate Change Authority as part of its 2014 review into the Renewable Energy Target.

Recurrent Energy is a major solar developer based in California and has one of North America's largest solar development portfolios, with more than 1.5 GW of contracted projects and a 4.3 GW project pipeline. Recurrent Energy's mission is to transform the world to sustainably meet its energy needs with clean electricity.

Recurrent Energy is proud to have been one of the first global solar PV developers to establish a presence in Australia and our local team has been undertaking work on a number of potential project sites around the country since 2010.

Recurrent Energy is eager to continue to invest in Australia and Australia's policy settings in relation to renewable energy are important to that decision. Recurrent Energy has submitted its insights to a range of parliamentary and governmental review processes relevant to the key issues of relevance to Recurrent, including the future of the Renewable Energy Target (RET) and the Australian Renewable Energy Agency (ARENA). This includes a submission to the Warburton Review into the RET (the Warburton Review).

In summary, Recurrent Energy submits the following views about the best policy settings to improve the competitiveness and increase the supply of renewable energy in Australia:

- *It is imperative that as Australia's energy market transforms, Government policies should be developed to improve the competitiveness and increase the supply of renewable energy in Australia.*

Renewable energy generation provides many environmental and economic benefits. Support for renewable energy generation is essential for meeting requirements in terms of both international (Kyoto) and domestic (RET) goals. In addition to its impact on emissions reduction outcomes, data is increasingly highlighting the critical role that the renewable energy projects, supported by the RET, plays in supporting regional investment and the creation of local jobs in Australia.

- *Australia needs policies that attract the investment required to continue growth in the energy resources sector.*

Companies which are willing to invest substantial capital, like Recurrent Energy, represent a valuable investment opportunity for Government. Large-scale solar generation projects like those Recurrent Energy is proposing will create regional jobs and stimulate the economy as well as helping transform Australia's energy market.

Attracting the required level of new clean energy capacity in Australia to achieve long term emissions reduction objectives requires significant investment, which will only be achieved with long-term stability, certainty and transparency in the policy environment.

- *A number of bodies have confirmed that the RET has a minimal impact on retail prices and causes wholesale energy prices to be lower.*

The Australian Energy Market Commission estimates that the RET is around 3 per cent of the current unit cost of electricity and that this will drop to 2.5 per cent in the coming years¹, and ROAM Consulting has reported that removing the RET would in fact have the effect of increasing electricity bills by \$50 in 2020 up to \$140 more per year beyond 2020².

- *The Government should continue to support the development and deployment of renewable energy through the RET.*

In Recurrent Energy's view, the RET is the single most important policy mechanism to facilitate the accelerated roll-out of renewable energy capacity in Australia. The RET will provide a strong foundation for Australia's transition to a clean energy economy, and it will remain critical to supporting investment in renewable energy capacity in Australia for the foreseeable future.

- *Large scale solar should remain a high priority renewable technology for the Government.*

Australia has the highest average solar radiation per square metre of any continent in the world, and is home to world-class research institutions and capabilities. The Government should leverage both the natural advantages Australia enjoys and also the significant work which has already been undertaken in Australia to build up expertise in this area.

- *There would be considerable benefit in modifying the Large Scale Renewable Energy Target (LRET) to encourage the development of renewable energy resources that can meet growing demand during peak periods.*

The technology-neutral design of the LRET ensures it supports the deployment of the lowest cost renewable energy technologies, and by far the biggest contributor to the LRET has been wind energy.

Recurrent Energy advocates a diverse technology portfolio which harnesses the advantages of solar PV in the peaks of demand to complement the important contribution from other technologies such as wind. A diverse profile is more in line with the long-term needs of the market and maximizes the utilisation of the network to avoid upward price pressure for customers.

Large-scale solar PV offers a more reliable, predictable and higher-value renewable energy generation profile. Solar energy production can be forecast with greater accuracy than other intermittent sources and the solar resource is most abundant during the hours of peak demand during the day, particularly the mid to late afternoon peaks during summer.

Recurrent Energy considers that amendments which 'pull through' deployment of technologies that deliver high-value energy, such as large-scale solar PV, would offer greater certainty to

¹ AEMC 2013 *Household Electricity Price Trends 2013*

² Clean Energy Council *The Renewable Energy Target: The Facts*, April 2014, p2

renewable energy investors.

There are at least three possible options to encourage further diversity in the LRET:

- a. Time of Day Multipliers: A time of day multiplier to certificates could be applied in a technology-neutral manner in the LRET to encourage energy generation when it is needed most. A form of this incentive has been used successfully by the Investor Owned Utilities in California in order to procure generation that is coincident to the utilities' load profile.
 - b. Carve-out: A technology carve-out or banding would allow emerging technologies to evolve without having to compete with lower-cost options. Similar incentives exist across jurisdictions that showed significant growth in the renewable industry. Ontario has had technology-specific procurement in both their Feed-in-Tariff structure as well as the more competitive Large Renewable Procurement. Similarly, the State of New Jersey has had a solar carve-out, making it one of the states with highest solar penetration rates in the United States.
 - c. Technology Multipliers: A technology multiplier could be applied to adjust the number of Renewable Energy Certificates (RECs) that certain technologies would be eligible for every 1MWh produced. For example, while a mature technology would receive 1 REC for every 1MWh produced, less mature technologies may receive 2 RECs for every 1MWh produced. A similar structure exists in United Kingdom's Renewable Obligation Certificate scheme.
- *Assistance programs are a highly important mechanism to encourage further development of renewable and other alternative energy sources.*

In Recurrent Energy's view, assistance programs are critical to encouraging the further development of renewable and other alternative energy sources and drawing in newer technologies to the market.

Emerging renewable technologies such as solar PV benefit from assistance programs, which greatly assist in overcoming market access and cost barriers and enable them to compete against wind energy and conventional fuels. In the future, these technologies will travel down the cost reduction curve experienced by more mature renewable technologies as the costs of development, financing, interconnection, construction and operation reduce.

Contact for further information:

Detail on each of these points is outlined in Recurrent Energy's submission to the Warburton Review, and Recurrent Energy would be pleased to provide further information if requested.

Please contact:

Mr. Robert Leah

Vice President Development, Recurrent Energy

bob.leah@recurrentenergy.com

612 6161 8627