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Submitted by email to submissions@climatechangeauthority.gov.au

Dear Sir/Madam,

We appreciated the opportunity to respond to the Climate Change Authority's RET Review. Please find following our response.

CleanSight is a renewable energy industry participant, with a broad range of experience dealing with many of the sectors in the renewable energy value chain, with a particular focus on the commercial aspects that see projects being delivered. CleanSight is experienced at working with large scale wind farms, solar PV and thermal projects as well as biomass generators and prides itself on maximising value which results in minimising the cost of the individual renewable energy technologies to end consumers.

We hope our experiences and insight into the industry assist in your review and which will result in a low cost and robust clean energy future.

Regards,

James Pennay



1. Background

The Climate Change Authority (CCA) is undertaking a review of the Renewable Energy Target (RET) and is currently seeking responses to "Review of the Renewable Energy Target Scheme Issues Paper".

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This document is in response to CCA's issues paper and specifically responds to the questions raised.

2. The 20 per cent by 2020 commitment

2.1 Are the existing 41,000 GWh LRET 2020 target and the interim annual targets appropriate?

Yes the 41,000GWh target and associated trajectory are appropriate. This is a target that sees real industry development and provision of considerable renewable energy, as has been intended by bipartisan political support. We expect in the order of 8GW of new capacity to be built under the target, with it all reaching financial close by the end of 2018. If not financed by 2018, there will be insufficient LGCs to support the project.

2.1.1 Moving Targets

The implications of changing the target are as follows:

- (i) **Decreasing the target**: this will result in considerable industry uncertainty in the future, on the back of many years of changes that have resulted in uncertainty and as a result delay in the build out and greater cost ultimately to consumers. Specific consequences of decreasing the target include:
 - a. Existing generator impacts all existing renewable generators will either immediately be impacted by lower LGC prices if not contracted, or will be subject to lower LGC prices at the end of their LGC offtake contracts. This will result in financial underperformance of assets which will undermine the existing industry investor's capacity and confidence to continue to invest in renewable energy projects.
 - b. New market entrants projects under development will be delayed and incoming investors will be concerned by ongoing regulatory uncertainty. Ultimately, participants in the renewable market will require greater returns to accommodate the risks of doing business in the Australian renewable industry, which will result in greater costs to retailers and end consumers.
 - c. Broader energy market the broader energy market continually raises regulatory risk as a key driver of increases in costs to consumers. By not changing the RET target the broader industry will have increased regulatory confidence which will avoid further uncertainty induced costs across the entire energy market.

(ii) Increasing or extending the target: whilst broadly this is encouraged, an overriding concern at this stage of the industry's development is that more changes will actually result in more uncertainty, less delivery and higher costs to consumers. For example, increasing the target beyond 2030 could result in further delays in commencing the build out in meeting the current target due to significant banked LGCs and the pressure to meet the 2018 financial close deadline being removed.

2.1.2 Energy Forecasts are Uncertain

Energy forecasts are subject to assumptions which have and will continue to swing widely, including:

- i. Rates of economic growth which are reliant not only local economy, but international economies and political circumstances
- ii. Elasticity of energy demand to price changes
- iii. Impact of demand side management
- iv. Exchange rates as a consequence of domestic and economic circumstance
- v. Oil and gas prospecting and reserves, overlaid with geographic political consequences and demand drivers
- vi. Commodity prices which vary depending on the above points
- vii. Carbon policy uncertainty domestically and internationally is significant, and depending on outcomes will impact on all other aspects in this list
- viii. Technology developments will provide ongoing surprises across the industry

Each of the above items are largely unknown next year, not to mention out at 2020. Whilst energy demand and price forecasts are important and AEMO and various consultants do a comprehensive job creating them, ultimately the outputs of the studies are in the forms of scenarios and the likelihood of the mid-range being the ultimate outcome has been proven to be slim. Consequently, to rely on forecasts to set long term targets will decrease economic efficiency and environmental effectiveness, whilst undermining equity when considering those who have already made investments in the sector.

In summary, linking the RET to demand will result in a known target, creating considerably more energy market uncertainty and push up costs not only in reenwables by in the wider energy sector, pushing up energy costs to consumers across the board.

2.1.1 Percentage Target Creates Uncertainty

By converting the target into a percentage, rather than a fixed number will only further exacerbate the above mentioned issues. A percentage of an unknown simply breeds even more uncertainty which will result in more risk and higher costs and therefore should be avoided entirely. The Tambling Review came to this conclusion, as the issues paper identifies.

2.1.2 CCA Measures

Regarding CCA's specific measures:

- (i) **Economic efficiency** as stated above, changing the target will result in inefficient investment, inefficient use of capital and resulting in higher costs negatively impacting on economic efficiency.
- (ii) **Environmental effectiveness** clearly reducing a target would negatively impact environmental effectiveness as there would be less renewable energy generated. In addition, delayed implementation of renewables with the same target will not optimise environmental outcomes.
- (iii) **Equity** the target has been clear, however, to reduce it now would benefit the liable entities and diminish asset values of existing generator and project developers, which would not at all be an equitable outcome.

3. Clean Energy Finance Corporation-funded projects

3.1 What are the costs and benefits of increasing, or not increasing, the LRET target for Clean Energy Finance Corporation-funded activities?

3.1.1 CEFC Impacts

CEFC's \$10bn fund will likely result in considerable benefits to the industry general, however, these benefits need to come about through mechanisms that do not distort the supply and demand of LGCs to meet the currently legislated targets. Should the CEFC impact on liable entities decisions to meet the current target then a distorted market will undermine the lowest cost renewable projects investors confidence and ultimately result in higher costs to the end consumer.

4. Surrender and shortfall charge

4.1 Is the shortfall charge set at an appropriate level to ensure the 2020 target is met?

4.1.1 Shortfall Charge Decreases with Time

No, the shortfall charge is not appropriate. This charge is "nominal" not "real", as it does not increase with inflation. As a result, liable entities actually have the shortfall charge decreasing with time, rather than increasing as one would expect.

Given the shortfall charge is not real, the impact is that liable entities are likely to find it will be lower cost to plan to pay the shortfall charge than buy LGCs, invest in projects or entering offtake agreements supporting third party projects. This issue is a considerable risk to the renewable industry and unfortunately will undermine the success of the RET and the Governments objectives. There are recent drivers that will make this issue worse:

- 1. With demand forecasts being less it is anticipated long term energy prices will also decrease which results in the LGC component of a bundled offtake agreement having to increase.
- 2. With the Federal Government removing the carbon price floor, this will make this issue greater as the LGC component of a bundled offtake agreement will once again need to increase relative to energy if global carbon prices don't increase.

These LGC price component increases will decrease the likelihood of renewable projects being built and undermining the budgeted revenues for projects already built. To counteract this issue, it is proposed that the shortfall charge be change to be REAL dollars. This will have little impact on the liable entities cost base but is likely to increase the RET's chances of success.

5. Small-scale Renewable Energy Scheme

5.1 What do you consider to be the costs and benefits of having a separate scheme for small-scale technologies? Should there continue to be a separate scheme for small-scale technologies?

5.1.1 Equality is essential

Until small-scale technologies are on a level playing field with large-scale generators, it is essential that they are not under the same umbrella as large-scale generators.

Small-scale technologies, such as rooftop solar PV do have merits in terms of being distributed generation, however whilst there are additional market supports they undermine the lowest cost large-scale projects.

Namely, there are three additional supports for small-scale at present:

- (i) No grid costs rooftop solar PV for example, does not contribute to the grid capacity costs, which now makes up the largest cost of delivered energy. This is not equitable for other energy users who are subsidising the cost of the grid for the solar PV owners, nor other generators who are subject to these costs. Furthermore, it is typically lower income families and pensions who cannot afford the capital cost who are subsidising moderate to high wealth families and businesses in this regard.
- (ii) Feed-in Tariffs rooftop solar PV receives additional politically charged state feed-in tariffs, which have been proven to be highly volatile. Not only have these subsidies affected large-scale lowest cost generation, and will continue to do so, but the associated state based political policy volatility results in gross uncertainty and higher costs.
- (iii) Multiple certificates whilst small-scale needs more support than large-scale, it needs to be separated.

AEMO's recent projections of considerable rooftop solar PV uptake has considerable impacts on energy system economics, particularly time of day generation and pricing profiles. This actually will undermine a number of planned energy investments across the industry, worth billions of dollars, and it therefore be necessary for there to be a complete re-evaluation of the small-scale impacts on the wider energy market, subsidies they receive and the ultimate cost to end consumers.