Climate Change Authority September 11, 2012

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Submitted via e-mail

Dear Sir / Madam,

Samsung C&T response to Renewable Energy Target Review

Samsung C&T Australia is pleased to provide this response to the Climate Change Authority's (CCA) request for feedback on the Renewable Energy Target (RET) in support of its mandated review of the scheme.

Samsung C&T Australia's overarching recommendation to the CCA is that the RET remain unchanged so as to minimize uncertainty and the negative consequences this would create, primarily in the form of higher costs for delivered renewable energy and environmental consequences of failing to meet the target.

Samsung C&T Corporation

Samsung C&T Australia was established in June 2011 as an Australian branch office of the Samsung C&T Corporation (SCT) headquartered in Seoul, Korea. SCT is seeking investment opportunities in three principal business sectors, one of which is the renewable energy sector – targeting significant investment in wind and solar generation projects around the country, through the provision of financing, equity investment, and construction services.

SCT's flagship renewable energy transaction is its Green Energy Investment Agreement (GEIA) that it signed with the Province of Ontario (Canada) in January 2010. Under this agreement, SCT is responsible for the construction and delivery of 2,500 MW of new renewable energy generation capacity, with additional commitments for ensuring the establishment of new manufacturing in the Province.

SCT has been working to establish a portfolio of utility-scale renewable energy project investments in Australia on a similar scale to Ontario since early 2010 on the basis of three key drivers:

- A broadly-supported clean energy policy that will require significant new development of renewable energy generation capacity in the immediate future (the RET);
- World-class wind and solar resources;
- A relatively new market, with a mix of large players and niche operators, requiring significant capital investment.

In this context, it is clear that uncertainty around the RET significantly impacts SCT's investment decisions, thus the preference that it remain unchanged.

Please note that SCT has chosen to respond selectively to the questions posed by the CCA based on its perspective and experience as a foreign-based developer and investor in Australia's renewable energy industry.

The 20 per cent by 2020 commitment

Are the existing 41,000 GWh LRET 2020 target and the interim annual targets appropriate? What are the implications of changing the target in terms of economic efficiency, environmental effectiveness and equity?

Yes, these are appropriate targets and should remain unchanged.

The implication of a change to these with regard to economic efficiency will be higher risk perceived by investors and financiers, which will lead to higher equity return requirements and financing costs, ultimately resulting in more expensive renewable energy. The process of deciding on and implementing any changes will also delay investment decisions, exacerbating the already very aggressive construction schedule necessary to meet the current target with the likely result of labour and equipment shortages that will lead to higher construction costs and more expensive renewable energy. In the event these delays and shortages make it impossible for the target to be met, renewable energy will also be more expensive due to the penalty price being hit due to a shortage of LGCs.

Environmental effectiveness will be reduced due to the delay in investment decisions being made, potentially resulting in targets not being met and therefore, delaying the time to when the RET's goals are achieved.

Further changes to the LRET target will reduce the amount of equity willing to participate in the Australian markets. This reduced competition amongst investors will also result in more expensive renewable energy and further heighten the risk of the target not being met due to insufficient capital to support the volume of projects needed to do so.

Is the target trajectory driving sufficient investment in renewable energy capacity to meet the 2020 target? How much capacity is needed to meet the target? How much is currently committed? Has the LRET driven investment in skills that will assist Australia in the future?

Yes, barely. Any further delays or deviations away from the already aggressive construction schedule needed to meet the current trajectory will almost certainly result in its not being met due to constraints in resources needed to deliver projects.

The capacity needed depends on the ratio of technologies, however anecdotally, approximately 10GW of new capacity is needed. This represents approximately $30 billion of new infrastructure investment.

The LRET has driven investment in skills including project development, project finance, project management & delivery, and asset management. These skills will assist Australia in the future as it seeks to initiate, deliver and operate other similar large-scale infrastructure projects safely and economically.

In the context of other climate and renewable policies, is there a case for the target to continue to rise after 2020?

No, there should be no rise after 2020 assuming carbon pricing and de-carbonization policies and targets are maintained and subsidies/assistance for fossil fuels and fossil fuel-based generation are eliminated. With a "level playing field" such as provided by these conditions, renewable and non-renewable (fossil-fuel based) generation technologies should be allowed to compete, with the market deciding how much/little new renewable generation capacity to be added. This applies to relatively mature technologies such as wind and solar photovoltaic. As with many other industries

now and in the past, there should continue to be government support for emerging renewable energy generation technologies.

Should the target be a fixed gigawatt hour target, for the reasons outlined by the Tambling Review, with the percentage being an outcome?

Yes, the target should be a fixed gigawatt hour quantity to provide the certainty needed for investment in projects with lifetimes as long as the 20-25 years or longer seen in renewable energy.

Should the target be revised to reflect changes in energy forecasts? If so, how can this best be achieved – as a change in the fixed gigawatt hour target, or the creation of a moving target that automatically adjusts to annual energy forecasts? How should changes in pre-existing renewable generation be taken into account? What are the implications in terms of economic efficiency, environmental effectiveness and equity?

No, for the same reason as above, being that the certainty provided by a fixed quantity target is what is needed to provide the certainty necessary to invest. If a dynamic target is implemented as a percentage of actual usage, investment decisions will be based on forecasts that are inherently inaccurate and uncertain. The result of this would be that projects to supply LGCs to meet only the lowest energy forecast expectations will be built, almost certainly resulting in the target being missed, particularly when the further uncertainty created by the imperfect information about the market's progress towards satisfying those minimal requirements is taken into account.

Clean Energy Finance Corporation-funded projects

What are the costs and benefits of increasing, or not increasing, the LRET target for Clean Energy Finance Corporation-funded activities? What are the implications in terms of economic efficiency, environmental effectiveness and equity?

The LRET should not be changed on account of the Clean Energy Finance Corporation on account of the further uncertainty this would introduce into Australia's renewable energy investment environment.

As already stated, a key cost of this uncertainty associated will be higher average cost of renewable energy delivered. Another potential cost is the financial and environmental cost of not meeting the scheme's target.

A potential benefit of increasing the LRET for CEFC-funded activities would be greater diversity in generation technology used to meet the LRET target, together with the learning associated with that diversity. That said, the value of this learning would be diminished due to the fact that CEFC support is only to be applied to commercially unviable opportunities, meaning that similar developments will not be possible without similar support.

The large-scale eligibility framework

Is a list approach to 'eligible renewable sources' appropriate?

This approach is appropriate, with the proviso that a list of criteria for inclusion on the list should be published. (All technologies already on the list should be covered by these criteria to avoid any introducing any uncertainty regarding eligibility.) Any new technology that meets these criteria should also be made eligible and added to the list to allow for and encourage further innovation.

Are there additional renewable sources which should be eligible under the REE Act?

(See response immediately above.)

Should waste coal mine gas be included in the RET? Should new capacity of waste coal mine gas be included in the RET?

No, waste coal mine gas should not be included in the RET, nor should it ever have been as it is not a renewable source of energy. By supplying some of the credits needed to meet the target, including this in the RET detracts from the opportunities for the genuine renewable energy industry to develop and dilutes the RET's overall effectiveness.

What would be the costs and benefits of any recommended changes to eligible renewable sources?

There are no costs to the proposed method of identifying a set of eligibility criteria enabling new technologies to be added to the list of eligible sources, provided eligibility requirements are clear and appropriate (i.e. do not allow non-renewable sources to be included), and decisions for what sources are actually used to meet the RET is left to the market, i.e. made on a commercial basis without any further influence by the RET scheme.

Benefits of allowing a wider variety of eligible sources include motivation for developers of new renewable energy generation technology to have this technology included on the list, greater innovation and the learning that comes from that, and the freedom to apply the technology best-suited to a specific circumstance/environment.

Small-scale Renewable Energy Scheme

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

The primary cost of having a separate scheme for small-scale technologies is the risk of distorting the market in favor or against a specific segment of the market, though recognizing the original reason for creating the SRES was to achieve the opposite, i.e. de-couple small- and large-scale segments and remedy the distortion created by multiple, overlapping incentives targeted at the small-scale segment. (These incentives include multipliers for credits generated using solar technology under the Solar Credits scheme, upfront deeming of credits, various State-based solar Feed-In Tariffs, and grants for installing solar generation capacity.)

In line with above, the benefit of a separate scheme is the separation this creates between small- and large-scale technologies, insulating the large-scale segment from the market-distorting effects of incentives specifically supporting small-scale projects.

Should there continue to be a separate scheme for small-scale technologies?

Once the incentives and support mechanisms for large-scale and small-scale technologies are equal, no, there should not be a separate scheme.

For the purposes of the RET to 2020, however, the current structure should be remain unchanged to avoid any uncertainty that the change back to a single scheme covering both small- and large-scale technologies might introduce.

Solar credits

What are the lessons learned from the use of multipliers in the RET? Is there a role for multipliers in the future?

The key lesson learned from the use of multipliers in the RET is that they are an effective way of stimulating demand for the technology they are applied to, substituting demand away from other technology(ies) that would have been employed had no multiplier been available.

Multipliers should not be used again for the RET. The focus of the RET should be on getting the greatest amount of power (MWhs) from renewable sources at the lowest price per MWh possible. Multipliers distort the market's calculation of how to achieve this and ultimately contribute to this objective not being met.

Diversity of renewable energy access

Should the RET design be changed to promote greater diversity, or do you think that, to the extent that there are barriers to the uptake of other types of renewable energy, these are more cost-effectively addressed through other means?

There should be no further changes made to the RET. Other cost-effective opportunities exist for promoting renewable energy generation, for example removing subsidies (direct and indirect) for fossil fuel power generation.

What would be the costs and benefits of driving more diversity through changes to the RET design?

The design of the RET should remain unchanged.

As already stated, a key cost of the uncertainty created by changing the RET design will be higher average cost of renewable energy delivered. Another potential cost is the financial and environmental cost of not meeting the scheme's target.

A benefit of greater technology diversity would be broader domestic experience with various technologies.

Review frequency

What is the appropriate frequency for reviews of the RET?

Four years is an appropriate frequency for reviewing the RET, given the time needed to develop and construct projects (two to four years) and the timescale for investments (twenty years and greater).

What should future reviews focus on?

Future RET reviews should focus on the rate of progress towards achieving the RET and identifying and understanding key factors for the market's success/failure of doing so. The purpose and structure of the RET itself should no longer be up for discussion due to the uncertainty this introduces into investors' decision-making process and the consequences this entails.

I and my colleagues in Samsung C&T Australia and Samsung C&T in Seoul are grateful for the opportunity to submit our comments on the Renewable Energy Target. We look forward to the Climate Change Authority's findings and, in the interim, encourage you to contact us if there are any questions or clarifications needed about this response.

With best regards,

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General Manager

Samsung Construction & Trading Corporation