



Investor Group on  
Climate Change

**Investor Group on Climate Change  
Australia /New Zealand**

ABN 15 519 534 459

PO Box H26, Australia Square NSW 1215

Level 9, 255 George Street, Sydney NSW

P: (02) 9255 0290

F: (02) 9255 0299

[www.igcc.org.au](http://www.igcc.org.au)

Climate Change Authority  
GPO Box 1944  
Melbourne VIC 3001

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## **IGCC submission to Review of the Renewable Energy Target Scheme**

The Investor Group on Climate Change (IGCC) represents Australian institutional investors managing \$900 billion. We are managers of retirement savings and pooled investments and are concerned with the long-term impacts of climate change on the stability of the economy. We invest in all sectors of the economy, emissions-intensive and low-emission alike, and are direct investors in energy generation assets. IGCC members invest in renewable energy generation assets in Australia and around the world.

We thank the CCA for the opportunity to make this submission on the Renewable Energy Target scheme.

### **Summary**

The Renewable Energy Target (RET) scheme was initially created to encourage the development of renewable generation assets in the Australian market in a cost effective manner. One of the necessary scheme design elements to support this outcome from an investor perspective was clarity on the required level of renewable energy generation. This clarity is necessary for investors in the sector to have the confidence to develop generation assets.

Changes to the RET scheme of the type discussed in the RET Review discussion paper, including changing the form or energy output level of the 2020 target, would undermine the confidence of investors in the RET scheme and in Australia's renewable energy investment environment, in a number of ways.

First, changes to the RET scheme could undermine the value and returns on investments made to date under the scheme. This would jeopardise the investment case for deploying additional capital to both existing assets and new assets.

Secondly, we see a risk that climate policy in Australia is perceived as being constantly in flux, putting future investment at risk.

For these reasons we do not favour any changes to the RET scheme arrangements to 2030 at this time. This includes increasing the level of the 2020 target to recognise the potential effect Clean Energy Finance Corporation (CEFC) funding for projects. Not modifying the design or operation of the RET would send a positive message about policy predictability in Australia, support new investments in the sector and increase the efficiency of the market based policy mechanism.

Investments in renewable generation are long-term in nature. IGCC members have invested in projects with expected life-spans of over 25 years. Rather than changing the design of the current scheme, if changes to improve the efficiency of the current scheme are to be made, the Government may consider addressing issues beyond 2030 so as to positively affect long-dated investment decisions in the short to medium term. For instance, the Government may consider extending the current RET arrangements to 2035 in order to overcome earnings tail risk in new generation projects, which is the result of delays in

asset deployment brought about by previous changes to the RET scheme and uncertainties over the future tightening of emissions reduction policies such as carbon pricing. Such an extension would provide investors with greater investment certainty in terminal cash flows and improve confidence to invest in renewable assets.

Finally, the periodic changes to the scheme since its inception have already created uncertainty for investors, which has constrained the efficiency of investment in energy markets. The prospect of further changes under the current review, as well as future reviews every two years contribute to further uncertainty. Constant review of the scheme increases uncertainty for all stakeholders, and is inconsistent with the long-term investments that are being made to achieve the objectives of the RET scheme.

Below are IGCC's responses to several of the questions outlined in the issues paper, with particular focus on the LRET. We look forward to discussing these matters further with the CCA as it conducts the RET review.

***Q. 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?***

### ***Appropriate targets***

From an investor perspective, relative to the stated objectives of the RET policy, IGCC sees no substantive case for lowering the 41,000 GWh LRET 2020 target. Relying on forecasts of energy demand eight years in advance in order to change what is currently a firm output based target is exactly the wrong kind of signal to send to investors about the stability of the policy regime.

Challenges to the development of sufficient clean energy projects to meet the 2020 target are being faced by investors. However, these challenges do not warrant modification to the 2020 target or the interim targets. If anything, sending a clear signal that the targets leading up to 2020 will not be modified would be the more appropriate response for investor confidence and improve the likelihood of achieving the stated objectives of the scheme. Some of the investment challenges currently being faced by investors are described below.

It is our view that it is too early to seek to increase the level of the 2020 target after 2020. Our thoughts are outlined below in reference to the interaction of the RET and CEFC financing.

### ***Implications of changing the target***

There are implications for economic efficiency from changing the 2020 target.

Investors, particularly in infrastructure assets, seek policy settings that are long term, low risk, have low volatility and evolve predictably. Changes to the design or operation of the RET at this time will weaken the confidence of investors, not only about the future of the RET, but the stability of climate policy in Australia. This is likely to undermine investment plans, current and future, in renewable energy in Australia and would also likely have a negative impact on the returns from existing energy infrastructure investments.

The clear short-term implication from changing the 2020 target is risk to capital that has already been deployed by investors in large-scale renewable energy projects. Changing the target can materially, adversely affect the return on invested capital. For instance, a fall in LGC prices arising from a change in LRET will reduce a project's revenue stream, make it more difficult for project lenders to refinance the asset on terms similar to those if the target had remained unchanged, and therefore reduce the project's return. Some IGCC member investors have invested in large-scale renewable energy assets in Australia based on assumptions about the 2020 target remaining at the current level.

Looking to the implications of changing the target for future investment decisions, changes to the RET at this time will lead to one or more of three possible outcomes for institutional investors, including: a higher risk premium being applied to new clean energy projects in Australia; institutional capital seeking alternative investment opportunities in low-carbon projects in offshore markets with greater regulatory stability; or, institutional investors shifting capital to other asset classes with clearer regulatory arrangements and more certain earnings streams.

Applying a risk premium to desired investment returns is a standard practice to address risk to those returns in a given investment decision. In the case that the likely returns from renewable energy projects are at risk due to possible regulatory change, investors will seek a higher level of expected investment return before investing. This has the effect of increasing the cost of delivering the project, generally requiring an increase in the earnings for the investment, which in this case, may mean higher energy prices. The effect of policy uncertainty on the costs of investments in the energy sector have been

demonstrated by a number of economic studies, including Nelson et al<sup>1</sup>, and Deloitte.<sup>2</sup> Although dealing with policy uncertainty around the carbon price, each clearly demonstrates that additional costs to energy customers result from sub-optimal investment decisions as a result of policy uncertainty. Any increase in risk premium for renewable energy generation will raise the cost of delivering the 2020 LGC target.

On prioritising low carbon investment opportunities in different markets, the examples provided by IGCC members are instructive. In recent years, investments have been made by Australian investors in markets where renewable energy market policies are more predictable and less subject to uncertainty through review. Preferred markets include Ireland, Germany, Chile, the UK and US.<sup>3</sup> These markets are perceived by investors to have more stable energy market policies and provide higher levels of predictability in respect to clean energy assets. In this case, perceptions of regulatory stability become a threshold decision point for institutional investors.

Confidence in regulatory stability for an asset class influences investors' asset allocation strategies. Greater confidence also leads to allocation of expertise to investigate specific investment opportunities. For institutional investors, this decision point can precede incremental calculation of risk premiums around possible future regulatory change. The effect of greater policy stability is that institutional investment strategies will favour allocations to these markets in preference to those with perceived policy instability. We note that risk is still perceived to exist in Australia's renewable energy policy environment and further change in the RET design would perpetuate this view.

On decisions regarding alternative asset classes, the institutional investment community in Australia still prefers a range of social and industrial infrastructure investments to renewable energy infrastructure. This is partly due to the relatively early stage of development of renewable energy generation assets in Australia, but also because more stable policy settings around other asset classes allow greater certainty on earnings streams for these assets. Airports, transport infrastructure, ports and community developments are good examples of infrastructure investments that IGCC members actively seek and support.

While local institutional investors are deepening their expertise and preparedness to invest in renewable energy assets in Australia, the stability of the policy framework for the next several years is critical to continued capacity building in the sector. Markets respond swiftly when clear and predictable investment opportunities exist. Frequent policy change or the perceived risk of frequent policy change that can impact investment opportunities has the opposite effect.

***Q. 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?***

There are a number of practical implications associated with the delay in the deployment of LGC generating projects that will make achieving the 2020 target challenging and limit the economic efficiency of the current regime. While none of these challenges are expected to be insurmountable, they are deepened by the continued spectre of frequent and unrestricted reviews of the entire RET policy.

Challenges arise from a confluence of events, including the previous overhang in scheme permits which has delayed deployment of assets, the tightening of planning controls in Victoria and NSW and the reduction in investment certainty created by the current wide review of the RET.

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<sup>1</sup> Nelson, T., Kelley, S., Orton, F. and Simshauser, P. (2010), 'Delayed Carbon Policy Certainty and Electricity Prices in Australia', *Economic Papers*, 29 (4), 1–20.

<sup>2</sup> Deloitte (2011), *Electricity Generation Investment Analysis. Deloitte Touche Tomatsu Report, 14 April. Deloitte Touche Tohmatsu, Melbourne.*

<sup>3</sup> The stability of energy policy is one of many factors that determine investment.

A significant portion of the pipeline of projects in Victoria with development approval will soon face expiry of those approvals. Uncertainties created by the current RET scheme review means that commercial negotiations are on hold pending the outcome of the review and any subsequent policy changes. The more favourable conditions under which those approvals were granted will no longer be available from the State Government, meaning that even projects with strong underlying economics may not proceed. In some cases, these projects are among the lowest cost wind resource sites in the mainland national electricity market. The combination of these events mean that transaction costs for new projects will increase, development timeframes and costs will increase and the productivity of energy generation sites may decrease.

While the planning policies of State Governments are outside the control of the Federal Government, reducing the frequency of future reviews of the RET should be considered to limit the extent to which such reviews can cause uncertainty in the market and further delay investment decisions.

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

IGCC considers that given the uncertainty around the long term level of ambition in national emissions reductions commitments in Australia and internationally, the related uncertainty for long-term carbon pricing trajectories, and the potential influence of other energy policies at a national and state level, it is too early to know whether increasing the RET after 2020 is desirable. Additionally, more time is required to assess the actual level of generation capacity that is deployed in the short to medium term under the current RET scheme arrangements. A more appropriate time to consider the case for increasing the RET after 2020 would be following the expected increase in deployment of new renewable energy sources coming on line in or around 2015 and after progress in international and Australian emissions reduction policies can be assessed.

***Beyond 2030***

For investors a more significant issue is the extent to which RET arrangements to 2030 support current investment decisions. In short, investors currently expect a material reduction in earnings from 2030 for new projects, which leads to significant tail risk for potential investors in renewable generation assets in coming years.

Due in part to the delays in development caused by REC oversupply and subsequent adjustments to the scheme, investment in new large scale generation assets that may have occurred up until 2012 is now likely to occur around 2015.

Given that many new Power Purchase Agreement's (PPAs) for wind assets are between ten and fifteen years in duration, new agreements commencing in 2015 will have expired by 2030, the same year that REC pricing falls away.

For new investors in wind assets, income during the first fifteen years of an asset's life is broadly limited to servicing debt obligations and operating costs, with minimal equity return. As a result we estimate that more than 25% of the value of the asset, and in some cases up to 40%, may not be realised until the end of the initial fifteen year PPA period.

Renewable generation plants can far outlive the length of the PPAs that are currently on offer. However, as there is some uncertainty over the extent to which carbon pricing or other policies will support the competitiveness of renewable energy assets in 2030 and beyond, the clear drop off in earnings potential related to the RET, limits the current desirability of these investments for institutional investors. These uncertainties therefore limit sources of capital for additional investment in new generation assets in Australia.

We note the differences in the US market where PPAs extend for up to 25 years, making investment cases far more attractive as greater value is realisable within the life of the initial PPA.

To overcome these earnings risks, the Government may consider extending the current flat 41,000 GWh target to 2035. This would improve the economics of current investment opportunities by extending the life of revenue supports for these assets. The effect of such a change would be to improve investor confidence in making generation investments in the short term, leading to an earlier build-out of capacity to meet the 2020 target, a smoother project deployment development pipeline and avoidance of bottlenecks in project delivery later in the decade.

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

The advantage of a fixed gigawatt hour target is that investors, developers and parties liable to surrender LGCs are able to calculate the level renewable output in the market and how much additional investment is required to meet the target. If the percentage output of renewable energy were fixed and the gigawatt hour target were not, significant uncertainty would be introduced for all investors, but especially those less able to spread earnings risk across multiple assets in an energy generation portfolio. This risk may also reduce the appetite for further investment from investors with existing investments in this space.

Such a change would again significantly increase uncertainty and risk, limit the flow of capital into the sector and may limit the extent to which the 2020 target would be met in practice.

Accordingly, IGCC's view is that the current expression of the RET as a fixed target should not be changed.

***Q. 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?***

IGCC sees no compelling case to change the level of the existing fixed 2020 gigawatt hour target.

The prospect of changes to the 2020 gigawatt hour target based on demand forecasts even once, makes the approach virtually indistinguishable from a target that automatically moves in response to annual forecasts from an investor's perspective. If policy makers are compelled to change the target once, investors will consider the likelihood that it will be changed again to be high. The prospect of regular changes to the 2020 target will damage investor confidence and discourage investors from participating in the market.

***Q. 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?***

While arguments may be made for increasing the RET to recognise the benefits of CEFC funding for newer or more expensive renewable energy technologies, there are material challenges to establishing additionality attributable to the CEFC.

Investors are largely agnostic about which technologies should fulfil the 2020 target. There are advantages for Australia and whole of economy investors if greater experience in deploying a range of renewable energy technologies can be developed in Australia. While diversity of renewable energy sources is not a desirable end in itself, building experience and lowering the cost of deployment of a

range of energy technologies should provide a higher chance of achieving an installed base of low cost renewable energy sources in future.

It is possible that CEFC-funded renewable generation projects that would otherwise be uneconomic to build or operate, due for example to more expensive technology, or lesser experience in deploying the technology in Australia, may displace prevailing lower cost renewable generation. While it is expected that projects benefiting from CEFC finance would become more cost competitive with existing lower cost wind projects, it is not expected that LGC pricing would be reduced in the market. If CEFC finance were to have the effect of lowering LGC pricing in the market, this would be of concern to investors that had already invested capital in renewable energy projects.

Aside from these considerations and the potential benefits of allowing CEFC finance to sit alongside LGC generation, it is too early to tell precisely what the CEFC will invest in and how much investment will be directed towards renewable energy projects that qualify for large scale generation credits. More clarity is needed on the basis for the CEFC's investment decisions, before judging the merits of adjusting the LGC target, or making the CEFC's investments eligible for LGC creation.

If after the experience of operating the CEFC there is a clear formula for demonstrating additionality, there may be an argument for supplementing the renewable target for all projects that received CEFC support. This would best occur once the CEFC has been fully invested or its impact on the LGC market is apparent.

## **Conclusion**

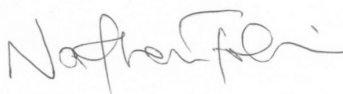
Investors deploy capital in long-term infrastructure projects based on the assumption that policy regimes will remain on foot for the course of the economic life of these projects. The prospect of frequent changes to regulatory arrangements undermines investor confidence and ultimately constrains the flow of capital, either by increasing risk premiums or leading investors to prefer alternative investment opportunities.

Neither the form of the 2020 target nor the level of the gigawatt hour target should be modified. Opting not to make any changes now, and limiting the scope and frequency of future reviews will provide the most positive impetus to realising the current 2020 LRET in a relatively efficient way.

If the Government is to make changes to the scheme, it could consider the impact of recent delays in generation developments and seek to address the tail earnings risk for new projects to be developed in the coming years. Extending the current RET arrangements to 2035 is one way to address these earnings risks, encourage more investment in the short term and support a more efficient deployment of assets across the decade.

IGCC member experience in clean energy investments is developing rapidly. We look forward to continuing a dialogue with the CCA on the evolution of the investment regime for renewable energy in Australia.

Yours sincerely,



Nathan Fabian  
Chief Executive  
Investor Group on Climate Change