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

Review of the Renewable Energy Target
Expert Panel
By upload to: www.retreview.dpmc.gov.au/online-submissions

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Institutional investor interest in this Inquiry

The IGCC represents Australian institutional investors with over $1 trillion of funds under management and other members of the investment community on climate and energy issues. IGCC members are invested across the Australian economy and are part owners of most of Australia's large companies. As managers of retirement savings and pooled investments we are concerned with the evident and increasing impacts of climate change on the global and Australian economies and future investment returns. We are seeking to reduce our exposure to greenhouse gases and the risks of climate change accordingly.

Of specific relevance to this Inquiry, we are owners of renewable energy generation assets in Australia, investments that were undertaken with the expectation of a strong Renewable Energy Target (RET) and a supportive regulatory environment for renewable energy investments. As large, diversified portfolio investors, we are also shareholders in publicly listed, vertically integrated energy companies operating in Australia.

While some of our energy investments have already been weakened by deteriorating market confidence on the future of the RET, we expect that reducing the Large Scale Renewable Energy Target (LRET) would change market conditions in ways that were not foreseen when the 45,000 GWh RET was introduced, with bi-partisan political support, and would further undermine our investment activities.

Finally as portfolio investors seeking to lower the emissions intensity of our portfolios, we are potential investors in assets and companies that may be developed and companies that may be created or supported if the RET continues to generate investment and commercial opportunities in Australia. If the policy environment does not support further renewable energy investment in Australia we will be forced to seek opportunities in international markets to meet our portfolio de-carbonisation objectives.

Summary

IGCC believes the 41,000GWh LRET should be maintained at the current level. Extending the scheme's duration to 2035 would address confusion and delay in the market created by recent policy uncertainty. Further, we believe that biennial reviews of the RET reflect a wider problem in climate and energy policy-making and indicate that the necessities of decarbonising the domestic economy have not been fully accepted by policy makers. Each of these points is discussed further below.

1. The 41,000GWh 2020 LRET should be maintained

There are sound investment and economic reasons to retain the current LRET rather than reducing it. IGCC's comments focus on the LRET as this is the sector of the market most relevant to our investment activities.

We do not focus on the Small Scale Renewable Energy Scheme (SRES) in this submission, but note that some of our institutional investor members may have small exposures through their Australian private equity investments.

1.1 Investment reasons to maintain the LRET

IGCC believes that reducing the LRET will damage Australia's investment environment in a number of ways. First, any material reduction in the LRET will negatively impact investors in assets already built and operating under the RET, particularly those subject to market pricing. Second, investors seeking to increase their low carbon exposures will reallocate capital to pursue opportunities created by more favourable investment conditions in international markets. Third, the availability of capital for renewable energy investment will reduce and the cost of that capital will increase, increasing the cost of delivering the RET, whatever the target.

Impact on existing investments

Reducing the LRET will affect the financial performance of assets already built and operating under the scheme – this will likely be reflected in lower revenue, greater difficulty in servicing debt obligations, lower/no distributions to investors and negative movements in periodic asset valuations.

Many renewable energy generation assets were financed based on REC prices derived from expectations of the RET target being met. Typical forecasts had REC prices rising in order to meet the 2020 target. If the RET is lowered there may be an impact on REC demand and prices.

Lower demand for Large Scale Generation Certificates (LGC's) may lead REC prices to fall. If REC prices fall and subsequently the revenue of some renewable generation assets fall, investors are likely see the expected earnings for these assets undermined.

MMA modeling for the Climate Change Authority Review of the RET in 2012 assessed implications for the REC price of a reduction in the RET from 41,000GWh to an 'updated 20%' case. MMA found that REC prices were likely to fall from $65 to $51 in 2017[1]. While most renewable assets will be protected by contractual arrangements that see purchasers taking pricing risk, or benefiting from reduced prices if they are also buyers of RECs, not all assets have these contractual arrangements in place and, as a result, are directly exposed to fluctuations in the market price of RECs.

We note there are trends evident on renewable energy deployment costs such as reducing technology costs and increasing expertise for deploying assets, which can influence future costs, and therefore REC prices. If the LRET is materially reduced, these factors will obviously not come into play.

A second investment impact for existing investors from a reduced LRET arises from increased debt refinancing costs for some assets, as the market demand and earnings/cash flow risks for those assets influence debt arrangements.

For example, the combination of regulatory uncertainty, followed by the certainty of lower demand and high probability of reduced earnings, introduce additional risk factors, which need to be "priced in" to loans provided to renewable generation assets.

[1] MMA modeling for the Climate Change Authority 2012 RET Review. The LGC price is $51/MWh in 2017 in the 'updated 20% target' scenario tab and $64.93 in the 'Reference case 1' scenario tab in 2017: http://climatechangeauthority.gov.au/sites/climatechangeauthority.gov.au/files/121218%20SKM%20MMA%20modelling%20output%20sheets%20-%20Final.xlsx

As a result, assets that are able to secure the necessary amount of debt re-financing can expect a higher cost of capital as a result of these risks. The higher cost of debt capital would also undermine expected equity returns for investors as a greater proportion of cash flow generated by the asset is used to service debt.

The greater level of investment risk created by the factors identified above may also lead to lower valuations for assets, which are undertaken on a periodic basis and are reflected in the periodic returns for institutional investors who own these assets.

These issues will impact investors that rely on market prices for RECs, or do not have broad portfolios of energy assets or do not have vertically integrated businesses. Price risk can never be fully hedged by investors with these exposures and changing the RET will be disproportionately impact these investors in the renewable energy market.

These examples demonstrate that changing a regulatory regime after investments were made can introduce sovereign investment risk for investors. This is especially so for a policy regime that was understood to have had bi-partisan support.

Despite concerning commentary on the future of the RET from Government representatives, investors consider it to be highly unlikely that the Government would scrap the LRET policy. Such an approach would make Australia's situation comparable to Spain's recent retreat on renewable feed-in tariff legislation, which retroactively reduced feed-in-tariffs for plants built between 2009 and 2011.[2] These changes significantly impacted on investors in the Spanish energy sector and led to litigation by investors against the Spanish government. If Australia was perceived by investors to have a similar level of sovereign risk, local and global institutional investors may abandon the renewable energy market in Australia for years to come.

Development delays due to uncertainty regarding the RET are already costing investors. Capital spent on land acquisition and site development is effectively sitting idle due to lower than expected REC demand. A number of IGCC members have been affected in this way. Another example is the impact on Infigen Energy where expectations of a reduced RET have contributed to a share price reduction of 25% since 2012.

Examples of investment losses for generation assets are matched by experiences in the equipment manufacturing and services sector. One recent example is RPG Australia (a manufacturer of towers for wind turbines based in Portland, Victoria) going into administration in 2012. This company received an investment from Next Capital, an Australian private equity fund manager supported by many local institutional investors. Similar examples are expected in future if the LRET is materially weakened.

Potential investment in Australia to go offshore

Expectations of a lower future RET are clearly impacting renewable energy investment volumes today. According to Bloomberg New Energy Finance, clean energy investment in Australia dropped a further 9.5% in 2013, after dropping over 17% the previous year.[3] A combination of investor expectations about climate and energy policy retreat, of local investors looking offshore for low carbon exposures and international investors avoiding Australia has contributed to this situation. Up to $21 billion of potential investment over 2014 – 2021 in Australia is at risk if the LRET is materially weakened.[4]

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[2] *Spain publishes retroactive PV FIT cuts*, PV Magazine, 21st Feb, 2013. http://www.pv-magazine.com/news/details/beitrag/spain-publishes-retroactive-pv-fit-cuts_100010298/#ixzz31pt61wJA

[3] Bloomberg New Energy Finance, Total clean energy asset financing, 2014

[4] Ibid.

Institutional investors are recognizing that reducing the emissions exposures in their portfolios is increasingly a strategic investment priority. While local investors favour local opportunities to increase these allocations, if Australia's energy markets remain on a higher emissions profile, with a poor policy environment, the only alternative to reduce emissions will be to diversify away from this market. IGCC members have already shifted capital to offshore infrastructure funds and private equity funds. Others are seeking renewable energy and technology exposures through fixed income instruments ("green bonds") that, although they provide modest returns, provide stable investment settings and high confidence on their low emissions footprint.

Policy change and uncertainty is also influencing foreign investors seeking low carbon investments, making them less likely to invest in Australia. Institutional investors in Europe and North America have indicated to us, their Australian colleagues, that retrograde climate policies introduce sovereign investment risk in Australia. Confusion and surprise at the extent of the current Government's retreat on climate and energy policy is the typical response, presenting a clear indication that Australia's risk rating on climate change has increased in the minds of international institutional investors.

The consequence of the investment risks raised in this submission are highly likely to encourage investors seeking low carbon investments to pursue jurisdictions with more stable regulatory environments. To avoid this situation a strong indication of Government support for the LRET would be necessary.

Reducing the availability and increasing the cost of capital for renewable energy

Materially reducing the RET will have several impacts on Australia's investment markets and future energy supply including both on the availability and cost of capital.

Australia does not have abundant sources of capital for energy investment. Energy generation assets are aging and emissions intensive by international standards. Attracting new sources of investment for energy supply is an important policy objective as Australia seeks to replace much of its generation capacity for lower emissions alternatives in the coming five - fifteen years. Material changes to the RET will increase perceptions of risk and increase investor uncertainty in energy markets at the same time that the Government should be seeking to increase investor interest in energy markets in Australia. The Government risks signaling that Australia is not yet committed to a pathway of structural change in its energy markets taking account of emissions constraints and technology changes.

Reducing the sources of capital, paired with low renewable energy ambition is likely to increase the cost of capital for all energy investments. Increasing the cost of capital increases the cost of meeting the RET and therefore the cost of electricity. High risk premiums would add to the building and operating costs of a typical wind or solar farm investment, other things being equal. All of which increases the cost of delivering the RET.

Typical infrastructure return objectives for institutional investors with no portfolio protection in this renewable energy market are 10% - 15% for operating assets. This figure compares to return benchmarks of around 10% (or even lower) for other infrastructure asset categories (such as toll roads, airports or sea ports). The gap in part reflects the regulatory uncertainty in this area and the implied risk premium required by investors as a result of the additional perceived risk.

By reducing the cost to deliver a project, the cost of energy can be reduced for consumers. Professor Garnaut was cited in the Climate Change Authority RET Review as submitting that:

> *"…uncertainty raises the supply price of investment and the costs of electricity to users. Change in the law should not be contemplated without compelling policy reasons."*[5]

An international comparison that further indicates the risk premium on Australian energy assets is the roughly 6% benchmark yield for listed solar YieldCos in the United States[6]. While some adjustment should be made in any benchmark analysis for interest rate differentials, this relatively low return rate indicates a substantial risk premium in Australia for assets by international standards.

1.2 Economic reasons to maintain the LRET

The key economic reasons for maintaining the RET include: that the net short term energy costs associated with the scheme are modest; the energy prices associated with RET supported projects will fall further over time as a result there being no fuel costs or inflation associated with generation; and the cost of alternative fuel based energy sources such as gas are rising substantially, leading to the risk of both energy price and CO_2 emissions increases unless renewable energy supply is further increased.

Additionally, undermining the renewable energy industry by materially reducing the RET would create a skill and capacity gap within the Australian economy that will be more expensive to fill later and it would reduce the emissions productivity of Australian industry.

Finally, the Government should guard against making policy decisions which have a long term goal based on evidence derived on a shorter term horizon, as this may lead to decisions made without full and proper regard being given to the medium to long term implications of these decisions (e.g. the potential loss of productive capacity in the Australian economy highlighted above).

Costs of the RET and energy

The costs for industry associated with the RET are modest due to a combination of exemptions from RET liabilities for trade exposed industries and because of lower wholesale energy costs over time as a result of increased renewable energy supply (the "merit order" effect). According to the Australian Energy Market Commission's report, in relation to the impact of the Renewable Energy Target on energy markets:

> *"The LRET [large-scale Renewable Energy Target] will act to dampen wholesale electricity prices by increasing renewable generating capacity beyond the quantity that would have been developed without the additional revenue streams provided by the LRET to renewable generation."*

The additional costs faced by energy users as a result of the RET are not material from an investment perspective. There is no apparent evidence that publicly listed companies have had had their investment rating or their share price reduced as a result of energy cost burdens associated with the RET. This is despite dozens of companies being substantial energy users. This indicates to the market that costs of the RET are manageable within day to day operations and do not present an undue cost burden.

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[5] Professor Ross Garnaut, Climate Change Authority RET Review, 2012, Page 36. http://climatechangeauthority.gov.au/sites/climatechangeauthority.gov.au/files/20121210%20Renewable%20Energy%20Target%20Review_MASTER.pdf

[6] UBS Global Equity Research, Julien Dumoulin-Smith, "*US YieldCos: Applying a Solar Valuation Approach to valuing NYLD*", 25 March 2014.

Even though RET cost impacts are already modest, the addition of renewable energy to the system is expected to reduce the overall cost of energy further. Recent modeling from the Clean Energy Council conducted by ROAM Consulting[7] shows that the RET will lower relative long-term energy prices if it is maintained. The modeling indicates the business case benefits of renewable energy sources over fossil fuel based energy. As technology costs for generation equipment reduce, the advantage of no fuel input costs provides a sustainable competitive advantage and a deflationary overall impact. On a medium term cost basis, the economic evidence favours maintaining the RET rather than reducing it. Maintaining a higher base of renewables can reduce energy costs in the system and avoid higher relative energy costs as a result of increasing gas prices, which we believe is in the interests of industrial energy users.

The CEC analysis addresses the question of the cost of gas as an input fuel. Recent examples of CCGT plants being increasingly used only as peaking plants because they are uneconomic at most demand levels is leading investors to derate the value of these assets. Given recent gas fired generation plant closures and excess capacity of gas generation assets in the system, the prospect of attracting investment to additional gas generation assets is low. Materially reducing the RET would limit choices for investors facing high gas prices, regulatory risk on renewables and expected future emissions cost risks associated with coal.[8]

Capacity and cost to deploy more renewable energy later

Any reduction in potential renewable energy deployment now will mean there is a greater requirement to deploy more renewable energy later, as emissions reduction obligations increase. To assume that emissions reduction obligations will not increase is to inappropriately discount the economic consequences of climate change and to overweight the chance that Australia's current direction on emissions reduction policy can be maintained in a decarbonsing global economy. The need to rapidly deploy more low emissions energy sources is likely to increase the cost of renewable energy deployment. Consistent, incremental build will be cheaper and will maintain productive capacity in relevant sectors of the economy.

Further influencing future costs would be the loss of domestic renewable energy industry expertise. If decisions made today lead to lower demand for new-build of renewable plants in the short to medium term, companies currently reliant on or involved in the construction process will be severely damaged. Analysis by CEC and others have shown the consistent loss of business opportunities for companies trying to operate in this sector.[9] Then, when new generation capacity needs to be built, both expertise and component parts will need to be imported or rapidly developed in Australia, possibly at a time when exchange rate conditions are less favourable to importing manufactured goods.

While we note the current reductions in energy demand, partly as a result of energy efficiency and reduced industrial activity, we consider that it is too early to call the future demand trajectory beyond 2020 and to determine that renewable generation capacity should be taken out of the system. Again we'd encourage the Government to make long term decisions based on long term system requirements rather than short term evidence and prioritise the need to reduce energy sector emissions over the long term rather than responding to short term demand variations.

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[7] ROAM Consulting report to the Clean Energy Council, RET policy analysis, 29th April 2014 www.cleanenergycouncil.org.au/policy-advocacy/reports.html

[8] *Gas price surge sends wrecking ball through energy markets*, Renew Economy, March 3rd 2014. http://reneweconomy.com.au/2014/gas-price-surge-sends-wrecking-ball-through-energy-markets-19541

[9] ROAM Consulting report to the Clean Energy Council, RET policy analysis, 29th April 2014

Without a carbon price, the RET is the primary electricity sector decarbonisation policy in Australia. The contribution of the Emissions Reduction Fund in its current form to electricity sector emissions reductions will be modest.

If the RET is weakened a perverse signal will be sent to industry, working against the need to improve emissions productivity and reducing rather than improving the attractiveness of local industry to global investors. As investors across the economy, it is in our interests that the emissions competitiveness of Australian industry is improved to ensure greater productivity from an emissions intensity perspective.

Finally, despite the fact that we are part owners of share market listed companies, it is our view that short-term financial return pressures in the public share markets should not unduly influence sound, long-term Government policy-making on climate change and energy. As institutional investors, we must share the load of structural adjustment to a low carbon economy along with the companies we part own. The priority for policy makers should be minimising the net long term costs associated with decarbonising the energy system in the interests of the broader economy.

2. The RET scheme should be extended beyond 2030

Recent confusion in the market about the future of the RET and the overhang of RECs created after the initial phase of SRES credit creation has delayed the building of renewable energy assets. In order to provide confidence about the financial returns from new investments to meet the LRET, the scheme should be extended to 2035 to provide confidence to investors. We note that it would be necessary to guard against the unintended consequence of windfall gains to investors in existing assets.

We understand that energy suppliers have sufficient accumulated RECs such that they would not need to enter the market to purchase additional RECs for some time. For example, AGL indicated in 2013 that they had sufficient supply of RECs for 5 years of obligations under the scheme[10]. If as a result of weakening the RET, there is still a surplus of RECs in the market for some years, further new build of assets may be delayed as a result of depressed REC prices. This could lead to a situation where projects built by third parties for the purpose of providing RECs are unable to receive finance because the project economics are not viable when REC obligations cease in 2030.

Given that many new Power Purchase Agreements (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 of 25-year life will extend well beyond the length of the PPAs that are currently on offer. However, as there is great uncertainty over the extent to which carbon pricing or other policies will support the competitiveness of renewable energy assets in 2030 and beyond, the possibility of a clear drop off in earnings potential for the assets limits the current desirability of these investments compared to other infrastructure investments. These uncertainties therefore limit sources of capital and liquidity for additional investment in new generation assets in Australia.

[10] AGL Merchant Energy Presentation, release to the ASX on 31 May 2013. Page 55. http://www.agl.com.au/~/media/AGL/About%20AGL/Documents/Media%20Center/ASX%20and%20Media%20Releases/2013/May/Merchant%20Energy%20Presentation%2020130531.pdf

We note the differences in the US and EU markets where PPAs generally 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.

3. Reviews of the scheme should take place no more than once every four years

Currently the RET is reviewed on a biennial basis. Such overly regular reviews of government policies that impact investment decisions increase uncertainty for markets. Policy reviews should therefore be avoided unless absolutely necessary to re-calibrate policy settings with long-term trends. Policy reviews that appear opposed to long-term trends, as in the case of the trend to decarbonise energy supply, undermine capital allocation decisions, as there can be little confidence in the longevity of decisions taken in the review. This will be the case if the Government materially weakens the RET because this decision appears to be at odds with the economic imperative of reducing emissions and attracting investment to the energy sector.

Not only do we encourage the Government not to review the RET so regularly as once every two years, we encourage it to see reviews as an opportunity to support the alignment of the policy to long term market trends. If the government is able to ensure that the outcome of this RET review is alignment with long term market trends, there will be little need for another review in the near term. If alignment is not achieved, investors will expect a further review, sooner than they would choose.

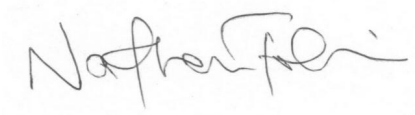
Conclusion

Investors are already being impacted by the proposed retreat on renewable energy policy in Australia. Investment losses as a result of a change in policy direction are unusual in Australia and we'd strongly encourage the government to maintain policy settings that were relied upon when renewable energy investments were made. Further we would encourage the Government to favour long term emissions reduction objectives in its policy considerations. This is entirely consistent with the Government's desire to encourage the deployment of long dated key infrastructure assets to enhance the Australian economy and deploy Australian labour and capital in productive enterprise. The net cost of maintaining the LRET is negligible in the short term and actually reduces costs for energy users in the long term. The local allocation of investor capital that is increasingly seeking low carbon alternatives, relies on a materially similar RET.

In order to reduce the cost of capital for delivering the LRET, we encourage the Government to extend the life of the scheme to improve project economics and reduce investment risks for new large-scale projects.

We look forward to discussing this submission and the needs of the investment sector with the Review committee.

Yours faithfully,



Nathan Fabian
Chief Executive
Investor Group on Climate Change