



CLEAN ENERGY FINANCE CORPORATION

Submission by the Clean Energy Finance Corporation to the Review of the Renewable Energy Target (the RET Review) – May 2014

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1. Introduction

Energy is a sector typified by long term assets requiring long term investment. The price and availability of finance plays a critical role in any decisions to invest in the sector. From this perspective, a significant reduction in the RET would adversely impact the value of current investments and the commerciality of future investment and increase the price of capital for the sector. These costs will flow through the economy and will be difficult to reverse.

The Clean Energy Finance Corporation (CEFC) was established in 2012 to address financing barriers and encourage private sector participation in the transition of energy generation to cleaner technologies, distributed energy, emissions reduction and investment in improved energy productivity.

Significant innovation and adaption by the Australian finance sector is required to achieve this. To this end, the CEFC has stimulated the appetite and risk understanding of co-financiers, utilised financial aggregation, and attracted new investors to catalyse investment activity. In addition, the CEFC is helping investment in new areas, using specialist skills which are not readily available in the Australian market, helping achieve innovation and adaptation by the Australian finance sector to improve investment conditions in this space.

The CEFC and its co-financiers are proving successful in creating jobs, improving the competitiveness of Australian businesses, and increasing the deployment of low carbon and renewable technologies.

The CEFC's observations in respect of investment in renewable energy in Australia are drawn from our experience in the development of a portfolio of investments worth more than \$700 million, with co-financier contribution of over \$1.8 billion. The CEFC has catalysed investments in projects across Australia worth over \$2.5 billion in value.

This has resulted in an expanded investment appetite by project proponents, improved readiness by financiers to invest and a reduction in risk margins - all of which help improve overall investment returns in this space. These CEFC investments have been selected with a commercial filter, with minimal use of concessional finance. They are expected to earn an average gross yield of approximately 7 per cent and benefit industries across metropolitan, regional and rural Australia, including agribusiness, property, manufacturing and utilities.

2. Scope of the submission

This submission is a distillation of relevant observations from the CEFC's experience as a financier. The submission is limited to matters which pertain to the CEFC's scope of operations. As such, our comment is confined to the financing industry, and access to finance for renewable sector-based projects, should there be a change in the Renewable Energy Target (the RET).

3. How the CEFC interacts with the renewables sector

The CEFC has a unique perspective to offer the RET Review Panel from its experience as a direct financier and a convener of finance for both small and large scale renewable energy projects.

The CEFC is mandated by law to invest in the renewable energy sector because the *Clean Energy Finance Corporation Act 2012* provides for a minimum of 50 per cent of the CEFC's investment portfolio to be invested in renewable energy technologies by 1 July

2018. In addition, the *Clean Energy Finance Corporation Investment Mandate Direction 2013*, issued by the responsible Ministers as a ministerial direction, provides the CEFC with high level policy direction and underpins the approach the Corporation takes to investment. This Mandate states that the Corporation must:

consider its potential impact on the operation of Australian financial and energy markets when making its investment decisions, and specifically on the market for Large Scale Generation certificates under the RET.¹

The CEFC's investment activity builds not only the experience of our co-financiers, but also the industry capacity in the renewables sector. It delivers positive impacts across a broad range of technologies and a wide range of industries - from utilities, to agribusiness, to manufacturing. The majority of projects financed by the CEFC in the renewables sector are based in regional and rural Australia, building new businesses, supporting existing businesses, and contributing to employment and the skills base across Australia's regional centres.

The CEFC does this by:

- attracting new finance into the Australian market for investment in the renewables sector – the CEFC is working to help improve the flow and diversification of funds into the sector, in particular from new sources, including local and international finance, superannuation funds and national funding institutions
- assisting project proponents as an arranger, helping to develop the business case and introduce the proponents to equity and debt financiers to enable transaction close
- participating in transactions to de-risk the investment within the finance sector. This can be achieved by establishing credit precedents, providing international performance comparatives to familiarise our co-financier with new asset types; and
- working with the finance sector to develop and deliver new financial products to the market, specifically tailored to the needs, attributes and emerging delivery models for new technologies in the renewables sector.

In essence, the CEFC has operated to catalyse investment in the renewables sector, driving renewable projects down the cost curve.

The RET is an important complementary measure for the commercial finance industry generally and the CEFC in particular because of the role it plays in assisting opening up a market for lenders to invest in. Once that market exists, the CEFC is able to work with commercial lenders to de-risk projects and build financial understanding and experience which is vital to the long term viability of the sector.

Policy uncertainty or abrupt changes in the RET policy settings will impact on the price and availability of finance for renewable energy. This impact on the value of current investments and the commerciality of future investment is significant due to the long term payback periods of energy assets. This adverse impact on investors and on the price and availability of finance can take a long time to unwind. This will create lead times before financial institutions and other investors are able to re-enter the market.

The Australian renewable energy sector has significant potential for Australia's growth and economic performance. Under the RET, the cost of renewables has continued to decrease. Project costs are moving down the cost curve, and increased financial familiarity and understanding of the sector has created a positive outcome for the

¹ *Clean Energy Finance Corporation Investment Mandate Direction 2013*

economy in the shape of new or expanded businesses, jobs, and technological know-how.

Australia's investment in renewable energy technologies is directed at capitalising on the nation's availability of free, cheap and abundant fuel stocks like waste, sun and wind. These are inherent resource advantages for Australia that lend themselves to:

- diversifying Australia's energy mix
- helping to reduce carbon emissions; and
- safeguarding Australia's competitive position in the energy sector.

All of these factors are important both in the consideration of the role of the RET and in ensuring Australia takes a long term focus in respect to its energy mix.

Diversification of Australia's energy mix

A diverse energy mix that includes black, brown and green energy sources is vital to safeguarding against Australia's exposure to global energy prices and our industries' competitiveness in a carbon constrained world.

Ongoing investment in renewables remains crucial to continue Australia's shift towards a more diversified overall energy mix. Conversely, a serious pullback from support to the renewables sector will increase Australia's exposure to rising gas and diesel fuel prices and fluctuations in coal prices.

Energy is a strategic resource. Renewable energy provides an important contribution to shoring up Australia's self-sufficiency in energy production. At a macro level, the RET is supporting technological innovation in electricity generation and thus leveraging off Australia's natural resource competitive advantage.

The renewable energy sector continues to be supported world-wide and is an important part of the energy mix across global economies. The Frankfurt School / United Nations Environment Programme Collaborating Centre in association with Bloomberg New Energy Finance recently reported that renewable energy accounted for 43.6 percent of global investment in new power capacity. Against a background of declining investment, the sector's share of worldwide electricity generation increased from 7.8 percent in 2012 to 8.5 percent in 2013.²

The sheer scale of the investment task to diversify Australia's energy mix requires ongoing collaboration between the private and public sectors. Government already has a range of mechanisms developed that have been successful in progressing this objective and in increasing the capacity of renewables into the mix. Mandating targets through the RET has been the most critical and important of these.

Emissions Reduction

Estimates recently cited by the Climate Change Authority show that the RET reduced Australia's emissions by approximately 20 million tonnes of carbon dioxide equivalent between 2001 and 2012. This would suggest that the RET has been performing reasonably well against its objectives in the *Renewable Energy (Electricity) Act 2000* (the Act).

² The Frankfurt School / United Nations Environment Programme Collaborating Centre in association with Bloomberg New Energy Finance (2014) 'Global Trends in Renewable Energy Investment Key Findings 2014' page 11

4. Australia's competitive advantage and the long term viability of the renewables sector

Given the long term nature of infrastructure assets in the energy sector, a long term vision for the energy sector will help ensure Australia is best equipped to handle its long term global challenges.

Australia is blessed with abundant natural resources like the sun, wind and waves; our strong agricultural sector also produces byproducts that lend themselves to conversion to useful energy (such as cane bagasse, or piggery or abattoir waste). Australia has a clear competitive advantage over other nations in its abundance of such resources.

Rising domestic energy prices have emerged to dominate in public policy discussion around the future of energy policy. The full positive economic potential of Australia's competitive advantage in long term development of renewables needs to be kept in clear focus. Such economic advantage outweighs any one-off incremental reductions in retail electricity bills from changes in the RET and other policy settings. It is also important to be conscious that such one-off, comparatively low-value and short term gains could be readily negated by rising domestic gas prices and reform of structural issues in the electricity market.

There is evidence the RET will place downward pressure on future wholesale prices.³ Outside of the remaining state owned generators, generation capacity is heavily concentrated and new entrants to the market should assist the electricity market to operate more efficiently – for example, by reducing the ability of existing market players to force up the spot price by withdrawing capacity. It is more efficient to meet the upfront capital cost of installing new renewable generation equipment and pay an input fuel cost of near zero, than to firstly pay for fuel burned in old plants with obsolescent technology and then secondly pay for other activities to clean up the carbon emissions they produce. The 'front ending' of surplus generation capacity via an orderly ramp up of renewable energy technology is actually desirable for the economy as old fossil fuel generators reach the end of their useful life. This is because the excess capacity avoids supply disruption as obsolete generators are withdrawn from service.

The RET, in supporting distributed renewable energy sources, also reduces the need for expensive transmission investment. This has a consequent downward pressure on electricity prices.

While electricity cost components vary across States, network charges make up a significant component of the overall electricity price. This is especially true in NSW and Queensland where network reliability standards were strengthened and capital expenditure significantly increased in recent years.⁴

The Australian Energy Market Commission found the RET was responsible for approximately 4% of the representative market offer price in 2013/14, expected to drop to a national average of around 3% in 2014/15.⁵

It is therefore important that all components of the price tariff are considered when developing policy to tackle the rising costs of electricity. The RET is only one such component to consider in this mix and represents a fairly small component.

³ ROAM Consulting(2014) 'Report to Clean Energy Council on RET Policy Issues' 29 April 2014

⁴ Dunstan, C., S. Sharpe and J. Downes (2013) Investing in Savings: Finance and Cooperative Approaches to Electricity Demand Management, a study by the Institute for Sustainable Futures of the University of Technology Sydney, page 20

⁵ Australian Energy Market Commission (2013) '2013 Residential Electricity Price Trends'

5. Market barriers to long term energy investment

The biggest market barrier to any long term investment in the renewables sector is the price of capital. There are other well documented financial barriers to investment in the renewable sector. While a body like the CEFC can assist to reduce such barriers, the RET plays an important underpinning role in the price of capital for investments, which is critical to allow those investments to progress.

The mandated RET targets have opened up the size and scope of the renewables investment market. The fact that the RET has been such a long-standing government policy has played a critical role in addressing some of these barriers, by adding to certainty for investors and making investments in the sector more viable.

Much of the full range of technology across the sector is still predominantly early-stage, capital intensive and has long paybacks. This is coupled with financial barriers, especially in respect to:

- informed due diligence, technology and credit assessment, and
- risk appetite on behalf of commercial lenders assessing whether to invest in this sector as compared to better known and developed markets.

Taken together this has the effect of inhibiting an efficient allocation of investment capital, driving up lending margins and making the energy produced through renewables more expensive than it would otherwise be.

This was highlighted by industry input to the Expert Review Panel into the Clean Energy Finance Corporation:

A number of submissions cited the costs associated with conducting due diligence on renewable energy projects and the lack of standardisation of projects. Assessment of the quality of the resource and potential production variability are central to the due diligence process. However, the cost of undertaking these assessments can be a deterrent. In addition, unique factors in clean energy projects do not lend themselves to a standardised assessment and approval process. Without these economies of scale, the financial sector underinvests in its capacity to service the industry. As bank lending has slowed, banks are reassessing their marginal businesses and some have cut back their commitment to the clean energy sector.⁶

As stated earlier, energy generation requires high upfront investment with paybacks over long time periods. The availability and price of capital for these investments has played a key role in their advancement. Westpac stated:

Westpac believes that the CEFC will have an important role to play in bringing forward new clean energy technologies to a point where private capital will be attracted. Policy enablers will be important in:

- *Bringing forward the entry point for private capital*
- *Lowering investment risk to enable private sector investment*
- *Bridging the funding gap for pre-commercial and first of a kind clean energy projects; and*
- *Enabling the deployment of supportive infrastructure for new clean energy technologies.⁷*

⁶ Expert Review Panel into the Clean Energy Finance Corporation Report (2012) page 30

⁷ Westpac, (2012) 'Submission to the Expert Review Panel into the Clean Energy Finance Corporation' page 5

In building industry sector capability, organisations like the CEFC have been responsible for:

- assisting the financial markets to familiarise themselves with the investment potential in renewables; and
- better understand and implement robust risk management processes to facilitate these investments;

therefore making them a more attractive proposition for the commercial investment sector.

The single-sector focus of the CEFC forces it to 'dive deep' into the technology to understand the true level of risk, rather than an assumed level. It has a duty in law to allocate capital and unlike a private sector investor, it cannot allocate it to another (non-clean energy) sector, so it must come to grips with technological risk in order to fulfill its task.

Further to 'facilitate financial flows' (the Object of its Act) it must work with private sector capital and draw investment in. With a KPI based on dollars of private sector leverage attracted, it is incentivised to share its learnings so as to get other participants comfortable with a transaction so as to 'crowd them in'.

The classic 'information barriers' identified repeatedly by economists in commentary on this sector are therefore directly addressed by having a government financier participate in the market.

The RET is complementary to this process, and indeed also lowers investment barriers, because its mandated targets boost the volume of potential investment opportunities and set the investment framework within which financiers can operate – thus giving them policy certainty.

Types of technologies supported by the RET

A year in from commencing investment, the CEFC includes a wide array of projects in its portfolio within the renewables space including in the areas of solar, biogas, wind, and wave technologies. In the CEFC's experience, the RET is a crucial component for the commerciality of a number of the large scale utility renewables projects. If any change to the RET inhibits the commerciality of large scale projects then the smaller scale renewables may also be negatively affected.

In addition to the above mentioned technologies, the CEFC is presently in advanced consideration of investment exposure to other renewables such as:

- Biodigester / co-generation for steam and electricity production
- Algae biofuel
- Cane bagasse biofuel
- Municipal waste to energy
- Biocrudeoil production from plant material
- Small scale commercial/residential solar through aggregation facilities.

Many renewables projects are dependent at least in part on the RET for their project economics, so to the extent the RET scheme changes this will undoubtedly alter the market conditions for investment across the entire renewable sector. This will not only have implications for the CEFC but it will affect all financiers operating in this space including many of the commercial lenders. It has the potential to increase investment uncertainty at a time when we are seeing an increased appetite amongst investors to consider opportunities in Australia's renewable sector.

6. Importance of policy certainty going forward

The single biggest impediment to further development of the energy sector (including the renewables sector) is unpredictability in policy settings. Policy certainty is critical to avoid discontinuity, allow smooth transitions to new energy sources, and avoid the costs associated with this. The renewables sector and the energy sector more broadly, require long term certainty through a settled policy framework.

Future development of the renewable energy sector will be enhanced by resolution of uncertainty about the RET. Regulatory and policy agenda uncertainty surrounding the RET has proved a significant influence on the sector's growth potential and investment attractiveness.

As has Westpac stated concerning the impact of policy uncertainty on investment potential:

To date, most investment activity in the clean energy market has been driven by the RET scheme, and has focused predominantly on wind projects. Even here there have been capital shortfalls because of policy uncertainty.⁸

Continuing uncertainty drives up the cost of capital due to heightened perceived risks. Investment in the renewable energy sector is presently subdued due to the degree of uncertainty over future policy settings. The CEFC is aware of at least one developer exiting the Australian economy in favour of development in more predictable jurisdictions and institutional funds being directed off-shore to secure investments in this asset category.

The need for regulatory and policy certainty was also picked up by AiGroup:

Supporting efficient long-term investment is an important principle for climate policy. While industry is used to dealing with risk and change, a clear, stable policy framework with broad political support would make sound investment much easier. Financial commitments from government should also be as stable as possible.⁹

As the CEFC noted in the submission it made to the Department of Industry's Energy White Paper Issues Paper¹⁰ process, the financial sector makes significant investment commitments to renewables based on a set of policy and regulatory settings.

Based on the current electricity and LREC market prices, abolition of the RET would see the revenue to existing renewable generators cut by up to 40 per cent with a commensurate reduction in the value of these assets.

These experiences have a long term impact on the investor appetite, risk margins for future renewable financing, and return margins they require to proceed.

The path to successfully reducing costs and risks in the renewables sector is only achievable through positive experience and moving down the cost curve. If the sector is to attract future investment, developing a stable and experienced industry and planning regime is critical. The RET plays a central role in this dynamic. If it is to be changed, such changes should be made gradually to reduce the collateral value destruction of sunk costs and the consequent increased risk margins on financing for the sector in the future.

⁸ Westpac, (2012) 'Submission to the Expert Review Panel into the Clean Energy Finance Corporation' page 5

⁹ Ai Group, (2013) 'Submission to the Senate Environment and Communications References Committee Inquiry into the Government's Direct Action Plan'

¹⁰ CEFC (2014) 'Submission to Department of Energy White Paper Issues Paper'

The market is pricing in an assumed carbon price of some form in future years. It is a measure of the level of market uncertainty on long-term Australian policy settings that this remains the case notwithstanding the number of unambiguous statements to the contrary. The Panel may accordingly wish to take this into account in the modelling of its deliberations to reflect what the market is pricing into contracts.

Complementarity of initiatives

Policies work optimally if complementarity can be built into their design. It is through complementarity that the effectiveness of government policies are maximised. The interface between Government initiatives needs to be thoroughly thought through.

The RET has been a pre-requisite for projects to achieve the commerciality that the CEFC requires and the CEFC's participation in new technologies has catalysed co-financing participation. The emissions reductions achieved by the CEFC has benefited from such complementarity.

7. Conclusion

The RET has been effective in increasing progression of renewable energy investments and lowering the cost of capital available to them. It also fits well as a complementary measure to a range of other government policies and programs. It has provided the basis for the commerciality of renewable energy projects and the development of financial markets to support this investment.

A contraction in the RET will raise the price of capital for investment in the sector and take a long time to reverse. If Australia sees a role for competitive renewable energy in the longer term, the impact of this capital price dynamic should be carefully considered.

