

ClimateWorks Australia's Submission on the Clean Energy Finance Corporation

Context

The Australian Government on 10 July 2011 announced that it will establish a \$10 billion commercially oriented Clean Energy Finance Corporation (CEFC) as part of its Clean Energy Future package. The expert review panel on the design of CEFC has invited feedback from stakeholders. ClimateWorks Australia welcomes the call for review and is pleased to provide the following submission. This submission is supplementary to the constructive meeting we had with the CEFC Chair, Jillian Broadbent AO, and Mike Waslin, the Head of CEFC Secretariat, in Melbourne on 16 November 2011.

ClimateWorks as a Stakeholder

ClimateWorks' has substantial experience in identifying cost-effective carbon mitigation opportunities that include energy efficiency, renewable energy and low emissions technologies across sectors. ClimateWorks' expertise draws from research we have undertaken and published, including:

- *Low Carbon Growth Plan for Australia*, the subsequent reports which draw on this analysis: the *2011 update* and *The impact of the carbon price package*
- Regional low carbon growth plans, including the *Low Carbon Growth Plan for Greater Geelong*, the *Low Carbon Growth Plan for Gippsland*, and the *Low Carbon Growth Plan for the Macquarie Park precinct*
- Sector analyses including the *Commercial buildings deep dive* for Low Carbon Australia and the *Low Carbon Growth Plan for Australia: Retail Sector Report* developed with the National Australia Bank

ClimateWorks' analysis of the impact of the Federal Government's Clean Energy Future package shows that the package has the potential to reduce Australia's domestic greenhouse gas emissions by 124 million tonnes per year¹. If implemented optimally, the package could

¹ Low Carbon Growth Plan for Australia: Impact of the carbon price package, August 2011 – Page -1

take Australia 76% of the way towards achieving its international commitment to reduce greenhouse gas emissions by 5% below 2000 levels by 2020 through domestic emissions reduction alone, demonstrating that there is realistic scope to expand the national target to 25%. This research includes specifically analysis of the contribution CEFC investment could make to domestic abatement potential by 2020. Specific details of our analysis of how CEFC investment could contribute to opportunities for cleaner energy generation are outlined in our response to question 4.

Scope of the Clean Energy Finance Corporation (CEFC)

1. How do you expect the CEFC to facilitate investment?

It is key for the CEFC to position itself as an attractive investment partner, to enable and encourage mainstream investors to become comfortable with what for many would be a “first of a kind” technology class. As an informed investor, the CEFC should be able to accept a higher level of project risk than would be acceptable to new market participants. It could therefore be able to provide either lower cost debt or equity, through reduced discount rates or lower rates of return, reflecting a different perceived level of risk. This could also take the form of subordinated debt or equity.

The CEFC’s mandate is to overcome capital market barriers that hinder the financing, commercialisation and deployment of renewable energy, energy efficiency and low emissions technologies. ClimateWorks research shows that the types of projects that would fit within this mandate are:

- Profitable projects that suffer barriers in accessing capital (namely, cogeneration and some renewables such as offgrid remote solar); or
- Technologies that are not yet profitable in Australia, have potential to provide baseload generation in future but need commercial-scale demonstration (beyond the ARENA stage).

ClimateWorks uses the McKinsey marginal abatement cost curve methodology to evaluate the profitability of a range of emissions reduction technologies across all sectors of the economy. In the power generation sector, this research shows a carbon price associated with Australia’s default 5% emissions trading scheme cap does not sufficiently improve the profitability of most known clean energy technologies to make them attractive to investment. This will therefore limit the range of technologies in which the CEFC can effectively facilitate investment.

Our response to question 4 below provides further detail on how CEFC funding that is not invested directly in clean energy technologies can best be deployed to facilitate greater deployment of renewables.

2. Are there principles beyond financial viability that could be used to prioritise investments, such as emissions impact or demonstration effect?

ClimateWorks feels that both emissions impact and demonstration effect are important principles that should be used to prioritise investments, beyond financial viability.

Overall emissions impact must remain a key principle, provided that it can be interpreted to include the likely impact from future market activity that can reasonably be expected to be catalysed by the initial CEFC investments.

Demonstration effect should also be used to prioritise investments, given the critical role it plays in improving the long term investment attractiveness of emerging clean technologies. Overall, this can achieve greater emissions reduction potential, even though the direct emissions impact from CEFC-financed projects may be limited. These transactions should focus on emissions reductions to 2020 but may also demonstrate potential to reduce emissions to 2030 or beyond.

We also believe that the CEFC must find a balance between prioritising certain technologies and not being prescriptive. This can be achieved by providing clear guidance to the market on the CEFC's areas of investment preference, to give sufficient comfort to project developers, their advisors and financiers to justify the investment of time and effort in preparing a transaction proposal for the CEFC.

3. What are the opportunities for CEFC to partner with other organisations to deliver its objectives?

It will be efficient for the CEFC to leverage existing skills in the market. Possible partners for consideration include:

- **Low Carbon Australia** – having built relationships with service providers and private sector financiers, Low Carbon Australia has developed expertise within the energy efficiency market, worked towards removal of barriers and also developed structured transactions in this space.
- **Expert review panels** – targeted feedback could be garnered from experts and experienced entities on specific proposals.
- **Banks, investment managers and advisors** – provide a key source of existing transactions expertise, albeit not yet widely in clean technology. Therefore, the CEFC should aim to achieve relationships and transactions with many

different financial institutions in order to draw on their experience and deepen knowledge in the clean energy sector.

The Market Gap and Overcoming It

4. How could the CEFC catalyse the flow of funds from financial institutions?

CEFC could catalyse the flow of funds from financial institutions by providing notional allocations for specific regions or asset types. This could be done using expressions of interest (EOI) to offer concentrated sums of finance for investment in preferred areas. This would also help to achieve critical mass.

As an indication of the possible preferred areas of investment that would meet the CEFC mandate, ClimateWorks' research on the impact of the carbon price² resulted in the following allocations for the CEFC:

	Leverage (1:X)	Funds used (million \$)	Funds unlocked (million \$)	Abatement unlocked (MtCO ₂ e)
Industrial cogeneration	2.0	853	2,558	2.4
Commercial cogeneration	2.0	1,647	4,942	4.3
<i>Cogeneration total</i>	2.0	2,500	7,500	6.7
Wave/tidal	0.0	16	16	0.0
Geothermal	0.0	530	530	0.6
Solar thermal	1.0	1,306	2,612	2.2
Solar PV (centralised)	1.0	660	1,319	1.2
<i>Developing technologies total</i>	0.8	2,512	4,477	4.0
Biomass dedicated	2.0	126	379	1.4
<i>Support to proven technologies total</i>	2.0	126	379	1.4
Total	1.4	5,138	12,357	12.1

As outlined above, our research shows that only about half of the CEFC's total funds of \$10 billion are likely to deliver additional abatement above business-as-usual by 2020 under carbon prices associated with the 5% cap. We recommend that (unless profitability changes after the review of the emissions trading cap) the remainder of the CEFC's funding be utilised to support investments that enable deployment of renewables, but where abatement is associated with subsequent non-CEFC investment in power generation (and hence the ultimate abatement tonnes are counted elsewhere). For example:

² Low Carbon Growth Plan for Australia: The impact of a carbon price, August 2011 – Page - 17

- grid extensions, in order to reduce connection costs for renewables projects to make them economically competitive
- provision of loan guarantees to smaller companies to enable them to compete in supplying RET generation, or other support to remove barriers to entry in meeting the RET
- post-2020 abatement generation projects

5. What experiences have firms in the clean energy sector had with trying to obtain finance; have term, cost or availability of funds been inhibitor?

This question is best addressed by firms that have current experience in obtaining finance within the clean energy sector.

6. What non-financial factors inhibit clean energy projects?

ClimateWorks' research indicates that for clean energy projects, economic barriers are compounded by policy factors and market structure factors that mean it continues to be difficult for a new clean energy projects to compete economically with incumbent fossil fuel power generation.

In addition, access to alternative fuels or ingredients (e.g. biomass or industrial waste material) is often limited and profitability decreases if they have to be imported or transported from a distant location.

7. Are there special factors that inhibit energy efficiency projects?

ClimateWorks experience and research show that a number of key barriers exist that hamper the uptake of energy efficiency projects. In the industrial sector, these include:

- **Market structure and supply.** Some large industries benefit from extremely low energy prices, which decrease the profitability of energy efficiency measures; some businesses can also be reluctant to implement costly upgrades to aging plants when facing low cost competitors or an uncertain future.

As for supply, low demand for energy efficient equipment has led to a gap or lack of variety in the equipment being offered in some sectors. Moreover, equipment replacement often follows a break-down and needs to be completed in a short timeframe to prevent operations disruptions. Replacements are therefore mostly taken from available inventory, made up of the most standard products.

- **Information gaps and decision process.** Limited understanding of energy consumption and the value of efficiency improvement – due to limited sub-metering or benchmarking – continues to limit emissions reduction action. Moreover, risks of

operational disruptions and production quality or timelines degradation involved in setting up new equipment or suppressing some back-up systems are often overestimated compared to the energy savings potential.

- **Capital constraints and investment priorities.** Implementing energy efficiency projects can come at a high upfront cost, e.g. installation of sub-metering or cogeneration plants. Competition for capital is intense and energy efficiency improvements are often a low priority as they are not a core business activity and offer returns which are lower and perceived as riskier than other potential investments, in part because future policy settings are currently highly uncertain.

Other Issues

8. How do you see the CEFC fitting with other government initiatives on clean energy?

It is possible that CEFC could work alongside RECs or other Government grants, provided that projects can prove their *additionality* – that is, that projects would not have happened without the CEFC involvement. This means that conventional REC projects (such as wind) would not satisfy the CEFC's test. However, it allows the CEFC's remit to be expanded to support projects which would not happen without CEFC support, but where their eligibility to access RECs or government grants will reduce the CEFC investment required.

About ClimateWorks Australia

ClimateWorks Australia is an independent non-for-profit organisation, founded through a partnership between Monash University and The Myer Foundation, launched in 2009. Its purpose is to achieve substantial emissions reductions in the next five years in Australia by working with government, business, industry groups, and the community via a collaborative action based approach.

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