

8 December 2011

Clean Energy Finance Corporation Expert Review

ACF submission on developing the Clean Energy Finance Corporation

Introduction

In the next decade Australia needs to begin the transition to a clean energy economy. This will be critical if we are to be on track to achieving Australia's legislated 80% by 2050 emissions reduction target, but also to ensure Australia can remain competitive in the growing global clean energy industry. The Clean Energy Finance Corporation (CEFC) will be a vital part of the delivery of Australia's transition to a clean energy future over the coming decades.

The CEFC will finally give the necessary support to tap our world-class endowment of renewable energy resources and play a part in the global boom in renewable energy – a \$243 billion industry in 2010 and expected to attract \$5.7 trillion of investment globally in the next 25 years.¹

It will also unlock the huge national benefits of building a new industry to take Australia into a new clean energy era, including new manufacturing industries that end our dependence on fossil fuels, new export opportunities and tens of thousands of new jobs mostly in rural and regional areas.

Analysis by ACF estimates that Australia needs to invest approximately \$100 billion in low-carbon assets in the coming decade in order to meet only a 5% emissions reduction target.² While this level of investment is beyond the capacity of government alone, the CEFC provides a mechanism that can unleash vast private investment for this critical transformation.

It is therefore essential that the CEFC provides a transparent framework to leverage private sector investment into clean and renewable energy technologies, unlocking the transition to a clean energy economy.

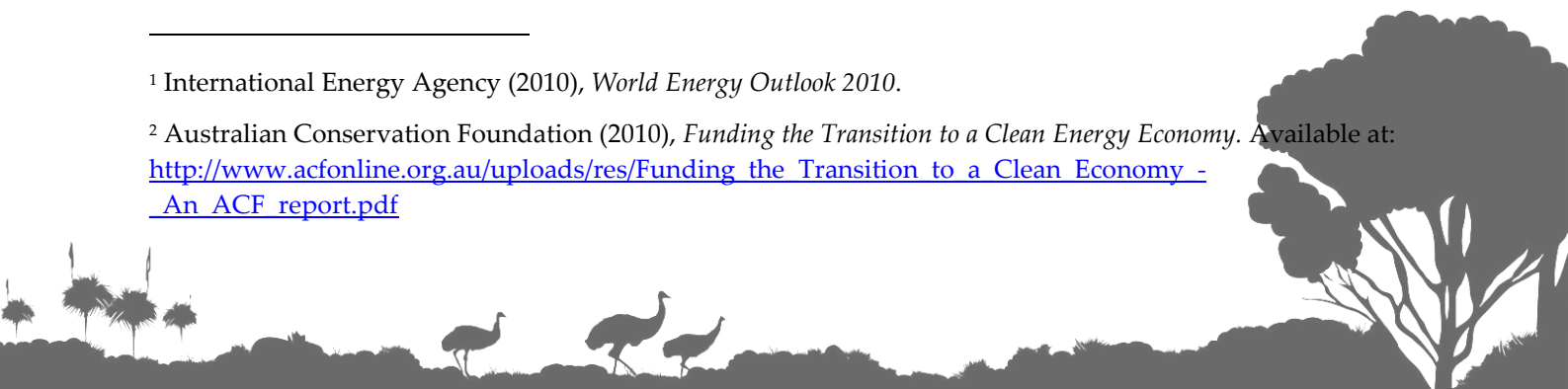
Many of the financial mechanisms to do this are already used in Australia to support other infrastructure assets, through institutions such as the Export Finance and Insurance Corporation (EFIC), Low Carbon Australia, Screen Australia and various financing structures employed for infrastructure PPPs.

There is no reason why these same tools cannot be adopted now to drive the transition to a clean energy economy, whilst complementing Australia's price on carbon pollution.

If we get it right, the CEFC will leverage up to \$100 billion of private capital over coming decades, drive the creation of tens of thousands of new jobs and create new export opportunities for a

¹ International Energy Agency (2010), *World Energy Outlook 2010*.

² Australian Conservation Foundation (2010), *Funding the Transition to a Clean Energy Economy*. Available at: [http://www.acfonline.org.au/uploads/res/Funding the Transition to a Clean Economy - An ACF report.pdf](http://www.acfonline.org.au/uploads/res/Funding_the_Transition_to_a_Clean_Economy_-_An_ACF_report.pdf)



country with world-class renewable energy resources and world-class capacity for technological innovation.

Summary:

- The overarching objective of the CEFC should be to develop a prosperous and diverse clean energy industry in Australia that helps to accelerate the transition to a clean energy economy.
- Barriers to clean energy investment differ from investor to investor and asset to asset. The CEFC must therefore be equipped with a broad and versatile set of financing tools.
- To maximise industry development potential several core principles must be included in the CEFC legislation and guidelines:
 - All funding should be directed at demonstration and deployment of renewable energy and energy efficiency projects.
 - The CEFC should catalyse additional private investment that would not otherwise have occurred.
 - The CEFC must therefore explicitly not invest in technologies where private investment is already flowing through existing markets.
 - The CEFC must invest only in clean and sustainable energy projects that aid the transformation to a clean energy future and that have no adverse sustainability impacts.
 - Due to the rapid pace of innovation in the renewable energy industry, criteria for investments should not prescribe specific eligible technologies.
 - Investments in energy generation made under the Clean Energy stream of the CEFC must adhere to an emissions performance standard set at a maximum of 0.2 tonnes of carbon pollution per MWh.
 - Funding parameters should not exclude community-owned projects by default through eligibility criteria such as minimum investment, project size or type of legal entity.
 - Core KPIs should not be based on emissions abatement or cost per tonne of abatement. The CEFC must be a first mover to support the deployment of early stage technologies, which by nature requires some higher cost abatement.
 - CEFC projects must be new and additional to the investment that will already occur under the 20% RET.
 - The committed \$10 billion of funding should be enshrined in legislation and at the sole disposal of the CEFC in a specially created account.
- To complement the CEFC, and ensure consideration of all financial and non-financial barriers to clean energy investment, a clean energy market coordinating body should be established as part of the AEMO review of energy markets to achieve a 100% renewable energy market, including members from agencies such as Infrastructure Australia, the CEFC, ARENA and AEMO.
- Independence from government should be established within the CEFC legislation, equivalent to that of the Reserve Bank of Australia, EFIC or the Future Fund.
- It is critical that the process to establish the CEFC moves quickly with the CEFC passed into law by April 2012, contracts for the first round of projects entered into in 2012/2013 and investment flowing on 1 July 2013.

Scope of the CEFC

How the CEFC will facilitate investment

Investment in the demonstration and deployment of renewable energy and energy efficiency technologies is currently limited by a lack of funding available for technologies between the R&D and commercial deployment phases. By bridging this 'valley of death' – taking our best renewable energy innovation to full-scale commercial operation – the CEFC can unlock investment in emerging and new-to-market technologies and create a diverse pipeline of clean energy projects in Australia (see Fig. 1).

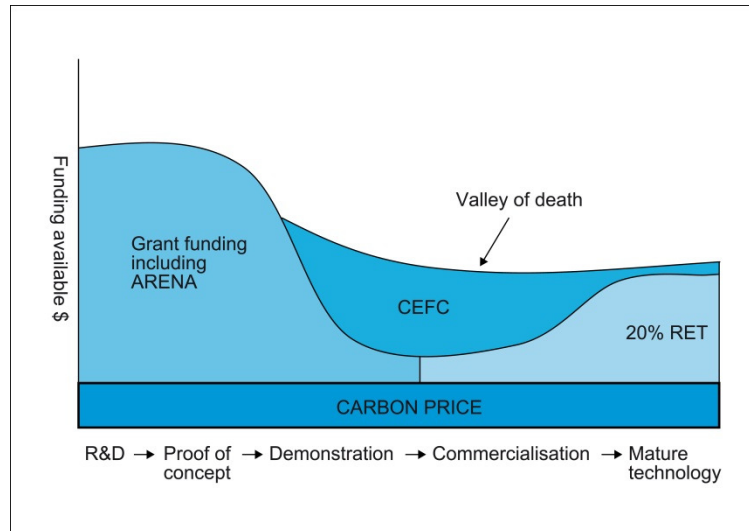


Figure 1. The CEFC will unlock private investment by filling current funding gaps for clean energy investment.

By addressing the range of investment barriers and market failures (financial and non-financial) that currently limit clean energy investment in Australia, the CEFC will facilitate unprecedented private investment, driving the transition to a low carbon economy.

Due to the diverse range of barriers that differ from investor to investor and asset to asset, the CEFC must be equipped with a broad and versatile set of financing tools that should not be limited only to equity investments, loans and loan guarantees.

Furthermore, categories of potential investors should not be excluded from the CEFC mandate. Tools and mechanisms must apply to the largest institutional investors as well as smaller community-owned projects, as all of these investors will play a critical role in achieving deep market penetration for clean energy.

In all cases, the principle should remain that the least public investment possible should be invested by the CEFC in order to secure substantial private investment.

EFIC has used a very similar model to great success for over 50 years, with bipartisan support, to help support the growth of Australia's export sector. In addition, Low Carbon Australia has successfully used various co-investment models to leverage significant private investment into the growing energy efficiency sector since 2010.

Furthermore, for decades state and federal governments have used a broad range of financial tools in order to reach financial close on large conventional infrastructure projects, from highways to desalination plants and social infrastructure in PPP structures.

Internationally, many countries are now developing (or have already developed) similar finance models to support clean and renewable energy investments including the UK, US, Netherlands,

Scandinavia and China, and a long history of this style of investment exists among multilateral development banks such as the Asian Development Bank (see Attachment A for more details: *Helping Australia Compete in the Renewable Energy Race*).

The experience from all of these examples shows that by changing the investment profile of clean and renewable energy projects through the judicious use of financial mechanisms, the CEFC can increase the attractiveness and bankability of this asset class, leveraging significant private capital.

Principles for investment

The overarching objective of the CEFC must be to develop a prosperous and diverse clean energy industry in Australia that accelerates the transition to a clean energy economy. The CEFC will be critical to long-term public policy objectives, including the 80% emissions reduction target by 2050, whilst delivering additional social dividends in jobs, cheaper clean energy, domestic industry development and future export opportunities.

To achieve this several core principles must be incorporated into the CEFC legislation and guidelines:

- All funding should be directed at demonstration and deployment of renewable energy and energy efficiency projects, taking these technologies from early stage innovation to full scale commercial operation.
- The CEFC should catalyse additional private investment that would not otherwise have occurred, without distorting existing markets such as the 20% Renewable Energy Target.
- The CEFC must therefore explicitly not invest in technologies where private investment is already flowing through existing markets.
- The CEFC must invest only in clean and sustainable energy projects that aid the transformation to a clean energy future and that have no adverse sustainability impacts. This includes all projects requiring strong due diligence and assessment processes such as environmental impact assessments.
- Due to the rapid pace of innovation in the renewable energy and energy efficiency industries, criteria for CEFC investments should not prescribe specific technologies that will or will not be eligible.
- In accordance with the principle above, investments made under the Clean Energy stream of funding must adhere to an emissions performance standard set at a maximum of 0.2 tonnes of carbon pollution per MWh to ensure that only the most efficient clean energy is supported by the CEFC.
- Funding parameters should not exclude community-owned projects by default through eligibility criteria such as minimum investment, project size or type of legal entity.

ACF does not believe that the CEFC's core KPIs should be based purely on emissions abatement or cost per tonne of abatement. The CEFC needs to be a first mover to support the deployment of early stage technologies, which by nature requires some higher cost abatement. It is these early investments, supported by the CEFC, that will be critical to drive costs down over the medium term.

ACF supports the use of a principle such as demonstration effect, as suggested in the discussion paper, as an effective investment guideline to overcome first mover disadvantage and to overcome the investment barriers that prevent private investors supporting new technologies.

In addition, to ensure that the CEFC underpins a thriving clean energy industry ACF believes installed capacity targets should be considered for 2020. The Climate Institute³ and ClimateWorks Australia⁴ conservatively estimated that the CEFC could achieve significant emissions abatement by 2020, including an estimate of 5 GW of investment in new projects. ACF believes that the CEFC should be guided by these estimates as a target range for new installed capacity 2020.

Overcoming the Market Gap

How the CEFC could catalyse the flow of funds from financial institutions

Investment in clean energy projects is currently limited by a complex suite of market and non-market barriers which prevent the flow of funds from financial institutions. These barriers include:

- **Inadequate private investment in R&D:** The single most recognised market failure preventing sufficient private investment in clean energy is the inability of private firms to capture all of the value of their investment, as innovation knowledge is unavoidably spilled over to others, including competitors.⁵ Public funding is therefore required for clean energy R&D to fill private underinvestment.
- **Volatile and inadequate policy and regulatory settings:** years of change and uncertainty around pricing pollution, clean energy funding and other climate related policies have left investors wary of the long-term future for low carbon investments.
- **Capacity constraints:** Institutional investors in Australia have a very low allocation of funds to the relevant low carbon sectors including venture capital, private equity and infrastructure leaving a significant funding gap.

The CEFC can overcome these barriers by prudently employing a suite of financial instruments to catalyse private capital. In the same manner that traditional infrastructure projects are financed with various forms of public fiscal support dependent on specific project risk, the authority should have access to a range of financial instruments. Importantly, the suite of financial tools available to the CEFC should be wider than the loans, loan guarantees and equity investments specified in the Clean Energy Future Package,⁶ and may include:

- *Loan guarantees* – as utilised by EFIC and the US Loan Guarantees program.
- *Co-investment* – debt and equity including direct, portfolio or seed investment, as applied by Low Carbon Australia.
- *Tax measures* – administering or advising on tax policy (such as R&D tax credits and new infrastructure tax provisions under Infrastructure Australia).
- *Policy risk insurance* – and other insurance products (including contract for difference) as utilised by EFIC.

³ The Climate Institute (2011), *Passing the Pollution Policy Test*. Available at <http://www.climateinstitute.org.au/our-publications/reports/859-passing-the-pollution-policy-test-australia-enters-the-global-clean-energy-economy>

⁴ ClimateWorks Australia (2011), *Low Carbon Growth Plan for Australia: Impact of the carbon price package*.

⁵ Garnaut Climate Change Review (2011), *Update Paper 7: Low emissions technology and the innovation challenge*.

⁶ Australian Government (2011), *Securing a Clean Energy Future: The Australian Government's Climate Change Plan*.

- **Direct project participation** – such as PPPs and off take agreements/feed in tariffs, as are commonly applied to infrastructure projects across Australia.
- **Climate Bonds** – like EFIC, raising additional funds through the bond issues with the government’s AAA credit rating should remain a possibility for the Corporation down the track, as it provides not only a means of raising funds, but also another investment offering for institutional investors wishing to get fixed interest exposure to clean energy. Retail bonds should also remain a consideration as per the UK Green Investment Bank.

While some of these tools are already used in Australia to support various infrastructure investments, to date most are not utilised to support clean energy (see Fig. 2).

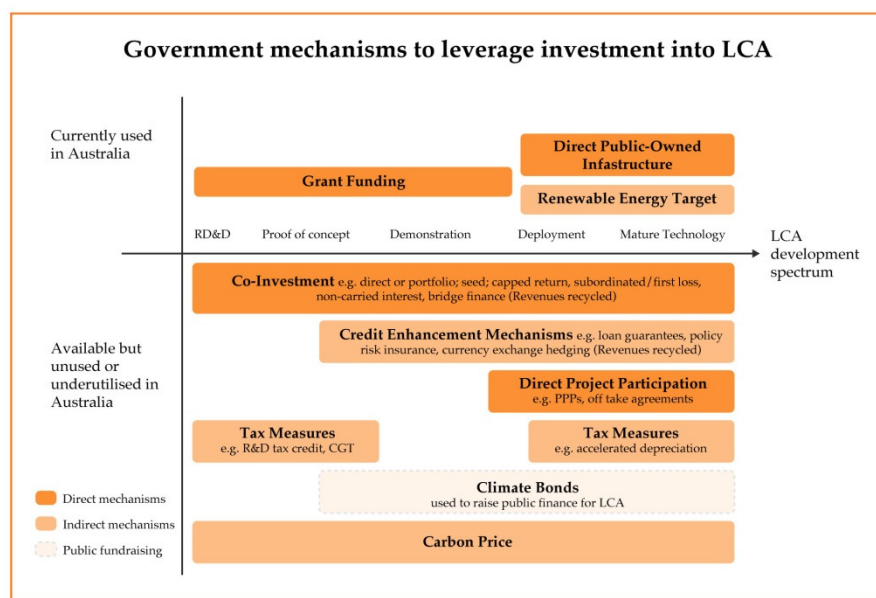


Figure 2. Government mechanisms to leverage investment into low carbon assets (LCA)

Non-financial factors inhibiting clean energy projects

Beyond merely financial constraints on clean energy investment in Australia, there is an extensive list of non-financial barriers that prevent private sector investment in clean energy. Although non-financial, the CEFC has a critical role to play to assist the industry to work through and solve the multiple layers of impediments to unlocking clean energy investment.

One such critical non-financial barrier is the current lack of transmission infrastructure to many of Australia’s richest renewable energy resources. This was identified by Infrastructure Australia as a national priority for infrastructure spending, together with the creation of a true national energy market.⁷

The CEFC should complement, and operate closely with, Infrastructure Australia and the Australian Energy Market Operator (AEMO) to overcome the barriers to network investment and prioritise investment in infrastructure to enable critical CEFC projects. For example, infrastructure investment to tap clean energy resources could be treated as national priority projects by Infrastructure Australia.

⁷ Infrastructure Australia (2009), *National Infrastructure Priorities*. Available at: http://www.infrastructureaustralia.gov.au/publications/files/National_Infrastructure_Priorities.pdf

There are many other bodies that have a role in enabling renewable energy deployment in Australia, including ARENA, the Clean Energy Regulator, the Energy Security Council and the Australian Energy Market Operator (AEMO), in addition to the CEFC and Infrastructure Australia.

As part of AEMO’s review of energy markets and networks to achieve a 100% renewable energy market, ACF recommends developing a coordinating body with representatives from all these organisations tasked with maximising synergies as well as efficiently delivering social dividends through accelerating the transition to a clean energy economy.

Interaction with the RET and Other Market Drivers

The CEFC must catalyse new and additional investment to bring emerging technologies towards full commercialisation. The Corporation must therefore provide assistance distinct from the grant funding available through ARENA and the Renewable Energy Certificate (REC) market created by the 20% RET (see Fig. 3). To best achieve this **CEFC projects must be on top of the 20% by 2020 Renewable Energy Target.**

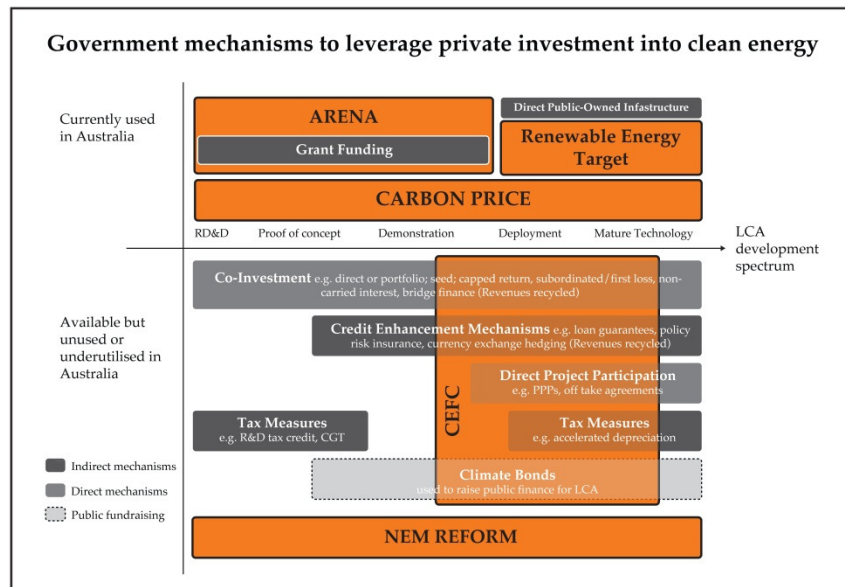


Figure 3. The CEFC will fill a current market gap in renewable energy finance mechanisms

However, to ensure that emerging technologies have the same market certainty as commercialised renewable technologies, such as wind and domestic solar, CEFC projects must also be eligible to generate RECs.

To ensure additionality, each REC generated by a CEFC project should be “topped up” in the REC market annually. In this way, CEFC projects will not disrupt investment in commercial technologies to meet the 20% target as the RET market will not change. However ultimately it will mean that the number of RECs in 2020 will be in excess of the 45 million certificates required to meet the RET in that year, as it will include additional investment in CEFC projects.

This mechanism already exists in the RET so that it accommodates support for waste coal mine gas projects without disrupting investment in renewable energy projects, and would therefore represent only a minor expansion to the functions of the Clean Energy Regulator to administer this mechanism.

Further Responses to the CEFC Scope of Review

Implementation Plan

It is critical that the process to establish the CEFC moves quickly and in combination with the carbon price to ensure that Australia does not get left behind in the global renewable energy race. The timeline that must be followed to help Australia compete in the renewable energy race is:

- **Early 2012:** the Chair and Development Board report back on the mandate, and drafting legislation begins.
- **April 2012:** the CEFC must be passed into law.
- **2012-2013:** Set up the CEFC, including appointing key experts, establishing funding guidelines and entering into first contracts.
- **1 July 2013:** Investment begins.

Experience from existing programs, including Low Carbon Australia and Solar Flagships, shows that there is no shortage of clean energy projects to fund (see Attachment A, Box 2). There is no reason that the CEFC cannot be investing by 1 July 2013.

Investment and Operating Mandate

In order to establish a clear and stable framework for investment, which will garner the support of developers and investors, there are several critical factors which must be features of the CEFC. These include:

- Independence from government established within legislation. This is critical to ensure the long-term certainty of the organisation and avoid disruption during political cycles. The CEFC must have independence equivalent of that of the Reserve Bank of Australia, EFIC or the Future Fund.
- Guaranteed \$10 billion of funding, enshrined in legislation and at the sole disposal of the CEFC in a specially created account.

Like EFIC, the CEFC should be a dedicated, independent body (a public company classified as a body within the General Government Sector) and be appropriately staffed with financial expertise to operate on a commercial basis in order to use public funds at least cost to bridge barriers to private investment.

The EFIC and Future Fund Acts provide useful models to achieve this clarity and independence. For example, the *Export Finance and Insurance Corporation Act (1991)* establishes a high level of independence by heavily restricting the powers of the Minister to intervene (s9) and clearly sets out both the general powers of the Corporation (Part 3) and the suite financial tools available to the Corporation (Part 4).

Board Structure and Skills

The success of the CEFC will rest both on the clarity of its investment mandate as well as the skills and experience of its Board. It is therefore essential that the Board is appropriately staffed with accomplished and respected individuals from the following backgrounds:

- Infrastructure investment/ private equity;
- Banking;
- Funds management;

- Renewable energy development and deployment;
- Deep knowledge of Australian energy markets;
- Sustainability impacts of energy developments;
- Broad economic policy experience in delivering a clean energy economy.

Furthermore, to ensure this is achieved the skills composition required of the Board should be outlined in the legislation, as has been done for both the Climate Change Authority and the Land Sector Carbon and Biodiversity Board in the *Climate Change Authority Act (2011)*.

For more information, please contact

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The Australian Conservation Foundation is committed to achieve a healthy environment for all Australians. We work with the community, business and government to protect, restore and sustain our environment.

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