

Submission by the Clean Energy Finance Corporation to the Australian Government’s Emissions Reduction Fund Green Paper – February 2014

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1. Key Points

KEY POINT #1: Given 'lowest cost' is the primary objective of the Emissions Reduction Fund, it is recommended that the White Paper define what is meant by lowest cost.

KEY POINT #2: To realise 'lowest cost' abatement the White Paper consider including an upfront finance mechanism as a complementary measure to the Emissions Reduction Fund.

KEY POINT #3: If the CEFC is abolished, that a mechanism be established to perform a complementary role to the ERF in providing upfront finance to ERF project proponents.

KEY POINT #4: To ensure genuine and additional emissions reductions, there should be some assessment of additionality based at the facility or project level.

KEY POINT #5: To ensure the greatest amount of genuine and additional emissions reductions opportunities are eligible, the additionality test should be comprised of a barriers test incorporating two limbs:

- 1) an objective financial additionality test
- 2) a subjective non-financial additionality test

KEY POINT #6: To ensure the greatest amount of genuine and additional emissions reductions opportunities are eligible, the question of whether receipt of other forms of government funding should rule a proponent out ought to be left to the application of the two limb additionality test suggested above.

KEY POINT #7: Given that the evidence suggests the largest volume of lowest cost abatement opportunity is located in energy efficiency in the buildings, industry and transport sectors, the CEFC recommends methodologies in this sector be prioritised.

KEY POINT #8: The White Paper should include an approach that makes best use of existing methodologies (including deeming methodologies).

KEY POINT #9: If the CEFC is not already abolished by the time the ERF is operational, it, or another mechanism established for the purpose be used to facilitate aggregation complementary to the ERF.

KEY POINT #10: While further small-scale reform should be adopted as appropriate, a period of macro policy stability would help promote achievement of the emissions reduction objective.

KEY POINT #11: Give the market an indication of benchmark price, at least for the first auction/procurement.

KEY POINT #12: The standard form contract for purchase of abatement would benefit from open consultation with industry groups.

KEY POINT #13: To deal with any unforeseen 'teething' issues, the Australian Government should reserve some flexibility as to the standard form contract for purchase of abatement, at least for the initial round.

KEY POINT #14: *To protect the ERF scheme's integrity, the White Paper should specify that a subjective due diligence screening on the project and its proponents be conducted, ideally before participation at auction.*

KEY POINT #15: *To protect the ERF scheme's integrity, the White Paper should specify that there be two separate auction streams – one where delivery is guaranteed and one where it is not guaranteed.*

KEY POINT #16: *To safeguard emissions reductions, the White Paper should proceed with the Green Paper model on baseline setting; that is, coverage should include both scope 1 and 2 emissions of large emitters, and be established at the facility level.*

KEY POINT #17: *The White Paper should consider the adoption of a 'rolling baseline' featuring the following elements to assist in automatic adjustment - a rolling three year average, a tolerance threshold, and an approach which tests per-unit emissions intensity.*

KEY POINT #18: *The White Paper should adopt a multi-year compliance approach in preference to having no compliance mechanism at all.*

KEY POINT #19: *Whilst the overall compliance mechanism should be "revenue neutral", there should be a financial penalty for facilities that exceed an established baseline, with this penalty recycled into the Emission Reduction Fund to enable further auctions under that vehicle.*

KEY POINT #20: *The White Paper should include an option to reset the baseline by application, with the Department to develop criteria for a high bar test that still allows all of the relevant circumstances to be taken into account.*

KEY POINT #21: *Because it is the sector with the most opportunity, the White Paper should include the Electricity generation sector in the baseline scheme.*

KEY POINT #22: *To secure the integrity of the ERF operations, the White Paper should include some consideration of what measures will be undertaken to handle conflicts of interest and misuse of information.*

2. About the CEFC

- **The CEFC is an Australian Government owned fund with a mission that is complementary to Direct Action and specifically, the Emissions Reduction Fund (ERF)**
- **In a short time it has proven itself cost-effective**
- **It is Government policy to abolish the CEFC**

The CEFC is a legislated fund dedicated to working with the private sector to invest in clean energy projects. From April 2013, the staff and assets of Low Carbon Australia Limited (Low Carbon Australia - a related entity formed in 2010) were transferred to the CEFC.

The CEFC's mission is to accelerate Australia's transformation towards a more competitive economy in a carbon constrained world, by acting as a catalyst to increase investment in emissions reduction.

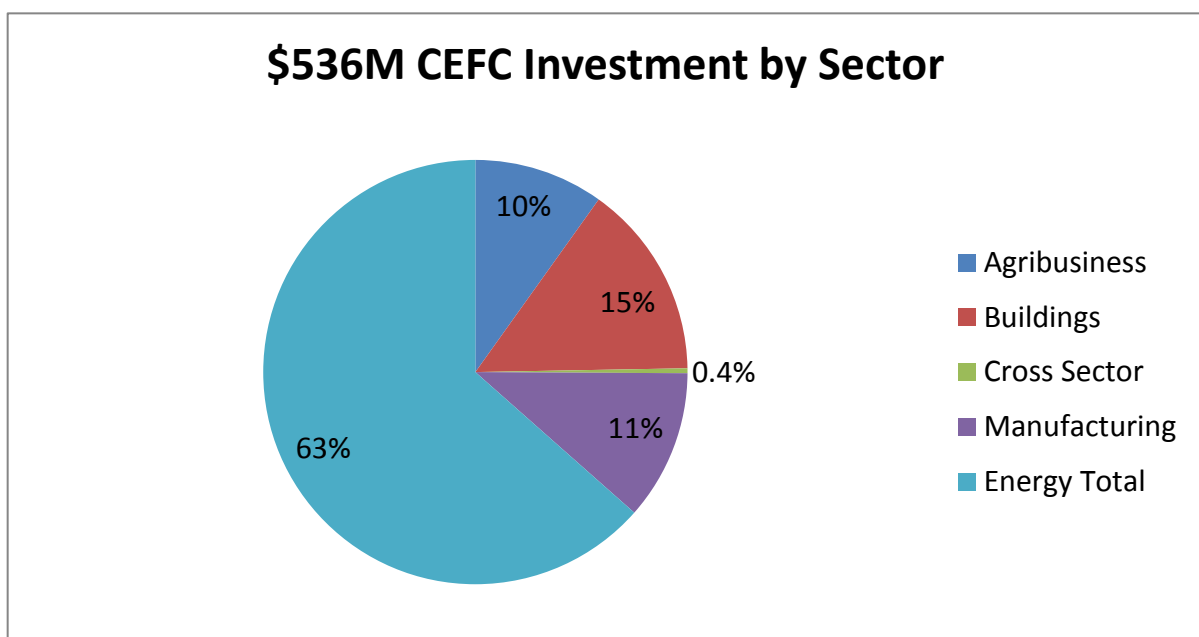
The CEFC is governed by a Board, comprising the Chair, Jillian Broadbent AO, and six other members with diverse business and government experience and an in-depth understanding of financing and energy markets.

The Corporation increases the flow of funding to the commercialisation and deployment of Australian-based renewable energy, low emissions and energy efficiency technologies ('emissions reduction projects') by mobilising public and private sector capital and skills, so preparing and positioning the Australian economy and industry for a carbon-constrained world.

CEFC Portfolio

The CEFC portfolio of investment is distributed across the energy, manufacturing, agribusiness, and buildings sectors (Figure 1 and Table 1 below). In addition, the CEFC also has a strong forward pipeline of viable investment opportunities in energy efficiency and emissions reduction.

Figure 1: CEFC investment portfolio by sector (20 August 2013)



By working with private sector co-financiers, the CEFC multiplies the total amount of funding available for investment. Through investing \$536 million of CEFC funds and attracting \$1.55 billion in private sector co-financing, by August 2013, the CEFC had facilitated over \$2.2 billion in projects, delivered approximately 4 million tonnes of abatement, and achieved it at negative cost (i.e. net return or benefit) of \$2.40 per tonne of abatement.

Table 1: The CEFC's investment impact to 20 August 2013

	Generation Capacity Installed (MW)	Annual tCO2e abated ('000)	Average Investor (i.e. CEFC) Cost \$/tCO2e	Average Cost to Govt \$/tCO2e
Totals	500	3,900	-\$2.40	\$0.20
Notes & Key: 1. Negative cost indicates a positive return to investor/government 2. 'Nameplate' or maximum operating output of installed generation 3. Average Investor Cost = cost to CEFC as investor (including Government cost of capital and operational cost) 4. Average Cost to Government = cost to government as funder (CEFC cost + Federal Grants received) 5. Includes an estimate of effect of unapplied demand aggregation financing programs				

CEFC Operations

In its relatively short period of operation, the CEFC has invested across a broad base of technologies which will improve Australia's emission reduction options and help lower their cost.

The CEFC operates as a sector-focused financial institution that provides market based support and long-term financing. The CEFC is a professional and functional operation with a flexible, high performing team of 44 staff with extensive experience in investments, portfolio management, finance, corporate treasury, legal, risk management, governance, corporate affairs, human resources, marketing and communications, and government.

The CEFC has added to the expertise and shared learning across the finance sector to build Australia's capacity to fund clean energy projects. The CEFC's legislative framework, funding and commercial approach for a public good outcome enable it to invest more time, effort and resources in transactions which have the public policy benefits it is charged to deliver. Such transactions might take more than a year to reach financial close because, for example, they are small, yet still complex; or, are remote and involve special challenges like transmission issues; or, are first in-kind technology that involves a range of skill sets that are not easily assembled in larger financial institutions.

The CEFC makes its investment decisions independently, based on rigorous assessment of the commercial business case, detailed due diligence and risk assessment on all projects, ensuring only those projects likely to deliver a return on investment in both an economic and an emissions reduction sense are supported with CEFC funding.

To date, the CEFC investment portfolio has been successful in creating jobs, growing Australian businesses and increasing the deployment of low carbon and renewable technologies across the nation.

The CEFC has demonstrated that it represents a positive cost-benefit outcome for Australian taxpayers, businesses, the economy and the environment. Australia has made a valuable investment in establishing the CEFC as a flexible and low cost policy tool. Through combining market know-how in both finance and energy technology, including the staff and assets of Low Carbon Australia, the CEFC has a proven capacity to mobilise private capital to achieve emissions reduction.

Current Status

The Australian Government has indicated its intent to abolish the CEFC, introducing a *Clean Energy Finance Corporation (Abolition) Bill 2013* into the Parliament. This Bill passed the House of Representatives but was defeated in the Senate in the December 2013 sittings.

As a statutory authority, the CEFC has cooperated with the Australian Government fully in provision of information. As required by its statutory mandate, so long as the law establishing the Corporation and its functions remain in effect, the CEFC will continue to perform its functions and operate in accordance with the law.

The CEFC's submissions to the *Senate Environment and Communications Legislation Committee Inquiry into the Clean Energy Legislation (Carbon Tax Repeal) Bill 2013*¹ and to the *Senate Environment and Communications References Committee Inquiry into the Government's Direct Action Plan*² have addressed the reasons advanced to date by various Government Ministers in seeking to shut down the CEFC.

¹ CEFC (2013) *Submission by the Clean Energy Finance Corporation to the Environment and Communications Legislation Committee Inquiry into the Clean Energy Legislation (Carbon Tax Repeal) Bill 2013 and related bills*

² CEFC (2014) *Submission by the Clean Energy Finance Corporation to the Environment and Communications References Committee Inquiry into the Government's Direct Action Plan*

3. Scope of submission

- **The CEFC is not commenting on all issues raised in the Green Paper, and is limiting its comment to matters which pertain to its own scope of operations**

The CEFC has confined its comment to those issues that fall closest to the CEFC’s functional remit and operational experience. As such, comment is largely limited to the operational requirements of the Emissions Reduction Fund (ERF) rather than other aspects of the Government’s Direct Action Plan which feature in the Green Paper including the Carbon Farming Initiative, the One Million Solar Roofs and 20 Million Trees programs.

Specifically, this submission is broken up into sections dealing with the following discussion points raised in the Green Paper:

1. Design Principles and sources of emissions reductions:
<p>The Emissions Reduction Fund will be designed to achieve lowest-cost emissions reductions as its primary objective.</p> <p><i>Views are sought on opportunities for large-scale, low cost emissions reductions, including estimates of potential reductions.</i></p>
2. Crediting emissions reductions
<p>Emissions reduction methods will be developed to calculate genuine and additional emissions reductions from new actions that are not mandatory and have not been paid for under another programme.</p> <p><i>Views are sought on how best to:</i></p> <ul style="list-style-type: none">• <i>ensure that emissions reductions are genuine</i>• <i>develop methods for calculating emissions reductions from priority activities</i>• <i>facilitate the aggregation of emissions reductions across projects and activities.</i> <p><i>Views are sought on regulatory reform opportunities that would complement the Emissions Reduction Fund.</i></p>
3. Purchasing emissions reductions
<p>Initially, the Clean Energy Regulator could run relatively frequent tender rounds to bring forward the delivery of emissions reductions.</p> <p>The Clean Energy Regulator would apply a benchmark price — the maximum amount it would pay per tonne of emissions reduced — with only bids costing less than the benchmark price being considered.</p> <p><i>Views are sought on how best to:</i></p> <ul style="list-style-type: none">• <i>facilitate early participation in the Emissions Reduction Fund</i>• <i>operate an efficient auction process to secure lowest-cost emissions reductions.</i> <p>Standard contracts will be used to guarantee payments for verified emissions reductions. These would have a maximum duration of five years and include options for addressing under-delivery of emissions reductions.</p>

Views are sought on how best to provide:

- *funding certainty for businesses*
- *confidence that projected emissions reductions will be delivered.*

Information will be published under the Emissions Reduction Fund to supplement information currently published under the Carbon Farming Initiative, including additional contract and auction information.

4. Safeguarding emissions reductions

A safeguard mechanism will be introduced to provide incentives to reduce emissions above historical business-as-usual levels

Views are sought on:

- *the coverage of the mechanism*
- *how baselines could most easily be set to effectively limit increases in historical 'business as usual' emissions*
- *the treatment of new entrants and significant expansions, including definitions of best practice*
- *compliance options in the event that baselines are exceeded.*

6. Administration

The Emissions Reduction Fund will be administered by the Clean Energy Regulator.

Views are sought on the proposed governance arrangements.

Within the above discussion points, this submission focuses solely on matters relevant to the CEFC and its private and government sector experience, incorporating the organisation's commercial market insight and public policy outcomes and accountability.

This submission should also be read in conjunction with:

- the CEFC submission to the Australian Government's *'Emissions Reduction Fund Terms of Reference'*³
- the CEFC submission in relation to the *Senate Environment and Communications Legislation Committee Inquiry into the Clean Energy Legislation (Carbon Tax Repeal) Bill 2013 and related Bills*⁴ and
- the CEFC submission to the *Senate Environment and Communications References Committee Inquiry into the Government's Direct Action Plan*⁵

³ CEFC (2013) *Submission by the Clean Energy Finance Corporation to the Australian Government's 'Emissions Reduction Fund Terms of Reference'*, available at http://www.cleanenergyfinancecorp.com.au/media/65401/cefc_submission_erf_terms_of_reference.pdf

⁴ CEFC (2013) *Submission by the Clean Energy Finance Corporation to the Environment and Communications Legislation Committee Inquiry into the Clean Energy Legislation (Carbon Tax Repeal) Bill 2013 and related bills* available at <http://www.cleanenergyfinancecorp.com.au/media/65406/cefc-submission-to-inquiry-into-the-clean-energy-legislation-carbon-tax-repeal-bill-2013-and-related-bills.pdf>

⁵ CEFC (2014) *Submission by the Clean Energy Finance Corporation to the Environment and Communications References Committee Inquiry into the Government's Direct Action Plan* available at <https://www.cleanenergyfinancecorp.com.au/media/76195/cefc-submission-to-the-environment-and-communications-references-committee-inquiry-into-the-direct-action-plan.pdf>

4. Design Principles and sources of emissions reductions (Part 1 of the Green Paper)

- **The White Paper will need to define what is meant by lowest cost**
- **There are market barriers to adopting many lowest cost abatement opportunities**
- **The ERF would need a complementary mechanism to realise these**
- **If it is not abolished, the CEFC could play a complementary role to the ERF**

Discussion Point: The Emissions Reduction Fund will be designed to achieve lowest-cost emissions reductions as its primary objective.

Views are sought on opportunities for large scale, low cost emissions reductions including estimates of potential reductions.

The Australian Government has stated its intent to design the ERF to achieve lowest cost emissions reductions as its primary objective.

Lowest cost - definitional considerations

The Green Paper has not provided a definition of what is meant by lowest cost.

KEY POINT #1: *Given 'lowest cost' is the primary objective of the Emissions Reduction Fund, it is recommended that the White Paper define what is meant by lowest cost.*

For the purposes of this submission, the objective of 'lowest cost' abatement is taken to mean 'lowest cost' to the Australian Government. In the context of the ERF this would mean the price of the winning bids through the ERF bidding process.

Lowest cost – difficulty in realising lowest cost opportunities

The reality though, is that the winning bids will only be the lowest cost of those participating in the bidding – not necessarily the lowest cost opportunities available in the market.

It is in the Australian Government's interest to therefore address any external barriers which prevent organisations being able to participate in bidding, otherwise the 'lowest cost' sources of abatement may not make it to the ERF bidding process, driving up the price to government.

This is evidenced in marginal abatement cost curves such as *ClimateWorks Low Carbon Growth Plan Update, 2011*, which are reproduced in the Green Paper at page 13.

The ClimateWorks curve shows that the lowest cost abatement opportunity is dominated by energy efficiency measures in the building, transport and industry sectors.

Commercial energy efficiency projects are an example. The low cost abatement potential of Australia's existing building stock has been well-documented and is widely accepted, with frequent reference to Australian building energy efficiency measures being some of the lowest cost abatement measures available.

If Direct Action and more specifically, the ERF, is intended to provide a financial incentive to deliver lowest cost abatement, then energy efficiency, and commercial buildings in particular, are likely to be a key target area.

But the reality observed by the CEFC is that due to a range of potential barriers including split incentives, company capability, motivation and project attractiveness, many of these measures remain unimplemented notwithstanding rising energy prices.

Previous policies and programmes that have proved successful in catalysing energy efficiency activity in commercial buildings include the Green Building Fund and more recently, the availability of the CEFC's co-finance products such as Environmental Upgrade Agreements (EUAs). These policies and programmes were successful in overcoming common barriers to energy efficiency activity by offering access to 'upfront' capital for a sufficient term to support the project, improving a project's payback rate and/or helping to overcome the split incentive issues common between building owners and tenants.

If the ERF is implemented in its currently proposed format (where contracts are awarded for a maximum of 5 years with payment post-delivery of abatement) then as a financial incentive it may (depending on the successful auction price) marginally improve a project's payback, but it would not address upfront capital barriers or help address split incentive issues.

The risk that the ERF only has marginal impact on energy efficiency investment activity can be illustrated through the theoretical example below.

Commercial Building Energy Efficiency Project Example

An energy efficiency upgrade project in a Sydney CBD commercial building might identify cost-effective measures that deliver 1,000tCO₂-e abatement per annum.

- Assuming the project is attractive and has a relatively low upfront capital intensity requirement, it might require upfront investment of \$1 million.
- If the 1,000tCO₂-e per annum abatement is achieved through being more energy efficient and thus consuming less electricity purchased in NSW, it might equate to a saving of 952 MWh per annum. Assuming a retail price of \$150/MWh, this would equate to a cost saving of \$143,000 per annum.

Based on the above assumptions, the project has a payback of 7 years, seeks ERF funding and meets the additionality requirements.

- If the project bid into the ERF and was successful, it might secure a 5 year contract, requiring it to deliver 1,000tCO₂-e abatement at a price of \$25/tCO₂-e.
- This would equate to an additional annual revenue stream of \$25,000 per annum or a 15 per cent uplift on the existing energy cost savings. The maximum 5 year contract would improve the simple payback by 0.9 years to 6.1 years.

To the project owner, there is a significant risk that this improvement in payback might be seen as marginal at best, and therefore not catalyse additional activity where payback is a barrier.

Furthermore, it does nothing to address upfront capital issues (since payment is in arrears) or the split incentive. In addition, if the auction contract terms required the project developer to source alternative abatement at its own cost, if energy use of the building actually increased due to changes in the way tenants used the building (for

example the tenants using more computers in a smaller space), then the additional revenue stream and shorter notional payback period could be viewed as insufficient to justify this risk, particularly where tenancy activities are outside the control of the bidder e.g. including where the bidder is an aggregator.

Lowest cost - need for complementary measures to achieve lowest cost outcomes

It can be seen from the above and widespread overseas experience with measures designed to drive abatement action in this sector that:

- In order to successfully capture the lowest cost emissions opportunities (that is, those at the left hand side of the ClimateWorks cost curve diagram reproduced in the Green Paper), the ERF alone may not be a sufficient mechanism.
- If these opportunities are not harnessed, it logically follows that the Government's purchasing through the ERF will be pushed further up the cost curve.

The same evaluation of likely attractiveness of ERF payments, post abatement activity, can be applied to all sectors and will have more or less impact depending on the prominence of payback rates as a barrier and the materiality of ERF payments in overcoming this. Comparable to other project types (e.g. reforestation), energy efficiency projects generally have relatively short payback periods, so a five year contract term is likely to be an even larger barrier to other project types.

Accordingly, the design of the ERF will need to include complementary measures. For the reasons highlighted in the commercial building example above, the availability of upfront finance will remain a critical component required to enable energy efficiency activity in commercial buildings.

KEY POINT #2: *To realise 'lowest cost' abatement, the White Paper consider including an upfront finance mechanism as a complementary measure to the Emissions Reduction Fund.*

Attributes of effective complementary mechanisms to the ERF

A complementary mechanism to the ERF will be needed to deal with market gaps - just because there is a financial benefit to be earned does not mean that action will occur. There are a range of well-documented market barriers, such as generally available market tenor, general policy uncertainty, threshold rates of return, split incentives, lack of know how etc. which are to date not addressed in the proposed scheme.

Example – the project payback is 10 years – the bank only lends out to 5 years, and the ERF payment is insufficient to pull the payback below 8 years.

There will be a need to deal with ERF gaps – If the sum awarded under the ERF won't cover the full costs, there must be a mechanism by which a project proponent can finance the proposal.

Example – The project cost is \$12 million. The ERF award for the project amounts to an effective subsidy of \$3 million. The proponent has a line of credit worth \$6 million and is having trouble getting the bank to commit to any more even though the project will generate revenue in energy savings.

There is a need to deal with scale issues - Similar issues may occur further back in the curve where scale is at issue and the ERF funds up for bid are insufficient. The ERF Green Paper states (at page 3) that:

Some emissions reduction activities such as revegetation and household and commercial energy efficiency are small-scale actions that could be most cost-effectively implemented through aggregation. The Government will therefore encourage project aggregation and facilitate project development so that small businesses, households and farm groups can simply access the Emissions Reduction Fund in a practical and cost effective way.

Approaches to an effective complementary mechanism to the ERF

There are three approaches that could be considered within the overall design features of Direct Action as complementary mechanisms to address identified barriers to uptake of the scheme. These are:

- Grants
- Guarantees
- Loans

Availability of grant funding could help address these barriers, but there are two aspects as to why this should not be used as a complementary measure. Firstly, the ERF scheme is itself a competitive grants program – further granting would add to the bottom line cost to government. Secondly, if the government wanted to create an upfront incentive in this way, it could instead simply make the ERF payment up front rather than running a parallel grants application process.

Another theoretically possible approach could be the issue of government guarantees to successful bidders, underwriting project success and enabling the private sector to bank the project. There are several reasons why this is undesirable in the area of project finance. Guarantees typically have a low upfront cost, but this draws government into becoming an ‘insurer’ of the outcome. They typically expand with each project as proponents ask the government to cover “just a little more” risk. They are inefficient. A bank lending against a guarantee will charge a debt margin at well above the costs the government could fund the project itself. Guarantees cannot be readily sold or transferred like debt. In the case of a loan it could sell the loan and move on once a project is established. Finally, government guarantees serve to decouple risk from return, at a danger of encouraging moral hazard.

The practical and most cost-effective way to deal with barriers to ERF uptake is to do what the CEFC now does...provide the certainty and flexibility of a range of loan-based financial products tailored to suit a particular project.

The CEFC has established relationships with proven, experienced partners in the market with strong delivery capability, a developed pipeline of projects and a willingness and capacity to innovate. These programs have been tested through the experience of Low Carbon Australia and expanded within the CEFC. These include:

- **On-bill finance** – offered through a co-finance agreement with energy utility, Origin. This finance model assists proponents to cover the upfront cost of energy efficiency projects but differs from regular hire purchase arrangements in that the equipment financed usually provides energy and dollar savings which can wholly or partially offset the cost of paying the finance back through regular energy utility bills.
- **Energy Efficiency Loan Program** – the CEFC is partnering with Commonwealth Bank to provide finance to this \$100 million program aimed at manufacturers and other businesses upgrading their equipment and processes.

Loans are available through Commonwealth Bank for upgrades including, but not limited to: lighting, power factor correction, variable speed drives, building management systems and metering, boiler upgrades, heating ventilation and air-conditioning upgrades, cogeneration or trigeneration installation, and small-scale solar PV.

- **Environmental Upgrade Agreements (EUAs)** – The CEFC has partnered with NAB and ANZ in providing funds managed through Eureka Funds Management to assist proponents undertake energy efficiency upgrades involving air-conditioning systems, building management systems and lighting. These projects tie finance to a commercial property rather than its owner and enable repayments through council rate notices. This structure allows longer payback periods, improving the attractiveness of undertaking energy efficiency upgrades.

Importantly, loaned funds keep responsibility for project risk and returns firmly on the borrower via the discipline of debt, which aligns the borrowing with project success and provides a financial return that is used to repay the lender in a virtuous circle.

The performance of the CEFC's loaned funds demonstrate how such a program can be run to provide a positive return to government, even taking into account cost of funds. Such an approach could radically alter the prospects of the ERF's success through several means:

- **Price transparency** – giving the bidder clarity as to their project's finance prospects prior to bidding into the auction so that the true overall project costs are known and the project understands whether ERF funding is even required for project feasibility, rather than guessing at what the market value might be
- **Up front capital** - mitigating the problems projects will experience in accessing capital caused by payment in arrears
- **Crowding in private sector finance** – through creating aggregated funds, private sector capital can be brought into play, placing downward pressure on government cost of abatement

This could clear the ERF market of barriers to realisable lowest cost opportunities and therefore drive down the average cost of abatement for the ERF.

Whether or not the CEFC will co-exist with the ERF is a matter for the Australian Government and the Parliament to determine, but if the CEFC, or an organisation with similar functions continues to exist, it could be a highly effective and necessary complementary mechanism to the ERF and work with the private sector banks to facilitate the types of projects that are likely to bid into the ERF.

KEY POINT #3: *If the CEFC is not abolished, it (or an organisation with similar functions) could perform a complementary role to the ERF in providing upfront finance to ERF project proponents.*

The CEFC Portfolio and Opportunities

The CEFC portfolio provides a reliable snapshot of the types of opportunities in the market that may be available under the ERF. Since the CEFC has been operating in the market, it has received a wide range of proposals of varying merits.

In summary, the CEFC has:

- Received over 400 enquiries for projects valued at \$31 billion
- Initially assessed over 200 transactions
- Undertaken detailed investment assessments of over 60 projects
- Concluded 11 investment transactions, committing over \$480 million in CEFC funding

- Assumed and expanded many aggregation activities that were formally undertaken by Low Carbon Australia, which focused on energy efficiency and the SME sector.

Given the nature of the ERF (where the direct funds provided do not require repayment), the significant levels of interest apparent through the CEFC's project pipeline as shown above are only likely to increase. To provide some context, a grant program such as AusIndustry's Clean Technology Investment Program announced over 440 grants in approximately 18 months of operation.

Unlike a normal grant-based program, however, the risks to be assessed project-by-project under the ERF are much closer to those the CEFC has been required to manage in provision of its financing support. This involves assessing the counterparties' risk (Credit); the project's construction and operation risks; the regulatory risk, and commercial risks of the business to ensure they will be there to produce the result. Without a comparable organisation to the CEFC, this will create a significant project assessment resource to be undertaken by an alternative lender. Given the size of many transactions and the initial round involving \$150 million, most Banks we have spoken to have indicated that this is not commercial business for them.

The CEFC portfolio has a strong forward pipeline of viable investment opportunities in energy efficiency and emissions reduction, and represents a diverse mix across the economy, with projects covering Manufacturing Innovation, Advanced Services, Agriculture, Education and Research (Buildings sector) and Mining (i.e. waste coal gas-fired generation).

Examples of some of the key projects in the CEFC portfolio include the following:

- The \$100 million Energy Efficient Loan facility co-financed by CEFC with the Commonwealth Bank will provide funding to smaller businesses, particularly those from the manufacturing sector, to upgrade facilities and equipment to be more energy efficient and reduce energy costs, with the additional positive effect of reducing carbon emissions
- The CEFC is providing \$75 million to Energy Developments Limited (EDL) for investment in new projects generating energy from waste coal mine gas and landfill gas. Fugitive emissions from coal mines and landfill are potent greenhouse gases. Using them to generate electricity that would otherwise come from higher emissions sources creates environmental and economic efficiency benefits. EDL will also use CEFC funds for remote generation solutions involving hybrid technologies that use renewable energy
- The CEFC and National Australia Bank are co-financing Australia's largest beef company, Australian Agricultural Company Limited (AACo), for the installation of solar photo voltaic (PV) units across 15 grid-connected sites in Queensland. The solar PV systems will enable AACo to cut current grid energy consumption and associated carbon emissions by just under 30 per cent.

The response that has been received from the market to date is extremely encouraging. Projects in the current CEFC pipeline representing significant opportunity for achievement of emissions reduction include:

- Creating a **green residential mortgage product** to replicate international energy efficient housing programs and incentivise energy efficient new housing construction
- Expanding availability of finance for **Environmental Upgrade Agreements (EUAs)** to promote energy efficiency in existing commercial buildings
- Working with **Australian manufacturers** and service providers to participate in projects to build supply chain capability for growth and jobs in the lower carbon economy

- Supporting **remote renewables projects** to reduce their reliance on diesel generation and provide long-term energy cost savings
- Encouraging the reduction in transmission capital expenditure and consequent consumer changes by promoting **efficient demand management and appropriate augmentation** activities
- Expanding co-finance vehicles targeted at energy efficiency and small-scale emissions reduction projects in **small to mid-sized businesses** for improved energy productivity across the economy.
- Investing in **community renewable projects** to make renewable investment accessible for participants in smaller and regional communities

5. Crediting emissions reductions (Part 2 of the Green Paper)

- **Assessment of additionality should be based at the facility or project level**
- **An effective additionality test would comprise of a barriers test comprising:**
 - 1) **an objective financial additionality test**
 - 2) **a subjective non-financial additionality test**
- **Other forms of government funding would be dealt with by the additionality test**
- **Development of methodologies for energy efficiency in the buildings, industry and transport sectors will need to be a priority**
- **There will need to be complementary mechanisms to facilitate aggregation**
- **Policy stability and avoidance of reform fatigue will assist in attracting investment in the sector**

Discussion Point: Emissions reduction methods will be developed to calculate genuine and additional emissions reductions from new actions that are not mandatory and have not been paid for under another programme.

Views are sought on how best to:

- ***ensure that emissions reductions are genuine***
- ***develop methods for calculating emissions reductions from priority activities***
- ***facilitate the aggregation of emissions reductions across projects and activities.***

Views are sought on regulatory reform opportunities that would complement the Emissions Reduction Fund.

'Genuine and Additional' Emission Reductions

As acknowledged by the Green Paper, providing ERF funds to projects that would have happened anyway is not an efficient or effective use of Government funding; nor, at a macro level, will it lead to a difference in Australia's actual emissions as required to meet the government's targets.

The Green Paper indicates that key eligibility criteria for project proponents is that emission reductions financed by the ERF bid are not required by regulation, and have not been paid for under another abatement funding programme. However, these criteria on a standalone basis will not ensure that a project will result in 'genuine and additional' emission reductions.

As an example, an Australian branch of a multinational company could be already intending to upgrade equipment and implement energy efficiency as part of meeting the parent company's global strategy for financial profit. The upgrade would be measurable against its NGERs profile but would be business as usual for that company and would achieve considerable cost savings in the short term. In this case, the Australian company could bid at a low cost for abatement that it would have achieved anyway, and the offshore parent would make windfall profits by Australian taxpayers subsidising energy efficiency activities already being undertaken for commercial reasons. So, the additional abatement achieved by this winning bid would be zero. Worse, it could displace projects that lost at auction because they bid at a slightly higher price and were truly additional, and which will now not occur as they were dependent on ERF funding.

If the Australian Government wants to achieve genuine and verifiable emission reductions, then there must be some assessment of additionality at the facility or project level.

KEY POINT #4: *To ensure genuine and additional emissions reductions will require some assessment of additionality based at the facility or project level.*

Additionality Test – Objective or Subjective Approach – ‘Barrier tests’

Financial additionality requires a project-specific assessment showing that a project will not have happened without the benefits received under the ERF. For most project types this approach can be complex; requiring a detailed baseline and with different returns required for different industries at different times, especially when checking if the project is viable without ERF support.

In the combined Low Carbon Australia/ CEFC’s experience, the search for an objective “one-size-fits-all” additionality test which is both simple to apply and serves the ‘genuine and additional’ purpose, is a fruitless journey riven with repeated turns into dead-end cul-de-sacs. You have financial barriers and non-financial barriers that ERF payments should address.

The multiplicity of circumstances would be better dealt with by adopting a dual-sided “barrier test” that allows one or both of the following to be satisfied:

- an objective financial additionality test (non-barrier test)
- a subjective non-financial additionality test (barrier test)

This ‘barriers test’ approach to additionality places the focus on the project owner to explain how ERF funding would overcome a current barrier to the project.

For some projects, a financial additionality assessment is relatively simple, so should be one of the tools available to project owners. Any project sufficiently developed to bid into the ERF should be able to provide a simple financial model that can show the returns to the project, with and without the proposed bid price, as a key part of feasibility due diligence. If a project developer does not have a financial model at bid stage, there is no way for them to accurately assess their overall project costs and hence, their correct proposed bid price.

However, for other projects, a financial additionality assessment will not be appropriate or will not tell the whole story. The barriers to implementing abatement projects are not always financial. In the energy efficiency sector in particular, profitable projects go undeveloped for a range of reasons.

An identified hurdle could be some other barrier, such as increasing the returns to a level sufficient to divert engineering resources away from other activities or justify setting up an aggregation facility to manage a portfolio. The Clean Development Mechanism has developed a similar barriers test, as well as a ‘common practice’ test, to try and supplement the imperfections of the standard financial additionality test.

KEY POINT #5: *To ensure the greatest amount of genuine and additional emissions reductions opportunities are eligible, the additionality test should be comprised of a dual-faceted barriers test:*

- 1) *an objective financial additionality test*
- 2) *a subjective non-financial additionality test*

Additionality and Other Forms of Government Funding

The Green Paper envisages that those projects which receive other forms of Government grant funding, such as funding under state energy efficiency schemes, would be excluded from bidding.

The Green Paper also mentions the Renewable Energy Target as being a government programme that the ERF will be designed to complement, rather than duplicate. The CEFC agrees that the two schemes should be complementary, but does not consider that eligibility to produce Renewable Energy Certificates should necessarily preclude a project from participating in an auction, where the project can prove that the ERF amount was sufficient to make the project financially feasible.

Renewable Energy Certificate revenues are not a government grant, but a market-based instrument funded by the private sector and ultimately, energy consumers, as part of a regulatory package to increase the renewable energy generated in Australia. Depending on market developments (and particularly depending on the amount of regulatory certainty around the RET at any one time), the value of Renewable Energy Certificates may be insufficient to make a project feasible.

Simply, if that project could deliver abatement at the lowest price to Government and meet the relevant additionality tests, it should be eligible to participate for ERF funding. There are a range of Government regulations and incentives in place to support different industries which are not specifically related to renewables and climate change, and it would be impossible to pick these apart in terms of how they benefit specific bidders (e.g. mining industry) versus others (e.g. manufacturing) when bidding into the ERF.

In addition, government investments in projects (including State Treasury investments, State Government grants or CEFC investments) should not preclude projects from bidding into the ERF. The adoption of a blanket 'no government finance' rule again leads to building fruitless administrative expense into the scheme, as:

- It would rule government out of the scheme altogether. Between state, federal and local government administrative buildings, universities, schools, hospitals, transport, emergency services and law enforcement facilities, there is tremendous opportunity for energy (and taxpayer) savings which could otherwise be unlocked
- Many sectors receive government assistance in one form or another at state, federal and local level – for example, tax credits, concessions, rebates and exemptions, grants (including R&D grants), production payments, subsidies, loans, rebates and trade concessions – the list goes on. It is, quite simply, an enormous and fruitless task cataloguing and classifying this
- If the intention was to limit the bar so that only those receiving 'green scheme' revenue would be ineligible, this would create a perverse and counterproductive incentive that rewarded late movers for sitting on their hands and encouraged early adopters to exit from those schemes
- All of this only serves to limit the bidding market – which will simply drive up the cost of abatement that the Australian Government (and ultimately the taxpayer) pays

Projects in receipt of other forms of government funding are best dealt with by the additionality test described above.

KEY POINT #6: *To ensure the greatest amount of genuine and additional emissions reductions opportunities are eligible, subjectivity is critical. Therefore, the question of whether receipt of other forms of government funding should rule a proponent out ought to be left to the application of the two limb additionality test suggested above.*

Developing Methodologies

The speed at which methodologies can be developed will be a key determinant to successful implementation of the ERF auctions because they will act as a determinant of market size. Development of methodologies is a complex and important exercise. Ideally, the full suite of methodologies would be available at the first auction to ensure that the lowest cost abatement could be sourced, but it is unlikely that this will be feasible in practice.

In terms of prioritising methodologies, energy efficiency in buildings, industry and transport is where the largest volume of abatement is expected but is often illusive (as we discussed in Part 4 of this submission), from sectors with sufficient direct control over the abatement activity.

KEY POINT #7: *Given that the evidence suggests the largest volume of lowest cost abatement opportunity is located in energy efficiency in the buildings, industry and transport sectors, methodologies in this sector should be prioritised.*

The CEFC's prior submission to the consultation process on the ERF Terms of Reference contained some detail on the options for developing methodologies, and striking the right balance between scheme efficiency and minimising time and cost, vs maximising accuracy. A similar balance will need to be struck in developing verification and reporting requirements, as described further below.

Calculating and Verifying Emission Reductions

The CEFC endorses the overarching objective in the design of the ERF to keep its administration as simple and low cost as possible. One way of achieving this would be to keep the reporting requirements to a minimum, with estimation and demonstration of carbon reduction being no exception.

Whilst monitoring and verification (M&V) has an invaluable role to play in many energy efficiency projects, deeming methodologies should also be available as an alternative for specific types of simple projects they suit. As is evidenced by the NSW Government's ESS Rule, M&V and deeming methodologies can prove complementary approaches, applied to projects with different characteristics.

Previous reference to deeming methodologies has often focused on white certificate schemes and the use of deeming methodologies to enable payments up front for certificates, i.e. ahead of reduction actually being realised. While there is a strong case for the efficiency of making one-off upfront payments per transaction, it is recognised that the Australian Government's preferred position is that payments be made in arrears.

This does not completely rule out the adoption of a deeming methodology approach. On specific project types where project reductions can be confidently foreseen (a starting point might be for those technologies recognised under NSW's ESS), efficiencies would be gained by confirming the reduction that will be realised at the outset of a project and then, if necessary, still withholding payment until abatement is realised (for example, in arrears at the end of each contracted year).

This approach would provide project owners and the Australian Government respectively with more certainty of payment and abatement over the project for its contractual period, negating the need for complicated make good provisions.

KEY POINT #8: *The White Paper should include an approach that makes best use of existing methodologies (including deeming methodologies).*

Facilitating Aggregation

Facilitating aggregation is finance dependent. While design of the ERF as an auction process may, of itself, encourage some market collaboration, it is clear that a chance at a back-ended ERF payment alone may not be enough of an incentive for either the small-scale projects or the institutions with real aggregation capability.

True aggregation power will come from financial sector participation. The simplest and most cost-effective method of facilitating financial sector aggregation for emissions reduction would be to make use of the skills and platforms that exist within the CEFC.

Low Carbon Australia trialled no fewer than eight different aggregation models based on finance, all of which were unique in the Australian context – four of them have proven successful and replicable (the remaining three failed to generate sufficient uptake but caused no loss). This experience has transferred to the CEFC, with the CEFC now scaling up and replicating the proven models and developing others. Establishing aggregation models are time consuming. The legal principles are simple; but ensuring that the program is understood, sold and effectively marketed, engages customers and achieves take-up, all takes time.

Based on this learning, in what is still a 'greenfields' area of financial activity, the CEFC is placing significant effort and resources towards facilitating aggregation efficiently and at a profit to the Government and the taxpayer.

The CEFC's experience could be of assistance to the ERF in order to:

- Use the CEFC's existing co-financiers to bid in to the ERF which would allow them to pass through a reduced interest rate on the financial product to their end-use customers (i.e. the small-scale project owners)
- Work with the financial sector to develop new special purpose aggregation vehicles which could bid into the ERF auction and deliver the finance and project outcomes through the financier's customer servicing network
- Work with corporates who are logical aggregators of projects (i.e. energy retailers, property trusts) to provide special purpose loans or investments to bridge the timing gap between incurring the upfront costs of aggregation and receiving a return via payback from the ERF
- The CEFC could itself be mandated by the Government to adjust the terms of its investment structuring to account for the value of blocks of unsold abatement (i.e. abatement after the expiry of the ERF contract) and retire that abatement. This would serve a dual purpose - the CEFC would then use the ERF payment to support projects in its pipeline that are 'just short' of being financeable and/or to entice financiers into deals which are financeable but for various reasons (e.g. small size, administrative complexity) 'just short' of being commercially financed.

KEY POINT #9: *If the CEFC is not already abolished by the time the ERF is operational, it could be used to facilitate aggregation complementary to the ERF*

Regulatory and Policy Reform and Uncertainty

The CEFC notes that the Green Paper calls for complementary regulatory reform, and the CEFC supports the type of practical approach which sees micro-regulatory reform such as that advocated by Refrigerants Australia cited in the Green Paper.

However, it ought to be noted that at the macro level there is a raft of regulatory and policy reform under current consideration. As well as the formulation of the Direct Action Plan and the ERF, there is a forthcoming review of the Renewable Energy Target (RET), and an Energy White Paper process that is complementary to the issues discussed in this submission.

Regulatory and policy agenda uncertainty surrounding the renewable energy and energy efficiency sectors has proved a significant influence on the sector's growth potential and investment attractiveness.

Investment in the renewable energy and energy efficiency sectors of the economy has generally slowed as the market assesses the impact of subsequent policy changes and reviews.

Continuing uncertainty is driving up the cost of capital due to heightened perceived risks, and may see some investors abandon the sector in favour of other sectors less exposed to a changing policy environment. Investments in this sector are often long-term, requiring stable and predictable policy settings. Ongoing policy debate and periods of change create risk of "investor fatigue" associated with uncertainties about policy settings changing over the term of an investment.

The need for regulatory and policy certainty has been picked up in the submission Ai Group lodged with the Senate *Environment and Communications References Committee Inquiry into the Government's Direct Action Plan*:

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.⁶

Private investors make significant financial commitments to the clean energy sector based on a set of policy and regulatory settings. These settings create and change the value of certain property rights. Based on the current electricity market price and RET market price, abolition of the RET, for example, could see the revenue to existing renewable generators cut by 40 per cent. Such investment losses will either need to be absorbed by investors (including shareholders) or retailers who have contracted for supply on a fixed price basis, given the clear legislative framework that has previously existed.

Investors facing or experiencing such losses will be reluctant to invest again and will likely only do so where they can achieve higher capital returns to compensate for a heightened regulatory risk profile.

⁶ Ai Group (2014) Submission by the Ai Group into the Senate *Environment and Communications References Committee Inquiry into the Government's Direct Action Plan*

Indeed, the uncertainty – affecting both conventional and clean energy - is now being built into investment consideration as a substantial risk. The cost of policy uncertainty is a drag on the economy that will continue to be paid for by energy sector borrowers in the form of higher interest rates and ultimately, by energy consumers in the form of higher electricity bills.

KEY POINT #10: *While further small-scale reform be adopted as appropriate, a period of macro policy stability would be useful in promoting the emissions reduction objective*

6. Purchasing emissions reductions (Part 3 of the Green Paper)

- **In a scheme based on a fixed tenor payment in arrears, the CEFC could play a complementary role**
- **The market should receive an indication as to the benchmark price, at least for the first auction**
- **Subjective due diligence screening is essential to scheme integrity**
- **Two separate auction streams – one where delivery is guaranteed and one where it is not guaranteed, would protect the ERF scheme's integrity**

Discussion Point: Initially, the Clean Energy Regulator could run relatively frequent tender rounds to bring forward the delivery of emissions reductions.

The Clean Energy Regulator would apply a benchmark price - the maximum amount it would pay per tonne of emissions reduced - with only bids costing less than the benchmark price being considered.

Views are sought on how best to:

- *facilitate early participation in the Emissions Reduction Fund*
- *operate an efficient auction process to secure lowest-cost emissions reductions.*

Standard contracts will be used to guarantee payments for verified emissions reductions. These would have a maximum duration of five years and include options for addressing under-delivery of emissions reductions.

Views are sought on how best to provide:

- *funding certainty for businesses*
- *confidence that projected emissions reductions will be delivered.*

Information will be published under the Emissions Reduction Fund to supplement information currently published under the Carbon Farming Initiative, including additional contract and auction information.

Efficient Auction Process – Transparency

Even with a standardised auction process, participating in an auction (particularly in early auctions) will entail significant costs and time being incurred by project developers.

Project developers need to develop the technical documents required under the pre-screen process and obtain necessary internal approvals, conduct modelling, and obtain requisite advice from a structuring, legal, tax and accounting perspective. In addition, a developer may need pre-approval of a financial backer of the project, such as their bank.

Accordingly, to minimise wasted time and cost, the Government should be as transparent as possible in providing all relevant information to project owners, including disclosing the top target price at which it will accept all volume and contracting terms well in advance. The Government should agree that it will consider bids above this price if sufficient abatement is not available at benchmark price (at least for the first auction)

The economic objective in holding an auction must be to clear the market at least cost. Proponents that may consider participating in the first auction are already likely to have sufficient information on their proposed project to assess whether they can bid at less

than the benchmark price. If they can't, they won't spend time and money preparing for auction. It would be a wasted exercise if an auction failed because the benchmark price was at a level much lower than the price required to achieve the abatement. Once there have been one or more auctions and the settlement prices for those auctions have been published, industry will have a better idea of the pricing of their competitors and can self-select accordingly.

The Green Paper does not provide insight as to how a benchmark price might be established initially – due to there being no previous sale history. The international carbon price is not a useful proxy, as the focus of the Direct Action scheme is to generate abatement in Australia, and the cost of abatement in Australia is largely driven by the costs of operating business here, including employment costs, electricity costs and financing costs; none of which are correlated to the international carbon price. If the Australian Government does choose not to disclose the actual benchmark price, it may still be useful information to the market to get a price signal – for example, by releasing an acceptable range and/or disclosing how the initial benchmark price will be established.

KEY POINT #11: *Give the market a top target price, at least for the first auction/procurement*

Form of Contract for Purchase

Although a 'standard contract' approach is attractive, participants may suggest a range of amendments before they are able to participate in an auction.

It is likely that the decision makers for any bidding organisation (risk managers, investment officers, legal teams, financiers) would still likely seek changes in relation to specific projects or a single project to clarify ambiguities or address unforeseen issues.

An open engagement with industry groups on the standard contract terms would be desirable, with some flexibility reserved to amend the contract for a specific auction, where the amendments would be common to all bidders.

For example, as part of the pre-screening process, bidders could propose necessary amendments to the standard contract. The Government could then review all proposed amendments from across the bidding group and choose whether or not to accept certain amendments for a specific auction. A revised contract, marking up all accepted amendments, would be circulated to all approved participants prior to the auction and would form the basis for the standard contract for that auction.

This would also provide flexibility to amend the contract to incorporate 'lessons learned' during early auctions e.g. around early termination rights or flexibility on delivery.

KEY POINT #12: *The standard form contract for purchase of abatement would benefit from open consultation with industry groups*

KEY POINT #13: *To deal with any unforeseen 'teething' issues, some flexibility should be retained as to the standard form contract for purchase of abatement, at least for the initial round*

Payment in arrears for verified emissions

The proposal that ERF claimants will be paid in arrears rather than in advance creates a number of implementation challenges for project proponents. The potential use of deeming methodologies to mitigate some of these challenges is discussed in Part 5 of this submission - *Crediting Emissions Reductions*.

The conceptual difficulty with payment in arrears to support projects that can only proceed with ERF funding is that in effect, it defeats the ordinary purpose of grant-making:

- From a project proponent's point of view, grant funds are usually deployable as a kind of protected equity – in other words, grants serve the purpose of an equity injection for the purpose of achieving a project
- Instead of securing a project, payment in arrears inserts an element of risk that may be unacceptable to proponents and particularly their financiers (i.e. policy risk, changed market conditions, liability for under-delivery)
- Those who have spare, available capital to fund such a project will be eligible to receive the grant. Outside of energy utilities, the sectors with some of the biggest carbon saving opportunities – SMEs generally, manufacturing, buildings, mining, agribusiness – have just been through several years of tough trading conditions and are unlikely to be in a position to bear costs up front (that is, those who may least need the grant may be the most eligible to receive it); and
- Those who have no access to spare upfront capital will either have to:
 - load up on commercially priced debt to cover the implementation phase and bridge the period between awarding and payment of the grant (if they can find a bank that will lend to them at all, which may be extremely difficult given the CEFC's observance of the financial sector's historical lack of investment experience lending to these types of project, coupled with the risks identified above); or
 - leave an otherwise meritorious project unimplemented for want of capital (i.e. the parties that most need the grants won't get them).

Sectors identified as providing major reductions opportunities may thus not be sufficiently motivated or competitive under the ERF. Property has been identified as a major cost-effective energy efficiency opportunity for abatement. CEFC experience indicates that due to the capital intensive nature of property retrofits and long payback periods, significant incentives are required to shift behaviour. The most recent example is the Green Building Fund.

For these sorts of projects in the property sector to be enabled by the ERF fund (assuming it focuses solely on carbon abatement outcomes and does not recognise wider cost benefits) then an incentive greater than \$90/tCO₂ is likely to be required to compensate for the lack of up front funding. The reality is that a deep retrofit building upgrade would not prove competitive at an abatement auction and the opportunity would remain unimplemented.

Should the CEFC be abolished and there be no means of providing upfront finance to the applicant, the success and cost of the ERF in this regard will be dependent on the confidence of the private sector finance market. This market itself has a number of barriers – for example credit department risk aversion to technology in which a bank has not previously invested, undue focus on short payback periods and the almost non-existence of efficient finance for small projects.

It is unlikely that the ERF in itself will be sufficient to overcome these types of barriers without a complementary financing mechanism such as has been provided to date by the CEFC and its predecessor. That said, structuring the contract in the way proposed (as a forward contract, provided the terms of that contract are financeable) would give a

proponent the best chance of gaining non-grant finance (for example, a private sector loan or equity capital raising) since the ERF incentive is more 'bankable' and hence, will give the ERF more chance of gaining private sector leverage.

Securing Lowest Cost Emissions Reductions – Contract Tenor

According to the Green Paper, standard contracts will be used to guarantee payments for verified emissions reductions. These would have a maximum duration of five years and include options for addressing under-delivery of emissions reductions.

The proposed maximum duration of five years for ERF standard contracts for verified emissions reductions may eliminate many potential project proponents from consideration. Many clean energy and energy efficiency technologies and other project types (including reforestation) have payback periods well in excess of typical corporate funding finance terms (3 to 5 years) or internal capital allocation hurdles which require rates of return commensurate with 3 to 5 year paybacks. Due to these long-term payback periods, such project proponents prefer funding tenors exceeding ten years.

Sectors identified as providing major reduction opportunities may not be sufficiently motivated or competitive under the ERF. For example, the property sector has been identified in the Green Paper as a major cost-effective energy efficiency opportunity for abatement. However, CEFC experience indicates that the opportunity is not located in Premium and A Grade buildings owned by major REITs, but in the B to D buildings. Due to disaggregated ownership, the capital intensive nature of property retrofits and long payback periods, significant incentives are required to shift behaviour by B to D building owners. Further, many proposals received by the CEFC indicate that the provision of longer tenor debt will facilitate the participation of other private lenders and equity investors in the clean energy area.

The CEFC was provided with specially appropriated funds so that it does not have the constraint of requiring matched liabilities. Consequently, the CEFC can currently provide longer-term debt maturities and a more patient approach to the deal that is often required for this sector. For example, the CEFC has been working with building owners and the financial sector to develop longer tenor products such as the NAB/EFM EUA finance. The absence of the availability of these sorts of financial terms from the finance sector prior to their provision in partnership with CEFC/Low Carbon Australia is well documented.

Obtaining Delivery Confidence - Due Diligence

The submission of the Carbon Markets Institute and the Plastics and Chemicals Industries Association referenced in the Green Paper, correctly make the case that due diligence, including on management experience, technical feasibility and commercial feasibility, should be an intrinsic part of the pre-screening process.

To obtain confidence that projected emission reductions will be delivered, the purchaser of those reductions (in this case, the Australian Government or their agent) needs to conduct due diligence on the technical and financial feasibility of the project. Even a basic due diligence assessment goes far beyond the limited 'fit and proper person test' and methodology eligibility assessment that is the only form of pre-screening specifically proposed in the Green Paper.

Due diligence is not mentioned as part of the proposed assessment process. In the absence of a due diligence screening process, the Government may be intending to manage this risk solely via its rights in a 'standard contract' for a project's failure to meet deadlines i.e. a right of termination and/or to receive replacement credits. Unfortunately, even the most watertight contract will not, in itself, adequately protect

against the risk of a large number of awarded 'lowest bid' projects inevitably failing to obtain finance and deliver the expected volumes on time.

From the CEFC's experience, it is crucial to understand the actual prospects of success of projects before awarding contracts to them. Large scale failure will discredit the process and undermine confidence in the scheme. The higher the failure rate of projects, the further away Australia will be from reaching its binding reduction target and making its limited contribution to the mitigating global problem of climate change.

Those who are immersed in a project are not always best placed to make rational, dispassionate assessments as to its likely prospects for success. The CEFC often encounters well-intentioned but naïve and optimistic project developers who invariably underestimate the financial and technical hurdles to deliver a successful abatement project. Some of these projects, with time and patience, can be partnered with organisations with the relevant expertise and worked into a successful financial model, but others are simply a pipe dream.

Without some assessment as to the likely prospect of project success, the ERF may see similar untested developers bid into the auction, who are likely to substantially underestimate their costs and financing prospects, thereby submitting 'cheaper' bids and winning contracts with projects that a simple due diligence could have revealed as destined to fail.

If this type of bidder comes to market in any volume, wiser industry players, knowing the risk of wasting time and money bidding against unrealistic projects, could simply decline to participate. Years down the track, when the contract deadlines are approaching, the government would bear the reputational risk of enforcing make-good provisions or terminating contracts with small firms whose whole business revolves around the contract, and would find itself in the expensive position of having to source further abatement in a shorter timeframe.

Without such pre-screening criteria, Government will not have discretion to screen out infeasible projects, or to decline projects which have other adverse factors that would lead to an ordinary carbon purchaser declining the investment (e.g. series of failed ventures by management, reputational/environmental risk due to externalities).

The Clean Energy Regulator, as a government body, could be reluctant to make subjective assessments due to the risk of sinking time and costs defending administrative law challenges which would not be faced by ordinary private sector carbon purchasers. This risk is clearly not insurmountable, judging by the number of international government and multilateral institution carbon funds. The CEFC and ARENA (both Commonwealth-owned corporations) also each have detailed due diligence processes in place appropriate for Government bodies and procedures for pre-screening and declining projects that could be drawn on by the Clean Energy Regulator.

Alternatively, the Clean Energy Regulator may not be resourced to conduct detailed technical and financial due diligence. In this case, it may prefer to outsource aspects of the due diligence to experts in the field, or to include eligibility criteria that would presuppose such due diligence (e.g. proof of financing, which requires investors to have properly assessed the project).

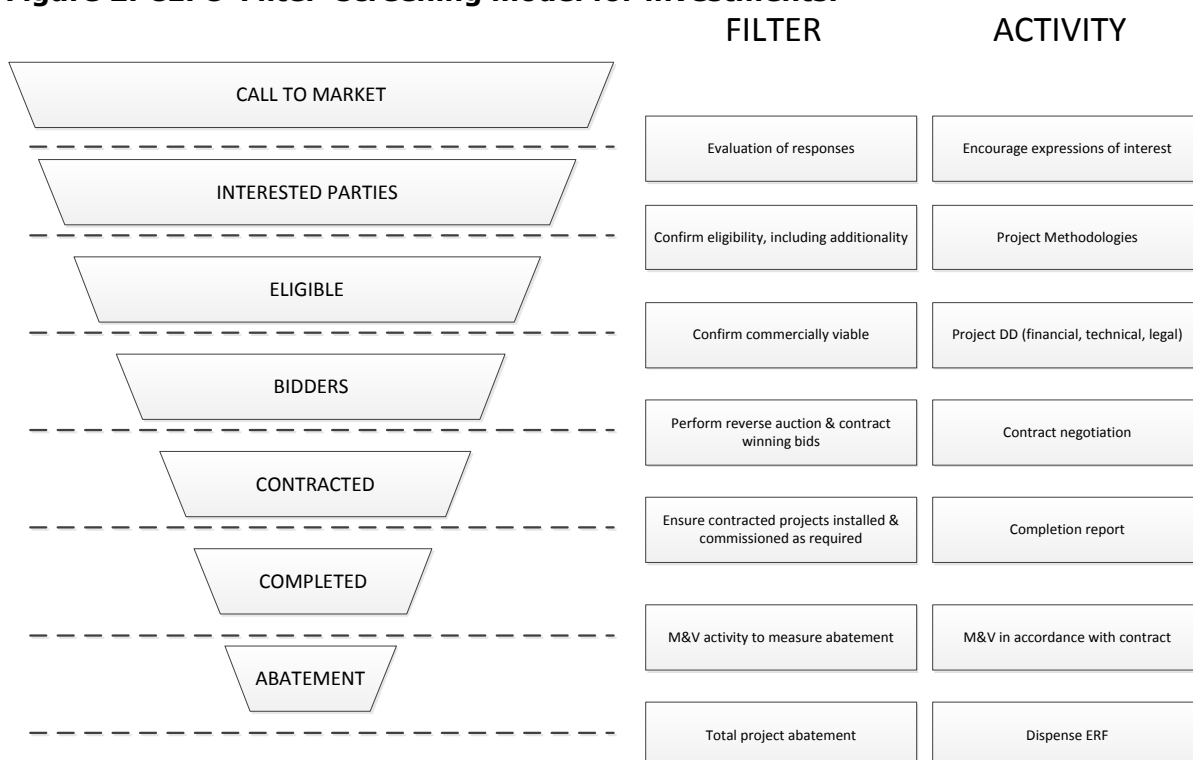
At the end of the day, before entering a contract to commit taxpayer money to a project, the 'efficient and effective' provisions which govern Commonwealth expenditure would seem to warrant that there should be some measure of confidence the abatement will be delivered - this can only be achieved by a due diligence process.

KEY POINT #14: *To protect the ERF scheme’s integrity, the White Paper should specify that a subjective due diligence screening on the project and its proponents be conducted, ideally before participation at auction.*

An effective due diligence approach could be developed using the existing expertise of other carbon funds and government-funded organisations. The diagram below illustrates progressive stages, gateways and activities showing the CEFC’s assessment activities, but these would be common to other organisations providing funding or offtake arrangements.

It is clear that the number of projects that actually deliver abatement is vastly smaller than the number of initial applicants. The risk is amplified in the circumstance where it is possible for a single project or facility to bid for a large volume at the lowest price and clear the entire auction. In this case, the government would contract the full abatement promised at the top level (i.e. the call to market), but zero abatement is actually delivered.

Figure 2: CEFC ‘Filter’ screening model for investments.



To incorporate due diligence in the pre-screening process, the Government could either:

- conduct project or facility due diligence itself (as would any purchasing fund in the global carbon market)
- outsource the due diligence to another entity, or
- require projects to show evidence of binding financing commitments in the amount required to deliver the project, which would have required the debt and equity financiers to have undertaken their own successful due diligence exercise.

A potential governance model to address these issues is in Part 8 of this submission.

Obtaining Delivery Confidence – Addressing Underdelivery

The Australian Government may seek to include clauses requiring sellers to guarantee promised abatement and to replace it with alternative abatement if there is a shortfall.

It is likely that only a small number of participants will be in a position to truly provide this type of guarantee, at least where such guarantee is of any true value for Government. These will be, for example, large and creditworthy corporations with existing credits, or very simple energy efficiency projects that can attract an energy savings guarantee.

A promise from a non-creditworthy institution is not of much value, particularly where that institution's only revenue comes from the Direct Action Fund, and the Government will need to discourage 'nonsense bidding'.

In addition, even creditworthy organisations with projects that have less reliable outputs (e.g. agricultural sector, forestry) should be unwilling to provide a guarantee for risks they cannot really control. If the end result can be this easily predicted, it makes sense to jump to the end point and construct the ERF to deal with the outcome rather than waste time on establishing an ineffective compliance regime that will be unlikely to see a recovery or a prosecution.

To overcome this, participants should be able to bid into two separate auction streams – one where delivery is guaranteed, and one where it is not guaranteed, but the Government has termination rights for unexpected delays. Any deadlines should be realistic and allow for long project lead times.

In addition, the standard contract could provide pricing levers to encourage early delivery and discourage late delivery (e.g. price uplift for early delivery and discount for late).

Of course any onerous contractual requirements will make it more difficult for projects to achieve funding. In particular, where delivery is 'guaranteed', the financial model will need to cope with a downside scenario where not only are revenues lost due to failure to receive ERF funding, but the project also incurs an unknown and unhedgeable future cost of replacing credits.

While there is some liquidity in the international carbon market, the risk of including international credits as a replacement option is that this creates vast optionality for project developers who fail to implement their project as promised and can nonetheless make a windfall by delivering international credit at a cost to them lower than their bid price.

An approach of combining:

- pre-screening due diligence; with
- non-guaranteed delivery contracts with price incentives for early delivery of assumed volumes

would have most chance of successfully delivering contracted abatement.

KEY POINT #15: *To protect the ERF scheme's integrity, the White Paper should specify that there be two separate auction streams – one where delivery is guaranteed and one where it is not guaranteed.*

7. Safeguarding emissions reductions (Part 4 of the Green Paper)

- **The baseline setting should include scope 1 and 2 emissions**
- **The baseline should be based on a rolling average that automatically adjusts with an emissions-per-unit intensity test as a backstop**
- **A multi-year compliance approach is preferable to having no compliance at all**
- **Electricity generation should be included within the scheme**
- **Collected penalties should be recycled into the Emission Reduction Fund.**

Discussion Point: A safeguard mechanism will be introduced to provide incentives to reduce emissions above historical business as usual levels

Views are sought on:

- *the coverage of the mechanism*
- *how baselines could most easily be set to effectively limit increases in historical business as usual emissions*
- *the treatment of new entrants and significant expansions, including definitions of best practice*
- *compliance options in the event that baselines are exceeded*

Coverage

The CEFC agrees with the Australian Government's approach to include scope 1 and scope 2 emissions in a manner as outlined in the Green Paper. Given the CEFC argues for measuring additionality at the facility level earlier above, it would be consistent to establish baseline reporting at the facility level.

KEY POINT #16: *To safeguard emissions reductions, the White Paper should proceed with the Green Paper model on baseline setting; that is, coverage should include both scope 1 and 2 emissions of large emitters, and be established at the facility level.*

Setting baselines

The Green Paper identifies several difficulties in setting baselines. One approach to dealing with such difficulties is to step back and examine the purpose of creating emissions baselines, because this should be determinative of design.

As conceived for the type of purpose elucidated in the Green Paper, a baseline ought to be a measuring point from which a threshold point of 'excessive' emissions can be determined.

It follows that, as time passes, as activities change, and the economy becomes less carbon intensive, baselines ought not to be absolute or rigid, but ought to be responsive to change over time. It is particularly important that a legacy baseline does not continue to punish a business that has taken the early initiative to reduce their emissions.

In other words, the baseline itself needs to be a flexible 'floating' measure that will adjust to changing circumstances and assist in determining the reasonability or otherwise of the emissions.

One approach of setting such a baseline would be to have a two-pronged test:

- **A** would use a rolling three year average to smooth variation in emissions. For further smoothing, in addition, there would be a tolerance factor within which fluctuations or spikes would be ignored – for example, a tolerance of 5%
- **B** would use a per unit 'intensity' measure. This would be useful in examples where production picked up because of economic growth. If the emissions per unit of output rose or fell by a factor of greater than 5%, this could be used to adjust the baseline.

To determine the utility of such a test (or some variant of it) would require modelling of historical NGERs data that is beyond the scope of this submission, but there are a number of in-principle advantages to this approach which are outlined both above and below.

KEY POINT #17: *The White Paper should consider the adoption of a 'rolling baseline' featuring the following elements to assist in automatic adjustment - a rolling three year average, a tolerance threshold, and an approach which tests per-unit emissions intensity.*

Example: Baseline Complexity and Relevance

The complexity of establishing baselines, and the importance of the question to investors, can be illustrated by the example of the Macquarie Generation power stations which (subject to ACCC approval) are expected to be acquired by AGL shortly from the NSW Government. Such a purchase will significantly change AGL's corporate emissions profile. Last year, the Liddell power station operated only at 56% availability – see Macquarie Generation 2012-2013 Annual Report. Presumably:

- Due to depressed demand in the power sector, there may not have been an incentive to get the power station closer to standard availability for a coal-fired power station (i.e. closer to 70-90%), even if this could have occurred by spending some money (which will now be available from AGL).
- AGL's rationale behind the purchase is likely to optimise output of the power station and take advantage of the advantageous coal supply contracts, so it may run the power station in a very different way to the NSW Government, and may run it for longer than had been anticipated.
- AGL would have needed to model a presumed "cost of carbon" in its bid preparation. In light of the current Government initiative to abolish the carbon tax, presumably this modelled power price was relatively low, and potentially even below the historically low European cost of carbon.
- If the (absolute) baseline set for the Macquarie Generation power stations is based on the past few years' historical performance (which included key generators being offline for significant periods of time), and a penalty is ascribed for exceeding that, then AGL will be exposed to a penalty for optimising an asset for which (based on Government policy) no carbon price was assumed.
- However, on the other hand, if AGL runs the power stations at a higher output (and correspondingly higher emissions) than Macquarie Generation would have (under "business-as-usual"), and/or extends the life of the power station beyond the current assumed life span, then this will have a significant effect on national emissions and will bring the Government further away from meeting its target.

The above example shows how even something as simple as a change of ownership can affect the output of a facility, and how baselines can vary from year to year responding to other changes in the market.

Compliance

There seems little point in requiring a regime of measuring and monitoring emissions if there is no penalty for increasing emissions – this would appear to be measuring for the sake of it. Substantial measuring has already been undertaken under NGERs, which provides a useful platform for designing baselines, but it is now time to act. A scheme which adopts a multi-year compliance approach and allows an emissions increase above the baseline, is infinitely preferable to one with no compliance mechanism at all. Indeed, the ‘averaging’ method offered above in ‘setting baselines’ is consistent with such an approach.

KEY POINT #18: *The White Paper should adopt a multi-year compliance approach in preference to having no compliance mechanism at all.*

The CEFC notes the Australian Government’s clear objective not to raise revenue from the ERF, and that it is not anticipating any revenue.

This is a matter of policy choice, but as a general comment, putting in place a penalty regime in the event that baselines are exceeded would substantially increase the liquidity of the market for Australian Carbon Credit Units and would provide a clear incentive to the private sector to assess and fund opportunities to manage their own baseline. Revenues from the penalty should be recycled into the ERF, thereby making the ERF budget stretch much further than currently contemplated. Whilst the overall compliance mechanism should be “revenue neutral”, there should be a financial penalty for facilities that exceed an established baseline, with this penalty recycled into the ERF to enable further auctions under that vehicle.

KEY POINT #19: Whilst the overall compliance mechanism should be “revenue neutral”, there should be a financial penalty for facilities that exceed an established baseline, with this penalty recycled into the Emission Reduction Fund to enable further auctions under that vehicle.

New Investments & Radically Changed Operations

The Green Paper has correctly identified many of the issues with emissions baselining as it pertains to new or changed operations.

Given a compliance regime based on averaging, one method of dealing with new operations could be to ignore the first year and commence a baseline rolling average of years two and three, with the 5% tolerance threshold and per-unit emissions intensity serving to deal with business growth.

The CEFC submits that the two-prong rolling average and intensity approach identified should provide a cushion for operations which substantially increase production as a result of re-tooling – but again, this will not be sufficient where the business radically changes. For example, when motor vehicle manufacturers withdraw their production lines from this economy, they may still be in business with a smaller local import and distribution arm.

What is required in this type of instance is an application to ‘reset’ the baseline which would require a subjective judgement of officials based on evidence from the applicant. This would need to be a relatively ‘high bar’ test, but it should be subjective so as to allow officials to take into account all of the circumstances.

KEY POINT #20: *The White Paper should include an option to reset the baseline by application, with the Department to develop criteria for a high bar test that still allows all of the relevant circumstances to be taken into account.*

Electricity Generation

The Electricity sector is the largest source of emissions, and it is rational to assume that the electricity sector offers some of the best opportunities for Australia to meet its 2020 emissions reductions targets.

Under the current policy settings (RET, carbon price, NGERs, EEO, ARENA, CEFC), the Electricity sector is already doing much of the heavy lifting – the recent national greenhouse gas accounts show that the sector contributed a 5.5% reduction in greenhouse gas output in a single year.⁷

If the Australian Government wishes to continue realising opportunities in the electricity generation sector then it stands to reason that the sector with the largest opportunity for gains ought to be included in the scheme – particularly if a rolling baseline approach outlined above is adopted.

KEY POINT #21: *Because it is the sector with the most opportunity, the White Paper should include the Electricity generation sector in the baseline scheme.*

⁷ Australian Government (2014) *Australian National Greenhouse Accounts: Quarterly Update of Australia's National Greenhouse Gas Inventory – September 2013*. Canberra: Department of the Environment at p3.

8. Administration (Part 6 of the Green Paper)

- **To ensure integrity in the process, there should be clarity about how conflicts of interest and misuse of information will be dealt with**
- **Should the Australian Government and the Parliament elect not to abolish the CEFC, the Corporation would be pleased to assist the ERF**

Discussion Point: The Emissions Reduction Fund will be administered by the Clean Energy Regulator.

Views are sought on the proposed governance arrangements.

The Government will conduct a review of the Emissions Reduction Fund towards the end of 2015 to provide certainty about the policy and design post-2020.

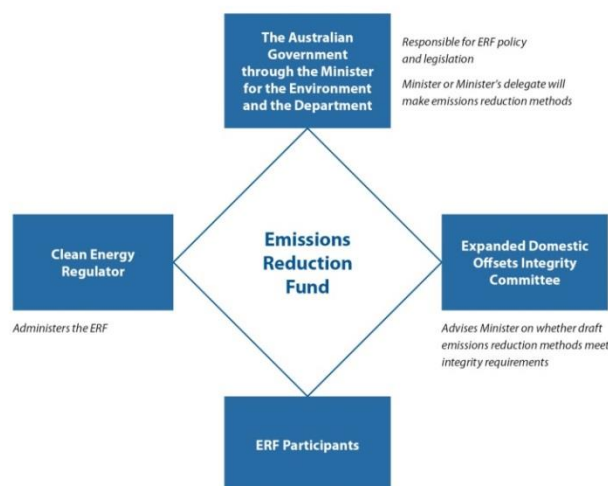
Governance Arrangements of the ERF

The CEFC agrees with the general sentiment of the Australian Government as stipulated in the Green Paper on page 47 where it is stated that:

Stable and effective administration of the Emissions Reduction Fund will provide certainty for participants and facilitate long-term investment in emissions reductions projects⁸

The CEFC believes it is imperative that the proposed governance arrangements for the scheme are clear and concise, streamlined where appropriate, and not burdened by unnecessary red tape. Notwithstanding this, there are important matters to be factored into these arrangements which may require revision from those proposed in the Green Paper and depicted at Figure 3.

Figure 3: Green Paper Proposed Governance Arrangements⁹



⁸ Department of Environment (2013) Emissions Reduction Fund Green Paper, page 47

⁹ Department of Environment (2013) Emissions Reduction Fund Green Paper, page 49

The governance arrangements as proposed in the Green Paper, while representing a relatively clear and concise basic breakdown of responsibilities between:

- the Australian Government handling all policy and administrative matters directly
- the Domestic Offsets Integrity Committee providing advice on integrity requirements, and
- the Clean Energy Regulator administering the bulk of the functions under the scheme,

may nevertheless fail to adequately address a range of possible conflicts of interest. This is particularly relevant where the Clean Energy Regulator has been delegated such a wide-ranging role under the proposed arrangements.

The Green Paper specifies the role of the Clean Energy Regulator to perform the following functions:

- approving projects
- registering and administering auctions
- contracting
- managing reporting and verification processes
- issuing Australian Carbon Credit Units for certified emissions reductions
- making payments on delivery of emissions reductions.¹⁰

Administration under the ERF mechanism will entail a number of distinct functions and elements:

- Standards setting for technological standards and methodologies ('standards-setter')
- Pre-screening eligibility standards and the auction rules ('rules-setter')
- Conduct of the auction/tender/market process ('auctioneer')
- An eligibility screen will ensure only participants with projects consistent with an approved methodology can participate, in accordance with the technical guidance provided by the rules-setter ('technical eligibility screener')
- Feasibility assessment/due diligence role on project prior to contract, taking into account issues such as credit risk, technology risk, implementation risk, ability to attract a debt/equity financing package, performance risk etc. ('assessing/due diligence')
- To maximise the number of viable projects, particularly aggregation structures, would be facilitated through an enabling/advisory/assisting function (for example – helping proponents restructure their proposals to make them technologically and financially viable and thus fundable by the ERF) ('offer enabler').
- Negotiation and contracting ('purchasing agent')
- Treasury/payment ('payer')
- Monitoring and verification (accrediting external monitoring and verification consultants) ('integrity supervisor role').¹¹

From a governance point of view, it is also critical to deal with potential conflicts of interest.

Under the proposed governance arrangements specified by the Green Paper, the Clean Energy Regulator is deemed to be undertaking most of these roles (given it is the auctioneer and it would be required to undertake assessment and due diligence

¹⁰ Department of Environment (2013) *Emissions Reduction Fund Green Paper*, page 47

¹¹ CEFC (2013) *Submission by the Clean Energy Finance Corporation to the Australian Government's 'Emissions Reduction Fund Terms of Reference'*

processes as part of its approvals function). Reconciling these potential conflicts is not impossible, but protecting against 'misuse-of-information' type offences will be essential. While the offence provisions of the Public Governance and Accountability Act could be pointed to, the existence of offence provisions do not alone prevent offences. The ERF is essentially creating a new market in which any bidder with access to price sensitive information will be at a distinct advantage to the rest of the market. Consideration should be given to establishing the usual commercial methods (e.g. Chinese walls etc.) to prevent 'leakage' of price sensitive information.

KEY POINT #22: *To secure the integrity of the ERF operations, the White Paper should include some consideration of what measures will be undertaken to handle conflicts of interest and misuse of information.*

Role the CEFC could play

There are several ways in which the Australian Government could make use of the experience and assets of the CEFC, and should the Parliament elect not to abolish the CEFC, the Corporation could still play a useful and complementary role in relation to the ERF.

This was expressed in some submissions to the consultation process on the ERF Terms of Reference. The Institute of Chartered Accountants Australia noted a complementary policy measure under ERF should be to:

Retain the Clean Energy Finance Corporation as a key institution leveraging private investment and co-funding on a commercial basis as part of a consortium of financiers to clean energy and energy efficiency projects¹²

Further, the Carbon Market Institute expressed the view that:

...to manage the ERF it would be important to select a fund manager with the appropriate experience in managing investment risks and preferably with private sector experience. One option to leverage the existing capability and skills built up in investing in energy efficiency, low carbon technology and clean energy is to draw from the expertise in the Clean Energy Finance Corporation/Low Carbon Australia.¹³

Building on the proposed administrative structure put forward in the Green Paper, one way the CEFC could assist would be that its due diligence, additionality assessments and eligibility assessments could be mutually recognised by the Clean Energy Regulator, in some formal arrangement which meant that applicants for both CEFC finance and an ERF payment would not need to 'double up' on paperwork.

Another method could be in actively assisting finance applicants to access ERF payments, using its convening power to aggregate small bids for 'chunks' of ERF payments – thus reducing red tape and administrative costs. The CEFC has explained how it could play this aggregating role in section 5 of this submission above.

These roles could be formalised to support the governance structure (based on the original in the Green Paper) per the diagram overleaf:

¹² Institute of Chartered Accountants Australia (2013) *Submission to the Australian Government's 'Emissions Reduction Fund Terms of Reference'* page 6

¹³ Carbon Market Institute (2013) *Submission to the Australian Government's 'Emissions Reduction Fund Terms of Reference'* page 17

