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Chair
CEFC Expert Review
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8th December, 2011

Dear Chair,

Thank you for your invitation to make a submission to the Clean Energy Finance Corporation ("**CEFC**") Expert Review.

The Investor Group on Climate Change ("**IGCC**") represents Australian institutional investors (including superannuation funds and investment managers who participate in a broad range of investment strategies[1], with funds under management of around $700 billion, and other key participants in the investment community. We are managers of retirement savings and investments and are concerned with the long-term impacts of climate change on the stability of the economy. We invest in all sectors of the economy, emissions-intensive and low-emission alike, and are part owners of many Australian companies.

IGCC believes that an independent financing institution is a key complementary measure alongside a carbon price to stimulate the transition to a low carbon economy. The CEFC has a critical role to play in deploying public sector capital to encourage private sector investment in areas where private sector capital is needed to fund the transition to a low carbon economy.

IGCC believes that a clear investment mandate and boundaries for the operation of the CEFC are critical for building investor confidence in the transparency, certainty and longevity of the low carbon financing framework in Australia. IGCC is pleased to contribute to the development of the investment mandate and operation of the CEFC.

Introduction

The recently published International Energy Agency (IEA) World Energy Outlook 2011[2] provides a sobering reminder of the challenges faced in making this transition to a low carbon economy as well as providing a context to the environment in which CEFC will be investing.

- Global subsidies for fossil fuel consumption in 2010 were $409bn and forecast to rise to $660bn by 2020 without reform. This compares with renewable energy subsidies of $66bn in 2010.

[1] Including listed equities, debt/fixed interest, infrastructure, private equity, venture capital and property.
[2] IEA World Energy Outlook, 2011 www.worldenergyoutlook.org

- 80% of total energy related CO2 emissions permissible by 2035 in the 450ppm scenario are locked in by 2017 without stringent new action by Governments.

- Every $1 of investment in low carbon transition between 2011 and 2020 avoids an additional $4.3 in required expenditure between 2021 and 2035 to compensate for the increased emissions.

- Much more needs to be done in the area of energy efficiency stimulated by tighter standards across all sectors.

The challenges of transitioning to a low carbon economy require an unprecedented level of capital investment far beyond public sector capabilities. Traditional private sector sources of capital have been the balance sheets of energy utilities or capital sourced from independent project developers and supported by local commercial banks. However the capital requirements for renewable projects to 2030 will be in excess of $100bn in Australia and will certainly require institutional investor support. CSIRO has forecast that, based upon a 5% emissions reduction trajectory, renewable power generation would need to account for 37% of total generation by 2030 (i.e. an additional 80TWh of renewable power generation beyond 2020).

Compounding this challenge are the current sovereign debt issues and the Basel III capital adequacy constraints on banks, which are leading to reduced ability to provide large volumes of debt capital and shorter duration lending.

In this context we welcome the establishment of the CEFC to give impetus to renewable energy and clean technology investing in Australia.

Summary of points in this submission

IGCC's submission focuses on the following points:

- The core purpose of the CEFC being to leverage private sector investment into clean/renewable energy technology, businesses and products. To do this it should make good projects better investment propositions by improving the risk / return equation for those projects (*See Question 1*);

- A structure that allows for direct investments as well as partnerships with asset managers via pooled or project specific fund vehicles (*Question 1*);

- Principles for investing that aim to reduce the cost of domestic emissions abatement; target domestic energy generation capacity; and where there is a high likelihood of reducing deployment costs, supporting investment in a portfolio of energy technologies (*Question 2*);

- The opportunity for CEFC to be a repository of market data and transaction information which can be used to help advise government on policy or regulatory gaps or overlaps – particularly Federal and State issues, and help to build confidence of investors through collaboration (*Question 3*);

- Recommendations for addressing a range of existing, known barriers to debt and equity investment in clean energy investments, including internal barriers faced by superannuation funds (*Questions 5, 6 and 7*);

- Product opportunities for investments across the capital structure (*Appendix*); and,

- Eight finance gap examples and suggested financing solutions to address them (*Appendix*).

In addition to the detail provided in this submission, individual IGCC members are happy to provide information on internal investment parameters and expectations on request, on a confidential basis.

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

The IGCC believes that the core objective of the CEFC should be to leverage private sector investment into clean/renewable energy technology, businesses and products (referred to in this submission as "**Clean Investments**") in a way that stimulates the transition to a low carbon economy. The CEFC's investments should provide capital in an amount and form, which secures substantial accompanying private sector investment by creating an appropriate risk/return outcome for each investment opportunity.

The IGCC believes that the CEFC should be seeking to fill financing gaps by leveraging further private sector capital into projects that are currently feasible but face financing constraints. The CEFC should not be attempting to address deficiencies in the economics of projects that are currently uneconomic. Any exceptions to this approach should have clearly identified benefits, which may include for example, a demonstration effect for projects that leads to more cost effective and economically viable projects in future.

(a) Identifying investment opportunities and allocating capital to investments

The IGCC believes that the CEFC will need to undertake an assessment of possible financing gaps in order to prioritise future investment opportunities (See Appendix A2 for initial suggestions from IGCC). An assessment of financing gaps will prepare the CEFC to efficiently screen investment opportunities and respond in a timely way to investment proposals. The implication of not developing a framework or matrix of

financing gaps will be the significant cost involved in assessing perhaps hundreds of investment proposals, each on their own merits. The assessment process should:

- identify a range of financing gaps (from an investment perspective) relating to investments in relevant markets;
- identify target amount of private sector capital required to address these financing gaps;
- assess the amount of CEFC capital support required to address the identified financing gaps, including the appropriate form of this capital, minimum /maximum investment periods, ability to recycle capital from shorter investments and target returns for the CEFC on its investments;
- develop appropriate investment structure/product in conjunction with private sector investors; and
- plan to implement the financing solutions using either or both a 'direct investment' and a 'partnership' approach (described further below).

The CEFC should have the capability to take a "**direct**" and/or a "**partnership**" approach to deploying capital to investment opportunities. Each is described below:

- A "direct" approach would require the CEFC to have internal resources with the skill, expertise and time to undertake each of the steps outlined above. A direct approach is most appropriate for large-scale energy efficiency projects undertaken by emitting entities or large scale renewable energy development projects with project developers. Determining a minimum project size guideline would help the CEFC to achieve some efficiency in assessing projects, deploying its capital and securing accompanying private sector capital.
- A "partnership" approach would see the CEFC review and consider opportunities presented by market participants with direct experience and insight into financing gaps. Under this approach, the work of identifying projects to fill identified financing gaps is effectively "outsourced" to market participants. Three alternative approaches exist for the partnership approach and IGCC considers that all will be necessary for CEFC:
    - The first is an externally managed fund approach in which allocations are made to third party funds managers to invest according to the manager's stated investment strategy.[3] The manager will also be

[3] These funds are likely to be established as "blind pools", where investors commit to the manager's strategy prior to the manager making any investments, and investors have to rely on the manager to execute investments consistent with it stated strategy. Many closed-end (i.e. fixed term) private equity-style funds have this characteristic.

required to raise an agreed level of private sector capital for its fund, which creates the "leverage" objective of CEFC capital;

- The second is an allocation to investment managers to aggregate investment opportunities and create a 'seeded' fund of smaller renewable asset(s) into which further third party capital is invested.

- The third is a 'tailored' allocation to investment managers to invest in a specific renewable energy or clean technology project(s) within the priority areas of the CEFC.

The proportion of funds deployed using a 'direct' and 'partnership' approach should be determined by the CEFC.

IGCC does not recommend targeting only a small number of specific investment opportunities in the manner that the UK Green Investment Bank has attempted to do, as this would limit the range of possible investment opportunities that might be raised by the market.

In Question 3 further comments are provided on partnerships between the CEFC and other organisations.

(b) Areas of focus

Different projects will have different types of investment characteristics – e.g. the characteristics of renewable power projects (attractive to infrastructure investors) would differ from the characteristics of a new energy efficiency technology (attractive to private equity investors). The CEFC will have to utilise different financing structures to facilitate investment in these different opportunities, recognising the different characteristics of these opportunities and the requirements of private sector investors in these areas.

The Terms of Reference for the Expert Review Panel identifies two categories of investment[4]. The IGCC's view of examples and characteristics of potential investments in each category is summarised in the table below and described in more detail in the following sections. IGCC has identified these categories in order to clarify which approach to deploying capital should be favoured in each case.

[4] Treasurer & Climate Change Minister Joint Media Release dated 12 October 2011, Appendix A Section 2.2

TOR Category	Examples	Characteristics
Renewable energy & enabling technologies	• Renewable power development projects (wind, solar, geothermal etc) • Transmission, grid connections	• Capital intensive infrastructure projects • Construction and operating risks to be managed • Project financing may be available
Energy efficiency and low emissions technology	• Building retrofits, including on-site power generation • Improving efficiency in transport, manufacturing sectors etc • Smart grid • Alternative fuel sources • Energy storage	• Commercial deployment of technologies proven at concept stage • Growth equity focus • Debt financing more difficult • Companies operate in a more competitive market environment

(i) Renewable energy and enabling technology

IGCC understands this category could include:

- renewable electricity generation plants (e.g. expansion of operating plants or conversion to “cleaner” fuel sources);
- large and small scale renewable energy developments (greenfield projects);
- hybrid renewable and fossil fuel generation developments; and,
- grid augmentation, such as smart grid (for load management), grid transmission and interconnectors.

For operating assets, characteristics that would be attractive to private sector capital are:

- debt financing in place;
- offtake arrangements in place for an acceptable term, which provide for a relatively stable price for and volume of output (this could take the form of a PPA, a clearly defined energy hedging strategy or a regulated tariff in the context of transmission infrastructure); and
- a good management team and suitable operations and maintenance counterparties in place to manage the asset effectively.

For development projects, characteristics that would be attractive to private sector capital include projects that have:

- secured (or close to securing) all necessary permits, approvals and land access requirements (e.g. leases or easements);
- negotiated appropriate commercial contracts with a builder (EPC contract), key customers and a provider of operations & maintenance services (if not being provided by the developer on an ongoing basis); and
- secured appropriate grid connections.

IGCC recognises that not all of these project characteristics are readily available. It is likely that private sector investors, if co-investing with CEFC through a seeded fund, would be satisfied to invest where there is a suitably experienced project developer or investment manager who has:

- secured (or is close to securing) all necessary permits, approvals and land access requirements (e.g. leases or easements);
- is a co-investor in the project; and,
- the project meets CEFC investment priorities identified under 1(a).

Deploying finance for development projects should follow the 'direct' approach if they are above a certain size or partnership approach if below such threshold size.

(ii) Energy efficiency and low-emissions technologies

IGCC understands this category to include: building efficiency (both new and retrofits), which may include on-site electricity generation; transport, manufacturing and industrial processes; energy storage, smart grid (for efficiency); biofuels; bio-sequestration, and others.

We believe that the CEFC should focus on attracting private sector financing to fund the commercial deployment of technologies proven at concept stage. As a result, the characteristics present in the opportunities to be financed include:

- technology proven at a concept stage;
- appropriate intellectual property arrangements in place to protect technology;
- clear and coherent business plan, setting out target market, revenue strategy, potential competitive threats; and
- a suitably experienced and qualified management team to execute strategy.

Deploying finance for these projects would best follow the external pooled fund, partnership approach, through pooled funds or a tailored mandate with an external manager. This is primarily because the financial scale of most investment opportunities is likely to be smaller and have a high relative transaction cost. Aggregation of investment opportunities by partners into pooled funds is likely to provide the best opportunity to reduce transaction costs for CEFC.

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

There are several principles that go to the social dividend of the organisation that CEFC should consider in the prioritisation of investments:

a. Assistance in lowering the cost of domestic emissions abatement by lowering the cost of capital for Clean Investments in Australia;

b. Achieving an appropriate or efficient scale of renewable energy deployment in Australia - this could be measured in terms of level of CEFC investment per MWh of installed capacity;

c. Bringing forward the commercial deployment in Australia of a range of clean energy projects and technologies (whether developed locally or internationally), with a view to establishing a portfolio of Clean Investments to stimulate the transition to a low-carbon economy in Australia.

The consequence of (a) above is that cost competitive and mature technologies are those that should be prioritised for investment from the CEFC. This would include least cost renewable technologies such as wind projects and would extend to technologies that are marginal from a cost competitiveness perspective (e.g. solar thermal), where substantial sub-commercial co-investment by governments has been necessary to improve project economics for private sector investors. It would not extend to financing projects for which unattractive project economics cannot be addressed by risk-reducing capital. IGCC is not in a position to comment explicitly on other technologies, but notes perceptions of technology and construction risk in areas such as geothermal energy and wave energy are high in the investment community.

The second principle, (b), would allow the prioritisation of financing opportunities after cost implications (a) were considered.

Principle (c) may conflict with principles (a) and (b), where achieving a portfolio of renewable energy generation assets calls for investment in higher cost technologies. In this case, the CEFC would need to provide finance on terms that sufficiently reduced investment risks for private investors, or ‘topped up’ revenue for projects that would otherwise not be economic.

Another way to view principle (c) is in terms of the public good argument for funding demonstration projects. There is a case to be made for funding demonstration projects, if it can be shown that such projects will help provide experience than can reduce the cost or risk of future deployments at scale. There are challenges with assessing the demonstration value, especially if the technology has already been

demonstrated offshore. The extent of public good achieved by demonstrating the technology again in Australian conditions will depend on the technology in question.

It is more difficult to see merit in principle (c) if there is little likelihood that the cost of future deployments of certain technologies can be reduced. Failure to reduce the cost of certain technologies would mean that they would be unlikely to be deployed at scale once the private market was left to make investment decisions without co-investment from the CEFC.

Achieving emissions reductions

IGCC considers that all things being equal, CEFC may differentiate between investment opportunities based on the level of emissions abatement that may be achieved per dollar invested. We have not included this as a core principle as it will further constrain the ability of the CEFC to make investments. Constraints would already exist as a result of the principles of lowering the cost of abatement and achieving a set target of energy production, as per above,.

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

We believe it will be necessary for CEFC to utilise commercial partnerships or relationships with other market participants to deliver its objectives. The CEFC could benefit from the specialist skills and resources available within these organisations in identifying and analysing financing gaps, analysing the level of private sector capital required and in implementing the investment strategy.

Consistent with our comments in response to Question 1 (see section 1(a) above), we believe it is appropriate for the CEFC to develop an internal team with specific capabilities to deliver agreed objectives. It should also develop an ability to work alongside external parties as and when appropriate to achieve these objectives. Both approaches will require the establishment of a CEFC investment committee, which we suggest is comprised of CEFC management and/or Board members, with a minority of independent members if it is considered that specific external expertise is required for the CEFC to make effective investment decisions.

In our view, the utilisation of external organisations and resources by the CEFC will depend on a number of factors, including:

- The level or internal resourcing within the CEFC and the skill and expertise of CEFC staff relative to the objective to be achieved. In many respects, this is a question of relative cost and efficiency – can an objective be achieved more efficiently and cost-effectively through internal resources or through use of an external partner? In certain areas (e.g. technology-driven growth equity investments), the CEFC may be unable to attract suitably qualified personnel at an appropriate cost, so establishing a relationship with an external manager

of capital (and tapping into the skill and experience of the manager's investment team) could be a more efficient way to access the relevant expertise and achieve a certain investment objective;

(Regardless of the level of investment expertise that is retained inside the CEFC, the organisation has a role as to be a repository of market data and transaction information which can be used to help advise government on policy or regulatory gaps or overlaps – particularly Federal and State issues, and help to build confidence of investors through collaboration)

- The availability of suitably qualified external resources at a reasonable cost (perhaps measured through the "net return" to the CEFC) and with a demonstrated track record in delivering the objectives sought;

- The best way to stimulate private sector investment of sufficient scale to address an identified financing gap. It may be that a partnership between the CEFC and an external fund manager (e.g. through the establishment of a pooled investment vehicle) could leverage a greater amount of private sector (particularly superannuation fund) capital than co-investments in individual projects or companies;

- The level of influence or control the CEFC wishes to exert over the investment strategy being pursued. Outsourcing to external parties or partnerships with external organisations may reduce the level of control that the CEFC has over the strategy being pursued, so the CEFC should determine the level of control, oversight or influence it wishes to have in execution of an investment strategy and consider whether this is best achieved through internal execution or whether an appropriate arrangement can be negotiated with external partners.

In relation to the use of external fund managers as partners, such managers will need to demonstrate a thorough understanding of the clean energy sector as, in our view, the clean energy sector presents unique challenges from an investment perspective. The manager must also have a proven track record of successful investment of its own and/or third party capital. Furthermore, the use of external investment managers is likely to mean that the CEFC has less direct control over the implementation of an investment strategy. This could be mitigated through a seat for the on the investment committee of the external manager and other corporate governance rights.

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

As noted above, the IGCC believes that the core objective of the CEFC should be to leverage private sector investment into Clean Investments in a way that stimulates the transition to a low carbon economy. The CEFC's investments should provide capital in an amount and form, which secures substantial accompanying private

sector investment by creating an appropriate risk/return outcome for each investment opportunity.

Therefore, we believe that the best way for the CEFC to catalyse the flow of funds from financial institutions is to use its capital to address the risk/return imbalance that many financial institutions believe exist, both on an absolute basis and relative to other investment opportunities available to them.

One clear way to address the risk/return equation in the context of Clean Investments is to overcome the external barriers to finance that may exist for certain projects or investments. Based on the experience of IGCC members, we believe there are a number of financing constraints that inhibit private sector participation in Clean Investments. Examples of these constraints, along with possible CEFC financing solutions, are set out in the table under the heading "A 2. Investment Mandate" below.

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

IGCC members have experienced constraints in lending (securing debt financing) to the clean energy sector. In particular some of the lending constraints emerging now are:

- Basel III capital adequacy requirements will increasingly restrict Australian commercial banks' lending to the clean energy sector. Basel III may result in the Australian commercial banks reducing the tenor of facilities and increasing interest margins. This in turn will place greater refinance risks on equity investors.
- Due to the lingering impacts of the GFC, 'cost of funds' pass through clauses are becoming common in addition to market disruption clauses.
- Capacity constraints will be heightened given the withdrawal of many foreign banks from the Australian market.
- The commercial banks may face 'look through' or aggregation exposure to some PPA counterparties.
- Generally there is a lack of demand within the commercial banks for clean energy projects that have resource risks (e.g. wind) or have technology risks (e.g. concentrated solar).
- Scale can be a constraint where many projects are too small to fund and many renewable projects are too large.

The IGCC believes that CEFC can work with third party investment managers and superannuation funds to develop debt products that can provide longer dated debt or CPI linked annuity type products secured against PPAs and co invest alongside commercial banks.

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

Based on the experience of IGCC members, the following non-financial barriers have constrained the availability of debt and equity financing for clean energy projects:

- regulatory / policy risks and uncertainty has dissuaded many institutional inventors from actively assessing opportunities in clean energy;
- imperfect information, based on short track record of investment performance in the clean energy sector;
- technology risks;
- grid constraints and challenges associated with deploying new transmission lines, particularly across state borders and to remote areas;
- a lack of availability of long term Power Purchase Agreements which reflect the duration of an asset's useful life and the potential for long-term financing (more appropriate matching of tenors is critical for encouraging renewable energy infrastructure projects given the high up-front capital costs and long useful lives (e.g. 25 years) relative to length of revenue certainty (which may be as little as 5-10 years) which may not be sufficient to attract debt or equity capital at a suitable cost);
- capital intensity and payback period both present challenges: it takes far more capital to pay for relatively larger demonstration projects and the time to achieve significant revenue. Some technologies (ocean power, for example) are already well demonstrated but will likely take another 10-15 years to achieve commercial maturity which is too long for most fund managers.
- scale is also an issue for private equity investors, which often have difficulty supporting the transaction and management costs of projects smaller than $20-50M. Scale coupled with a lack of a well recognized investment model have been the critical issues in impeding small (commercial) renewable energy and waste to energy projects;
- there is a lack of experience within many investment managers on clean energy and clean technology investment opportunities, which has resulted in short performance track records of managers in the clean energy sector; and
- the potential for new disruptive technologies to undermine investments undertaken based on existing technologies.

Investment considerations for Superannuation Funds

Superannuation funds invest for the long term across all investment categories and are able to adopt a "patient" approach, which is well-suited to seeking stable, long-term asset-based investments. These characteristics have allowed Australian superannuation funds to allocate substantial capital to less liquid investments such as infrastructure, property and private equity. The investment strategies of individual superannuation funds differ, so it is hard to generalise on specific fund perspectives, however the manner in which superannuation funds develop their investment strategies and areas of focus may have an impact on their appetite for Clean Investments. Specific considerations include:

- Investment strategy – The level of outsourcing to external managers versus internal resourcing and a fund's "mandate" for direct investing. The fund's strategy will also dictate the level of expertise of the in-house team in relation to assessing direct investment opportunities. This may limit the extent of flexibility for super funds in the way they assess and allocate to investment opportunities facilitated by the CEFC;

- Investment philosophy and principles – not all super funds accept the traditional investment structures (including manager remuneration and alignment considerations) and illiquidity associated with investing in unlisted asset classes (such as infrastructure, property and private equity);

- Strategic asset allocation ("**SAA**") – Capacity to commit to different strategies (e.g. infrastructure, private equity) relative to target SAA weightings. This may be more relevant in the current environment given volatility in equity markets and the "denominator effect". This is addressed in Diagram 1 below. Superannuation funds seek return benchmarks related to risk expectations from different investments. SAA strategies for most super funds are such that a typical asset allocation mix tends to be clustered towards lower risk investments and not as much on higher risk investments. Additional information on specific objectives of individual superannuation funds can be provided on an in-confidence basis if required;

- Investment portfolio considerations – Looking through manager commitments and direct investments to assess concentration in sectors/sub-sectors (e.g. weighting of individual investment (e.g. Pacific Hydro) or group of investments (e.g. airports)), which impact appetite for further exposures to the sector/sub-sector. Again, alignment with asset allocation strategy is important;

- Risk profile – This may cover a number of elements in the investment context, including:

    - the fund's capacity and desire to accept exposure to greenfield / construction projects, including willingness to absorb bid costs if unsuccessful in competitive bid situations; and

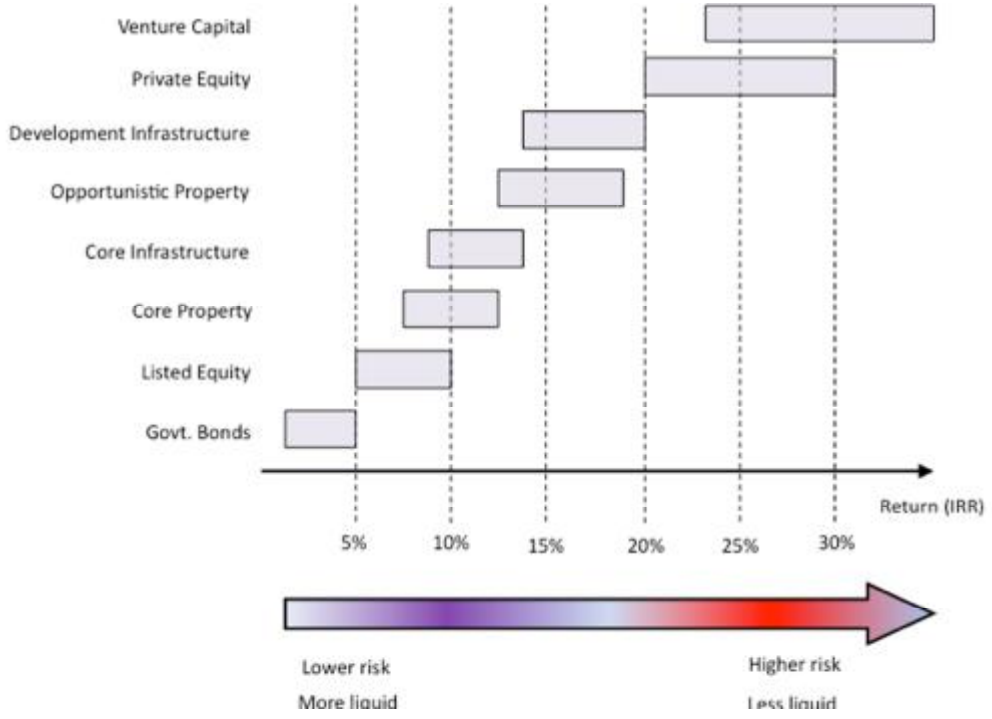
    - cash flow and return characteristics of direct investments (e.g. growth equity investment opportunity with aggressive growth strategy, inability to fund growth through revenue (i.e. negative cash flow and need to borrow to fund growth) and uncertain exit to the public markets);

- Investment opportunities – For funds with a primarily outsourced strategy, identifying managers with the requisite skill, expertise and track record to execute and capitalise on an investment strategy is a potential constraint (as reliance has to be placed on an external manager if the fund does not have the capacity/mandate to invest directly).

In order to attract superannuation funds to invest in low-carbon assets, each of these factors will need to be addressed in some way. The superannuation community welcomes on open and early dialogue on how it may invest alongside the CEFC in appropriate projects, pooled investment structures or tailored investment strategies.

Diagram 1: Return benchmark expectations for Superannuation Funds

SAA strategies for most super funds are such that a typical asset allocation mix tends to be clustered towards lower risk investments (left hand side of the risk/return chart) and less so on higher risk investments (right hand side), which is where a lot of the clean energy assets will fit. Additional information on specific objectives of individual superannuation funds can be provided on an in-confidence basis if required.[5]



it has been

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

IGCC members have current and significant experience in establishing energy efficiency investment funds that co-invest with capital provided by Low Carbon Australia. These funds seek to address certain market failures in energy efficiency being:

- a lack of capital available for energy efficiency investments; and
- spilt incentive constraints, where building owners do not have sufficient incentive to invest in energy efficiency works as such investment is at the owner's cost and this cost may not be recoverable from a tenant under net lease structures, leaving the tenant to benefit from the owner's investment without contributing.

Experience has shown that other market barriers exist such that the provision of capital alone is not sufficient to encourage investment, for example:

- Information gaps – educating the market on energy efficiency opportunities and solutions. Sectoral knowledge and experience is shallow and there is limited understanding of the financial implications of energy efficiency investment.
- Management focus – energy efficiency solutions are often complex requiring an investment in management time.
- Scale – projects may be profitable but are too small support due diligence or other transaction costs.
- No compulsion on consumers to reduce peak power demand nor incentive offered by retailers to abate peak demand.
- Enabling legislation – new legislation has been passed to enable investment in energy efficiency works secured against a statutory charge . This still requires local councils to engage and process these projects, which has proven bureaucratic rather than catalytic.
- Transaction costs can be high if management costs are included

8. How do you see the CEFC fitting with other government initiatives on clean energy? (ARENA, Clean Technology Program, RET, others)

ARENA

We believe the CEFC should be a "later stage" financing vehicle for Clean Investments. It can dovetail well with ARENA's programmes, which tend to be earlier stage and a involve venture capital financing approach or be grant-based. We note that CEFC and ARENA will generally focus on investments with different "characteristics" (e.g. investment objective, size of investment, level of technology risk, operational support/expertise required – see also our response in relation to Question 1(b)(ii) above) and, in this respect, CEFC funding is likely to follow ARENA funding rather than overlap with it.

LRET Scheme

The CEFC should focus primarily on addressing barriers in the financial market, not in the energy market. The RET and the carbon price provide underpinning support for renewable and other clean energy technologies and these prices will adjust over time to reflect the needs of a low carbon economy. CEFC should not as a matter of priority attempt to fix deficiencies in the economics of projects, rather it should be filling a gap in the provision of financing to support relatively sound projects and opportunities. The one exception to this situation is where a portfolio of technologies is supported for the purposes of demonstrating their deployment and reducing their deployment costs.

We believe that it is entirely appropriate for CEFC-funded projects to be eligible for RECs; in fact, the project economics would quickly fall away (as would the interest of private investors) if RECs weren't available. It is difficult to reconcile this view with the concept that CEFC-funded projects can "crowd out" other renewable projects, especially if the market is generally short. If the RET target, on the other hand, looks like it might be met too easily, possibly as a result of the contribution of CEFC-funded projects, then it may be appropriate for the target to be tightened.

Other issues raised in Appendix A

A 1. Implementation plan for the establishment of the CEFC

Given that attracting private capital to Clean Investments is a likely objective of the CEFC, clear communication to the private sector about the implementation plan for the CEFC is necessary.

A 2. Investment mandate

IGCC believes that the specific investment mandate for the CEFC should be developed by the Board and Executive Management of the organisation, once appointed. However, we have developed a set of generic parameters which we believe should guide the CEFC in the development of its investment mandate:

- To ensure investment discipline, the CEFC should deliver appropriate financial returns on its investments (which may be concessional and set at a level that facilitates private sector investment based on an appropriate risk/return objective);

- The level of financial return should be looked at two levels: (i) appropriate return on the government's funding (e.g. CPI + [x]%), and (ii) return for individual investments based on objectives outlined elsewhere in this submission;

- Investments must have "transitional" impacts by supporting the transition to a low carbon economy. We think this is important from the perspective of the purpose of setting up the CEFC and will influence the type of investments that will be undertaken;

- Appropriate exposure limits to technologies, investment stages, sectors, individual projects/companies etc;

- The strategy must be mindful of distortions of the functioning of investment markets and the risk of crowding out private sector investment;

- The strategy must be mindful of existing policies designed to encourage investment into low-carbon / renewable assets, such as the Renewable Energy Target, and seek to minimise any distortions to the proper functioning of those policies;

- A portfolio level target of private sector capital leverage is appropriate to avoid inefficient use of CEFC capital and to distinguish CEFC from government grant programs;

- The strategy should allow for review and revision based upon measurable success.

- An initial time frame should be established, including:
  - The period for committing to new investments;
  - The period for continuing to finance existing investments; and
  - The period during which no funds are deployed but existing investments continue to be managed by the CEFC.

Investment products

The IGCC believes that the CEFC should have a broad mandate to invest through a range of investment options and products, based on the specific objective(s) to be achieved, including asset out below.

(a) Tailored and targeted investment products across the capital structure:
- Equity (ordinary, preferred, first loss)
- Debt (senior, mezzanine, junior)
- Hybrid/structured financings.

(b) Direct investments or investment through pooled vehicles/fund structures.

(c) Risk management/mitigation products:
- Loan guarantees (repayment of principal & interest by borrowers)
- Refinancing guarantees post-construction
- Co underwriting debt syndicates

In addition, CEFC may provide advice to government in relevant policy areas.

The proposed investment products below are yet to be assessed against specific barriers to financing Clean Investments, although we have set out below a number of examples to demonstrate in practical terms how different investment products could address a particular financing issue.

Scenario	Financing Problem	CEFC Solution
1) Renewable power development project with a target 60%/40% debt/equity financing structure	Lenders are only willing to provide debt financing up to 50% and developer unable to finance the shortfall with equity	CEFC could provide a loan guarantee to the project if that would result in lenders increasing the loan amount (more capital efficient). Alternatively, CEFC could provide mezzanine financing to fill this financing gap (less

Scenario	Financing Problem	CEFC Solution
		capital efficient)
2) A renewable energy project developer with a suitable long-term PPA (e.g. 15 years) trying to secure debt financing	Lenders may only be willing to lend for a maximum period of 5-7 years against an asset with a 25 year useful life and a 15 year PPA in place, creating refinancing risk for owners of the project (equity).	In order to reduce the refinancing risk to the owners of a project, the CEFC could provide a component of the project's debt financing requirements for a longer tenor than commercial banks would be willing to lend, or a "refinancing guarantee" (where the CEFC agrees to underwrite a future refinancing of a project).
3) Characteristics of customers/off-takers and limited ability of an independent power producer to negotiate PPAs to underpin investment case for new renewable energy projects	Without a robust, stable and secure revenue profile, an investment project will not be able to attract the equity and debt financing required to develop a new renewable power project.	To mitigate investment risk primarily for lenders, CEFC could offer project-specific loan guarantees or refinancing guarantees to mitigate credit risk. In addition CEFC could offer financiers insurance products that underwrite the power price to cover debt service for senior debt and thereby improve tenor, pricing, LVRs and financial covenants. Equally CEFC can provide insurance products to equity investors that provide a power price floor to equity, either partially or fully.
4) A company has developed a new product to a point where demand for the product exists and growth capital is required.	Debt finance not available as company revenues cannot support debt. The company requires expansion capital for commercial deployment of product at scale and has been unable to raise enough capital for this purpose.	CEFC could participate in equity financing alongside private capital – could take the form of a hybrid security (e.g. convertible note, "junior" preferred shares) or work through a partnership using a pooled funds structure.
5) Overcoming construction risk and cashflow requirements of private funds	Lack of income during construction phase of project, but significant liabilities.	Private fund invests directly in a project. CEFC pays an income stream to the private investor during the construction phase. CEFC claws back the construction phase payments over the operating life of the asset.
6) Small-scale investment projects (e.g. community or remote area renewable power generation projects or energy efficiency projects)	Individual projects may be too small (in terms of amount of equity or debt capital required) to attract institutional investors.	Use an external pooled fund model to appoint external managers who can aggregate a number of small-scale investment opportunities to

Scenario	Financing Problem	CEFC Solution
		create a "portfolio" of exposures that would be attractive to institutional investors investing alongside the CEFC in the manager's fund.
7) Waste to energy plants that are in operation overseas or have been demonstrated at commercial scale but have not been developed previously in Australia	Banks will provide very limited funding, if any because of perceived risk. Projects are often subscale to support diligence and transaction costs. Venture capital investors have no interest because of limited upside.	Tailored relationship with an external manager to aggregate such projects with perhaps a partial loan guarantee to enable bank participation. After 10-20 successful projects CEFC participation should no longer be necessary.
8) Grid investment to support deployment of renewable energy generation assets	AEMO have identified $8bn in interconnector investment (NEM Link) and between $4bn-$9bn in augmentation of the existing shared network which will support an additional investment of $120bn in renewable generation by 2030. Renewable energy projects can't fund large scale transmission or interstate interconnectors.	Bring interested parties (transmission owners/operators, renewable project developers, others potentially interested in haulage) around specific projects as a pooled investment, establish a base load of transport contracts which could underpin the project, and then provide 'first loss' debt funding and possibly some equity to then attract private sector equity and debt. CEFC to work with a project champion, most likely an existing TNSP[6].

A 3. Governance arrangements (Consistent with statutory requirements and the guidance set out in Governance Arrangements for Australian Government Bodies)

IGCC considers that the following Governance arrangements are necessary:

- Strong commercial governance structure, independent from government, with a majority of "independent" directors.

- Board and Executive Management to develop detailed investment strategy and return objectives within broad legislative mandate.

- Board and Executive Management should have a range of skill sets, including:
  - banking and finance, including funds management, project financing and corporate/ structured finance;
  - professional services, such as law, accounting and tax;

[6] Transmission Network Service Provider

- consulting/business strategy experience;
- expertise in venture capital, private equity, lending/credit investments;
- engineering and technical expertise (in renewable technologies); and
- experience with other government funding programs/bodies (e.g, EFIC, LCA).

- A mechanism for reviewing the operations and progress of the CEFC over time should be implemented to assess the required lifespan of the corporation and its performance against strategy objectives. IGCC recommends one or more "review of operations" should be scheduled at various times over the medium term (e.g. every 3 years, or after 5/7/10 years), at which the operation of the CEFC will be reviewed against its original purpose and strategy adjustments undertaken.

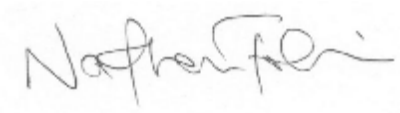
A 4. Interactions with ARENA and Low Carbon Australia

Low Carbon Australia

A key role for CEFC is to play an ongoing role in support of the valuable foundation work of Low Carbon Australia (LCA) in supporting innovative financing mechanisms and solutions. LCA solutions have catalysed further private sector capital in support of energy efficiency and precinct distributed energy projects across the non-residential building sectors, public sector buildings and industrial/manufacturing processes. A number of IGCC members have worked constructively with LCA and believe that the organisation has developed important capacities and experience in the deployment of catalysing finance in Australia.

Assimilation of LCA's existing energy efficiency investment fund and operations with the CEFC-administered program should be considered.

Yours sincerely,



Nathan Fabian
Chief Executive