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H M Ridout
Chief Executive

51 Walker Street North Sydney NSW 2060 PO Box 289 North Sydney NSW 2059 Australia

ABN 76 369 958 788

Tele: +612 9466 5566 Fax: +612 9466 5599 www.aigroup.com.au

Ms Jillian Broadbent AO Chair Clean Energy Finance Corporation Expert Review Panel c/o The Treasury CANBERRA ACT 2600

Dear Ms Broadbent

The Australian Industry Group has long believed that a sound approach to climate policy needs to incorporate more effort on research, development, demonstration and deployment. Innovative low-emissions technologies will be needed if the extremely ambitious long-term emissions targets embodied in the *Clean Energy* Act are to be achieved at acceptable cost.

We are therefore very interested in the potential of the proposed Clean Energy Finance Corporation, as well as the suite of other relevant policies announced as part of the Clean Energy Future package. By supplying capital and reducing risk, CEFC has the potential to accelerate developments that can ultimately lower energy and abatement costs for all.

Success is far from guaranteed, however. As we argue below, CEFC needs clear goalsand broad autonomy, and must adopt a commercial approach if it is to be effective. Establishing a strong pipeline of potential investments will require close engagement with stakeholders from the public, academic and private sector innovation communities.

It is also vital that investment in the many possibilities for industrial energy efficiency is firmly on CEFC's agenda, particularly given the competitiveness challenges posed by troubling economic conditions and rising energy prices.

Industry looks forward to further more detailed consultation and engagement from CEFC as it moves closer to implementation and the Panel is able to provide more detail on its proposed approach. If you have further questions about this submission, please contact our adviser Tennant Reed on 03 9867 0145 or via tennant.reed@aigroup.asn.au.

Yours sincerely,

Heather Ridout Chief Executive

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Ai Group submission to the Clean Energy Finance Corporation Expert Review

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

CEFC has been proposed because Australia's innovation system is seen to be insufficient to meet the challenge of clean energy. Indeed, concern about the difficulty of commercialising innovation in Australia extends well beyond the sphere of low-carbon energy.

There are several underlying problems which are beyond the powers of CEFC to address:

- The Australian market is relatively small much greater profits, efficiencies and learning improvements can be found when supplying larger markets
- Australia's financial community is risk averse when it comes to clean energy investments
- The tax system, regulation and broader culture still do too little to encourage, reward and celebrate innovation and risk-taking.

The experience of public venture capital funds in many countries is that they do not lead to a larger self-sustaining private venture capital sector once government intervention lapses. Such an industry will only be achieved, if at all, by broader economic reform efforts and by closer integration with overseas markets and innovation systems. In the meantime, a sufficiently challenging aim for the CEFC will be to temporarily overcome the barriers to innovation, make decent investments and to leverage greater private capital than would otherwise be available to energy innovation. Success will not be easy.

To be most effective, CEFC needs a broad scope, a strategic framework, a proactive and commercial approach, and full autonomy.

Scope

The potential *scope* of CEFC's investments is already broad to the point of vagueness. The renewable energy stream could encompass:

- construction of first-of-a-kind innovative generation facilities at scale;
- underwriting power purchase agreements for relatively well-established technologies like wind;
- developing transmission infrastructure to unlock renewables resources;
- supplying capital to underpin further development activities, for example in geothermal drilling; financing manufacturing and service facilities to supply the sector; and more.

The general clean energy stream is even less defined, but could at a minimum include

- the deployment of cogeneration and trigeneration;
- development and manufacture of energy efficient products and processes; and
- uptake of energy efficiency opportunities in industry and elsewhere.

Ai Group considers that CEFC should have scope to pursue any and all of these opportunities where they can deliver the central outcome of lowering the costs of a transition towards lower-emissions energy (discussed further below). There is no point in tying CEFC's hands from the outset with excessively prescriptive directions about favoured targets for investment. Indeed, despite the Government's contrary policy decision, the clean energy stream would ideally be able to support carbon capture and storage technologies,

including industrial process CCS. This breadth of scope should extend to means of financing, allowing any variation of loans, loan guarantees and equity that offers agreeable value to CEFC and its clients.

Strategic approach

CEFC also needs to develop and update a *strategic framework* for its investments. This would involve:

- judgments on where potential opportunities lie for Australia;
- the medium- and long-tem potential for cost and emissions reductions from these technologies;
- the scope for CEFC support to appreciably advance commercial deployment; and
- the best niche for CEFC amid the web of other Australian and international innovation efforts.

Such a framework needs to be developed with caution and open eyes. It should be used to lend coherence to CEFC's investment portfolio and give evolving guidance to markets as to where further work may be needed, similar to Infrastructure Australia's approach.

Deal-making

A *commercial orientation* will be very important. This does not simply mean that CEFC should pursue returns – important though financial returns are. Rather, it means that CEFC should proactively pursue outcomes, rather than passively waiting for proposals to be submitted and evaluated through a bureaucratic process.

While CEFC is to provide finance rather than grants, it could easily default to a grants program mindset. This would be wrong: to succeed, CEFC must do deals and generate business in areas of strategic advantage. Developing relationships with financial partners and potential investment clients will be vitally important, and will require a different approach to that frequently taken under public initiatives. The public funds involved are of course highly significant, and appropriate governance standards must be maintained. A businesslike approach is not at all inconsistent with such high standards.

Autonomy

Finally, CEFC needs *autonomy*. Beyond a clear and general investment mandate and appropriate transparency and reporting, government should have no role in the selection or approval of CEFC investments. This principle seems already to be well recognised, but it deserves emphasis: a politicised investment process is unlikely to deliver value to the public, or certainty to commercial partners.

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

CEFC needs a clear, coherent mandate and flexibility in pursuing that mandate. This does not mean an over-simplified mandate; for instance, solely prioritising financial returns to CEFC would imply investment in relatively mature and cheap technologies, with little further innovation or early mover spillovers to be generated.

Managing risk

Financial viability is critically important if CEFC is not to exhaust its capital. However it must be recognised and accepted that innovation is risky and that some investments will fail to make a return. To be effective in commercialising low-carbon innovation, the CEFC should manage this risk across a portfolio of investments, rather than simply attempting to restrict finance to investments with individually low risk. Depending on the preferred mixture of risk and reward, a few big successes can bankroll many risky investments, or a stable of more conservative investments can cover the occasional failure. There is room for both strategies within CEFC's potential portfolio.

A clear purpose: reducing long-term costs

While looking beyond pure financial return, CEFC needs clarity about its purpose. Confusion over purpose has underlain much of the rancour over the Renewable Energy Target and its successive iterations, variously viewed as a policy for emissions reduction, renewable energy deployment, Australian renewables industry development, innovation, household renewables assistance, and more. The same could easily befall CEFC.

The guiding principle for CEFC should be to reduce the costs of Australia's transition towards lower-emissions energy. The main application of this principle is in supporting commercialisation of technologies and businesses which will otherwise be under-invested in due to spillover effects or other limitations or failures in relevant markets.

The Garnaut Update 2011 discussion of innovation provides a useful set of questions to apply, albeit in the context of a proposed matching-grants policy much closer to a conditional entitlement than to a competitive grant or discretionary loan. Garnaut suggests the key questions for eligibility (and, extending them beyond the entitlement context, merit) should be:

- Will the technology contribute to lowering the cost of mitigation?
- Does the project qualify as an early-mover innovation?
- Are there expected spillovers associated with the project?

These represent a sound approach, though as Garnaut recommends, streamlined assessment processes are needed that will not add excessive cost or delay. There are other market failures and limitations, particularly related to energy efficiency, that involve different questions, discussed in more detail below.

Secondary benefits

Adopting long-term cost minimisation as a guiding principle does not mean that co-benefits are irrelevant. Development of Australian industries is a desirable objective, and CEFC should ensure that investment recipients are aware of the opportunities presented by local suppliers – perhaps including other CEFC clients – and of the other forms of assistance available for growing a business, including EFIC.

The direct impact of an investment on emissions will generally not be especially relevant as an additional consideration or focus. The potential for least-cost emissions reduction from catalysing broader rollout of the relevant technology is much more important. Furthermore,

the emissions impacts of the investment itself will generally flow directly into the financial assessment through the mechanism of the carbon price.

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

Partnerships will be crucial if CEFC is to be effective, providing access to expertise, processes and client networks that would be wasteful and time-consuming to duplicate. While CEFC needs to develop a core financial capability and clean energy expertise if it is to make sound judgments, it should also take advantage of existing capabilities wherever possible to leverage greater results. Existing lenders, financial service providers, angel investors and venture capital firms have many avenues for distributing clean energy loans, and pre-existing relationships with business and other stakeholders.

Partnerships for efficiency

CEFC should be able to invest through such partners where they have already developed relationships, procedures and credibility in clean energy investment. In particular, it could make sense to partner with groups like Low Carbon Australia to deliver finance for energy efficiency. Such partnerships obviously need to be developed consultatively, rather than being overly defined or limited *a priori* in the investment mandate and enabling legislation.

Referral agreements

Another form of partnership will be very important: referral agreements with other bodies covering different stages of the innovation process, such as ARENA, or different subjects of innovation, such as Commercialisation Australia. These would see each organisation refer applications or opportunities that are viable but more suitable or relevant to the other party. The innovation system is very much a patchwork; mutual assistance of this sort between different patches can render it a little more seamless.

- 4. How could the CEFC catalyse the flow of funds from financial institutions? While the financial sector is best placed to respond on this issue, anecdotal evidence suggests that in the face of global economic and financial uncertainty there is a strongly diminished appetite for risk among Australian lenders. That is having impacts across the board, but is obviously very significant for potential investments that offer innovation risk and an inability to fully capture spillover benefits particularly at large scales. Thus instruments that reduce risks to more acceptable levels, such as offering loan guarantees or agreeing to take the first tranche of losses on an investment, could well unlock significant sums of private capital. The underlying risks must be reasonable for CEFC to take on in the context of its total portfolio, of course, and risk reduction must not go so far that participants become indifferent to success or failure.
- 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?

In broader industry, the key barrier confronting energy efficiency investments has frequently been access to a limited and highly-contested internal capital budget for which higher-return

or mission-critical projects are also competing. This is discussed further below under energy efficiency.

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

Policy risk and uncertainty has been a serious problem for energy projects of all sorts over many years, but particularly for clean energy. Energy markets are dynamic and unpredictable enough as it is, but capricious policy is even harder for business to deal with. Yet public support for clean energy has been characterised by constant change, with revision, re-badging, re-profiling and cancellation of programs. While CEFC cannot resolve this problem, it needs to establish and maintain a reputation for consistency and reliability in its dealings with business, or it will be short of clients.

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

Energy efficiency is a crucial strategy not just for least-cost emissions reduction, but for managing the costs of low-carbon energy sources. The latter tend to be significantly more expensive than coal-fired electricity. While there is substantial cost-reduction potential the imperative to use energy efficiently will become even greater as the carbon intensity of our energy supply drops.

Efficiency should be firmly on the agenda for the CEFC's general clean energy investment stream. Ai Group is particularly keen to see consideration of options for investing in industrial energy efficiency. Industry uses a great deal of energy to provide the goods that Australia and world markets demand, and finding ways to do so more efficiently is essential to support competitiveness under economic conditions that are very difficult for most trade-exposed industries.

However, efficiency does face serious barriers that differ from those confronting other clean energy approaches. In contrast to current renewables, a wide range of energy-efficient technologies, products and practices are already cost-competitive with existing alternatives. Uptake of these opportunities is instead constrained by fragmentation and lack of access to capital by energy end users.

Fragmented opportunities

Fragmentation is a problem both with technologies and customers. There is a huge and often confusing variety of efficiency options, encompassing:

- cogeneration and heat recovery;
- Insulation:
- heating ventilation and air conditioning;
- compressed air;
- electric motors;
- furnaces;
- appliances that are more efficiently designed or sized;
- production process refinements;
- behaviour change; and much more.

Energy efficiency opportunities vary across industrial sites, commercial buildings and residences, and are often small in absolute terms. These factors lead to relatively high and off-putting transaction costs, particularly in combination with an energy services sector that remains embryonic both in size, level of sophistication and degree of recognition.

Access to capital

Access to capital is a problem partly because many households (and even businesses) are capital-poor. Just as important, however, is that industrial efficiency projects must compete for limited capital budgets with other investments. Even where efficiency projects offer decent returns, paying back their costs in three years or less, they are frequently deferred in favour of investments that offer higher returns or which are critical to the continuation of the business. This is rational behaviour by individual companies, but it foregoes wider benefits from efficiency – including the development of cost-reducing scale and innovation in the supply of efficiency goods and services.

CEFC's role

CEFC can help on both fronts. The finance that CEFC can offer will help considerably with capital constraints, and in the efficiency context such finance does not need much concessionality to make it attractive. Just as important, CEFC (or rather, its partners) can actively seek out efficiency investment opportunities, bringing to bear expertise and economies of scale to lower transaction costs. CEFC should make use of other private and public finance bodies with existing relationships, profile and expertise in industry and energy efficiency. A pipeline of efficiency investments should be able to provide CEFC with reasonably attractive returns while making a strong contribution to lowering costs for further efficiency efforts.

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

Despite periodic efforts at consolidation, the number of government policies, programs and agencies active on or relevant to clean energy development continues to expand. Ai Group has been concerned at this proliferation for some time, as it tends to result in confusion, distortion and duplication. CEFC should be aware of these problems and not exacerbate them. That has several specific implications.

Exploit existing sources of information and clients

Firstly, CEFC must closely coordinate with all relevant bodies. There should be regular communication with the Departments of Resources, Climate Change, Innovation and Environment, the Treasury, and State and Territory equivalents, to keep track of policy developments and strategic directions. The Climate Change Authority, the Climate Change Commission, Infrastructure Australia, the Australian Energy Market Operator and Australian Energy Market Commission are important stakeholders and sources of information and advice.

Even more importantly, bodies like the Australian Renewable Energy Agency, CSIRO, Low Carbon Australia and many others may provide something CEFC cannot function without: a pipeline of investments and technologies that have moved beyond the blue-sky phase and are ready for consideration. Analysis of innovation systems worldwide strongly suggests

that creating a supply of venture capital is not enough if demand for that capital is lacking or the two cannot be connected. Australia has much policy directed at generating early stage innovation, from public sector research to tax incentives for private R&D. The effectiveness of the system continues to be debated; Ai Group has been particularly concerned at an unnecessarily restrictive approach to the new R&D tax incentive. Nevertheless, CEFC needs the closest possible linkages with all the bodies and companies that can supply it with innovation.

Coordination with these bodies should not imply that CEFC is hostage to their conclusions or their timelines for reporting and decision-making. CEFC must retain its independence. But it must also have a clear idea of what other bodies are thinking and doing. This should involve participation in existing interdepartmental, interagency and intergovernmental forums. It should also involve new forums initiated by CEFC. Informal and frequent consultations and communication are also vital.

Keep interactions in mind

Second, armed with the knowledge of other stakeholders' activities, CEFC should keep firmly in mind the total impact of all public assistance on investments that it is considering or has already made. This is important to respond effectively to any gaps in that assistance that will prevent success. It is even more important to help avoid an excess of poorly coordinated assistance that results in distorted markets and unsustainable bubbles, as has been seen in recent years with support for household solar photovoltaic systems. Of course the difference between a bubble and sustainable growth is famously hard to spot, and CEFC is intended to accelerate deployment and build the volumes and experience necessary for new technologies to gain a commercial foothold. Nonetheless, CEFC should be aware of the potential for its investments to raise the costs of other support programs (as the national Small-scale Renewable Energy Scheme and NSW Solar Bonus Scheme boosted each others' costs), and should be ready to make judgements that existing levels of support for particular technologies are adequate.

Be ready to deliver through third parties

Thirdly, CEFC should take advantage of existing capabilities wherever possible without reinventing the wheel. As argued above, CEFC should partner with other bodies to deliver its services. It should also exploit the information and opportunities provided by the many relevant government bodies mentioned above, as well as expertise outside government. partner with groups like Low Carbon Australia to deliver finance for energy efficiency.

Clean Technology Program

One specific interaction with existing policy that is critically important involves the \$1.2 billion Clean Technology Program (CTP) being administered by AusIndustry. Most CTP funding will go towards grants to assist manufacturers improve energy efficiency and otherwise reduce emissions. However grants are expected to cover only 25% of the costs of successful projects. This improves the economics of projects, but still leaves the significant risk that capital constrained manufacturers will be unable to commit the remaining 75% of project finance required. If CEFC finance does not make projects ineligible for CTP funding – likely but not yet clear – then loans at a commercial or only modestly concessional rate would overcome the capital constraints that inhibit many industrial energy efficiency projects.

Strong communication and coordination between CEFC and AusIndustry would be needed to streamline decision-making and reduce transaction costs.

9. Other issues

An additional matter that will need clarification is whether the clawback adjustment under the R&D Tax Incentive will apply to any finance (or the concessional element thereof) provided by CEFC to businesses also claiming the Incentive. If CEFC finance were considered a government recoupment of R&D expenses, the clawback could deny an investment recipient anything up to the whole value of the finance provided.

The R&D clawback nominally applies only to grants, which CEFC will not provide. CEFC finance is conceptually quite different and should not be subject to the clawback. And given the focus of CEFC on late-stage development – commercialisation and deployment – and Ai Group's long-expressed fears that the revised R&D Tax Incentive effectively excludes much development activity, clawback cases may not arise in this context. Nonetheless, early clarification would help convince innovators of the value of seeking CEFC finance.