

CLEAN ENERGY FINANCE CORPORATION

EXPERT REVIEW

REQUEST FOR SUBMISSIONS

RESPONSE FROM AQUAGEN TECHNOLOGIES PTY LTD

Sustainable Ocean Energy Solutions

EcoGen 2011 Award - Most Outstanding Small-Scale Clean Energy Project
Startup Smart 2011 Awards - Best Start-up Product, Top 50 Fastest Growing Startup

Level 2, 7 Mosrael Place

Rowville Victoria Australia 3178

Ph. +61 3 9764 9800

Mob. +61 415 245 538

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Manager

Communications

The Treasury

Langton Crescent Parkes ACT 2600

Email: medialiaison@treasury.gov.au

BACKGROUND

On 10 July 2011 the Australian Government announced that it will establish a \$10 billion commercially oriented Clean Energy Finance Corporation (CEFC) as part of its Clean Energy Future Package. Information on the Clean Energy Future Package is available on the web site: www.cleanenergyfuture.gov.au.

The objective of the CEFC is to overcome capital market barriers that hinder the financing, commercialisation and deployment of renewable energy, energy efficiency and low emissions technologies.

The CEFC will invest in firms and projects utilising these technologies as well as manufacturing businesses that focus on producing the inputs required. It will not invest in carbon capture and storage technologies.

The CEFC is not intended to compete directly with the private sector in the provision of financing to these businesses. The CEFC will act as a catalyst to private investment which is currently not available and thereby contribute to reducing carbon emissions and cleaner energy.

Capital that is returned from investments will be retained for reinvestment by the CEFC, with the Board to determine the timing and quantum of dividends payable to the Australian Renewable Energy Agency.

On 12 October 2011 the Government announced that it had appointed Ms Jillian Broadbent AO, Mr David Paradise and Mr Ian Moore to form an expert review panel to advise on the design of the CEFC. The panel will be chaired by Ms Broadbent.

The expert review panel will consult with stakeholders and report to the Government by mid-March 2012 with recommendations on the:

- implementation plan for the establishment of the CEFC;
- investment mandate and risk management approach of the CEFC; and
- governance arrangements of the CEFC, including the responsibilities, powers and statutory duties of the Board, Chair and Chief Executive Officer.

The recommendations of the CEFC Review will inform the drafting of legislation, which will be introduced into Parliament next year in order to allow the CEFC to commence operations in 2013-14. The scope of the review is at Attachment A.

SUBMISSIONS

To supplement the consultation process, the CEFC review panel is seeking written submissions from stakeholders and their experiences on the key themes for the review:

- the scope for the operations of the CEFC;

- the market gap in financing low emissions technologies;
- how this gap in financing could be overcome; and
- how the CEFC could work with other government and market organisations.

Submissions should focus on the above key themes and be submitted by email to cefc@treasury.gov.au by 5:00 pm AEDT on 8 December 2011. Submissions should be in Word format and must not exceed 5MB. All submissions received will be posted on the CEFC review website. Should you wish your submission to remain confidential, please advise at the time of providing your written submission.

SCOPE OF THE CEFC

The CEFC will not provide grants. It is intended to be commercially oriented and to make a positive return on its investments.

The CEFC will be able to make investments in businesses and projects in the clean energy sector with the objective of facilitating the flow of funds into the commercialisation and deployment of clean energy technologies.

To achieve this objective, the CEFC may need to form partnerships with other organisations on projects and investments.

Questions

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

There are many options but for projects where it is difficult to obtain private capital (eg. emerging renewable companies developing early, pre-commercial pilot plant demonstrations) the project could be fully funded by the CEFC under a long term loan agreement. Under such an agreement, the loan is only paid back (with interest) if and when the technology being commercialised makes a profit at which point there would be a tiered payback approach.

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

- the potential of the renewable energy technology to deliver economic benefits to Australia
- the technical strength of the Project to deliver clearly defined technical outcomes,
- the national and international significance of the technical innovation
- the contribution of the Project to the renewable energy industry generally

- the management capability, expertise and track record of the applicant and any proposed consortium members to implement the proposal
- overall project risk

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

One comment here is that the work of the CSIRO on the development of an Australian Wave Energy Atlas delivered a basic product which now needs to be enhanced. There is also further work to be done in the area of wave characteristic measurements through the deployment of wave-rider buoys at more locations around Australia. Data from such buoys would add to existing buoys deployed by the likes of Sustainability Victoria and be used to feed into and support the CSIRO wave atlas map. Hence, there is an opportunity for the CEFC not only to partner with CSIRO to fund the development of a more rigorous study but also to commit funding to the deployment of further wave-rider buoys at strategic points around our coast. The results of these two inputs would form the basis for wave energy developments around the country. We have one of the best wave resources in the world in Australia so it needs to be fully mapped to ensure its optimal future use.

THE MARKET GAP AND OVERCOMING IT

The CEFC is not intended to compete directly with the private sector in the provision of financing to the clean energy sector; instead, it is intended that the CEFC will act as a catalyst to private investment that is currently not available for clean energy technologies.

Questions

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

In the current uncertain economic climate, it is extremely difficult to obtain capital. Investors who are right at the point of investing are saying that they will not invest until they know what is going to happen in Europe – ie. Is there going to be another GFC? During such times we believe that the usual government approach of expecting matched funding from non-government capital sources does not work. This is currently evidenced in the number of state clean energy grants where the grants are awarded on the basis that the grant proponent must then go out to the market, as per their financial plan included in their application, to find the matched funding within a limited timeframe.

This is particularly so with emerging renewables such as Marine and Geothermal Energy. These technologies are not mature enough to attract the

significant capital required for demonstration and thus cannot meet the matched funding requirements of almost all grant programs available.

However, it is appreciated that part of the reason for having the matched funding rule in place is to reduce the government risk and it is certainly important to minimise the risk of public money on projects. So the question becomes; 'How can risk be minimised in other ways?

One idea is to have a pool of money available under the CEFC for the body to be able to contract external consultants to carry out studies into the viability of the various proponents applying for CEFC funding. In this way, the consultant/s can review the technology and business risk on behalf of the government in order to give the project proposal an overall risk level and thus enable the CEFC to award funding with a reduced risk.

We realise that the CEFC is not a grant body but these points are seen as critical to consider in the formation of the CEFC. Failure to do so may result in the CEFC being unable to deliver significant emerging renewable projects.

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

For us the inhibitor really has been availability of funds in that investors, VC's etc generally say that we are "too early stage". What this really means is that they generally have a mandate to guarantee a return on the investment in under four years or so. This is very difficult to guarantee when developing a new emerging renewable technology as you still need to go through several development stages before you develop a final commercial product from which you can start to make a return on investment. For such investors it is simply easier to just invest in a wind or solar technology or product as there is a far more established market and technology. Even though the potential returns are far less than taking the longer term risk, the investor has a mandate and other things to consider.

As a case in point, in AquaGen, in order to win a Commercialisation Australia grant to build and develop our Lorne pier demonstration unit, we had to take on personal debt to match the funding. This is impossible for the next phase of development where we will need a minimum of AUD\$3million. We are making every effort to raise the required capital to apply for matched funding but are finding that no-one is opening their wallets right now and we know that is happening right across the board.

It is also important to point out an issue with the government funded VC initiatives such as REEF and the like. Some of these VC funds are supposed to be for early stage ventures and yet this is not mandated and is left to the discretion of the VC itself. When the final investment decision is made, if not mandated, the VC is of course going to back a shorter term, lower risk option.

Hence, such government backed VC funds should be mandated to commit at least a proportion of the fund to appropriate earlier stage ventures.

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

The big one here is approvals. These can take many years to get through so even when you do get capital for a project, you may be significantly delayed in starting the project. This is a double edged sword because to get approvals rolling on a site, for a marine energy project you need both marine and land surveys completed and these are very expensive. So you can't seriously start the approval process until you have enough money to pay for it.

There are also barriers in the form of community consultation, intellectual property protection costs etc but these are relatively insignificant in comparison to approvals.

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

No comment.

OTHER ISSUES

The CEFC is part of the Australian Government's Clean Energy Future package, which includes a suite of new programs and measures to tackle climate change and transform Australia's energy sector. These programs and measures include the introduction of a carbon price, the \$3.2 billion Australian Renewable Energy Agency and the \$1.2 billion Clean Technology Program. In addition, the Government has previously established a range of programs and measures to support clean energy, the most significant of which is the 20 per cent Renewable Energy Target.

Question

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

Given the current lack of non-government capital available, for earlier stage development projects, perhaps state and federal government initiatives can link together to provide matched funding. E.g. it is possible to apply for *Emerging Renewables* and then leverage the funding from that to match against say Victoria's *Energy Technology Innovation Strategy*.

The CEFC Review Panel is also interested in receiving the views of stakeholders on other issues raised in the terms of reference at Attachment A.

APPENDIX A – TERMS OF REFERENCE

Scope of the Review

Reporting to the Deputy Prime Minister and Treasurer, the Hon Wayne Swan MP and the Minister for Finance and Deregulation, Senator the Hon Penny Wong, by mid-March 2012, the Chair and Review members are requested to:

1. Develop an implementation plan for the establishment of the CEFC.
2. Develop and recommend a proposed investment and operating mandate for the CEFC, with the mandate reflecting:
 - 2.1. the market area in which the CEFC will operate, including broad guidelines for how the corporation would invest and manage risk;
 - 2.2. how it will approach the intention that funding be divided into two streams:
 - 2.2.1. a renewable energy and enabling technology stream which will have one half of the funding allocated; and
 - 2.2.2. an energy efficiency and low emissions technologies stream which will have half of the funding allocated and will be able to fund renewable energy projects in addition to the dedicated stream.
 - 2.3. how the CEFC is positioned within the broader objectives of the Government's Clean Energy Future Package.
3. Consistent with statutory requirements and the guidance set out in *Governance Arrangements for Australian Government Bodies*, suggest appropriate governance principles and mechanisms, including:
 - 3.1. responsibilities, powers and statutory duties of office holders including the Board, Chair and Chief Executive Officer;
 - 3.2. appropriate Board structure, representation and skills;
 - 3.3. reporting obligations of the Board;
 - 3.4. relationship between the Board and responsible Ministers; and
 - 3.5. duties and functions of the CEFC employees.
4. In the context of the proposed operating mandate, assess how the CEFC will interact with other Australian Government bodies and initiatives, including the Australian Renewable Energy Agency and Low Carbon Australia. Where appropriate, recommend a path for transitioning from the current arrangements to arrangements which streamline support for cost-effective carbon reduction.
5. In conducting the Review, the Chair is to put in place a process for consulting key stakeholders, including wind producers, about the role of the CEFC and its relationship with the Renewable Energy Target.