# <u>CLEAN ENERGY</u>

## FINANCE CORPORATION SUBMISSION

I would like to take this opportunity to express my support for this government initiative to contribute finance to new Clean Renewable Power Generation Technologies.

The formatting of this form will endeavor to provide answers to the list of question's set out in the CEFC submission request.

How do you expect the CEFC to facilitate investment?

I expect investment in the form of a cash contribution to companies who are conducting research and development projects in renewable power generation projects. The most efficient transfer mechanism to deliver investment funds is to provide individual companies a bank account set up by the CEFC on which approved companies can draw funds from when needed to pursue technology based research projects and to transfer the skills and knowledge developed from these R&D projects to commercial manufacturing partners. This way the CEFC can monitor the flow of finance, where it is going and how much is used. For investment security I would suggest any funds that are withdrawn from the CEFC fund be approved and it must be clearly specified what the intended use of the funds is for. This capital can then be loaned to companies who pursue the goals that are set out and agreed to by the CEFC and the applicant company. This safe guard will ensure that any potential loss of CEFC investment capital is kept to a minimum. If the applicant company shows definitive proof of the success of the research project through the development of new clean technology, it then would be expected that the financing conditions would change to support the next stage of the business life cycle, and the applicant companies endeavor to commercialize the intellectual property and transfer the technology developed from the R&D project to a manufacturing base.

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

I'm not sure how to go about answering this question? If the CEFC thinks it will provide more incentives to encourage private investment then an emissions impact statement would be helpful, though CEFC will have to clearly define how this relates to a reduction in consumer power consumption, unfortunately business is only interested in the financial costs and rewards associated with a new product or service not in the cosmetic benefits to the environment. I would be more interested in the demonstrative effect of new technology and its ability to be incorporated into the existing power supply infrastructure system, how much are homes and businesses likely to save per year. Can the consumer sell power back into the national grid and make a profit from the purchase of this new renewable power generation technology? Incentives!! The consumer becomes the investor.

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

The CEFC could look at partnering up with RMIT University to support research and development projects specifically directed at creating new renewable power generation technologies. Partnering with commercial manufacturers who are interested in integrating clean renewable power generation technological processes into their existing manufacturing practices is advised.

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

The CEFC could catalyse the flow of funds by providing a guarantee for a third of any loss of capital invested by investors. Provide a guarantee of financing, to applicant companies setting up or involved in research and development projects for any investment short falls in funding that private investment or commercial partners may not be able to or unwilling to meet.

Provide financing to applicant companies in their start-up life cycle to support the pitching of clean technology research projects and business commercialization proposals for investor consideration.

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?

As a start-up company I am unable to find matching funding for R&D projects or 50% funding for cooperative research centers. I do not meet the general term and conditions of current government funding mechanisms. I do not have an annual turnover of x amount of dollars and have not been in business for any longer than a couple of months. I have spent the last seven years researching this new technology and now I am embarking on the business side of the process. The large cost of R&D and lack of availability of funds has been a major inhibitor due to the nature of this new high end clean energy technology. It requires a major research and development team of scientific experts to construct a prototype proof of concept for investor demonstration before it can be commercialized.

### What non-financial factors inhibit clean energy projects?

The main non-financial factor that inhibits clean technology projects is the technical scientific problems that have to be overcome during the course of a projects life-time. Locating, the right scientific experts to achieve a successful research project outcome.

Locating and hiring an excellent management team to organize and run the legal, accounting and administrative tasks surrounding the project on its developmental path to commercialization.

### Are there special factors that inhibit energy efficiency projects?

The business community is unable to comprehend scientific literature and terminology. The lack of protection for intellectual property rights both nationally and internationally due to complex legal procedures and inadequate funding for IP protection. An undefined export market specified for clean technology products. No legal IP protection agreements from foreign military and intelligence community government departments such as China. A lack of government support for the control of weapons technology applications that this technology

will provide. Lack of financial support for R&D start-up companies who specialize in new clean technology innovations. Investors are only primarily interested in investing in R&D projects of well established companies or cooperative research centers. Because these projects are aimed at improving the efficiency of existing technologies, investors shy away from new technology development and prefer to invest in what is perceived to be a safe R&D project with little or no risk. My company is breaking new ground in game changing renewable power generation and propulsion technologies. Unfortunately due to the lack of scientific understanding investors are unable to interpret the potential of this advanced technology and its applications and therefore see the R&D project as too much of a risk. Without a proof of concept prototype investors have no basis of comparison on which to assess the true return value of the R&D outcome from markets that the technology is aimed at competing in.

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

The CEFC can coordinate its activities with the Clean Energy Program in providing financial incentives for manufacturing partners to embrace Research and Development clean renewable energy projects here in Melbourne Victoria.

Bottom line is this, unless the Australian government and CEFC contribute financially to my business in the early stage of its Research and Development life cycle, then no new innovation activities will occur and no new technologies will be developed and this CEFC initiative will never reach its full potential.

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