



Clean Energy Finance Corporation  
By email: [cefc@treasury.gov.au](mailto:cefc@treasury.gov.au)

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**Re: Clean Energy Finance Corporation (CEFC)  
Submission from NewSouth Innovations  
University of New South Wales**

## **Background**

UNSW is already a leader in the clean energy space, with world-leading photo-voltaic (PV) technology and partnerships with the world's leading Photovoltaic cell manufacturers. We believe that our experience in this area enables us to provide a unique perspective on the challenges and opportunities facing the development of the Clean Energy sector in Australia and the CEFC. We do not propose to comment in detail on areas such as investment criteria or funding terms, but will focus instead on the research/commercial system and the ways in which this can be developed and supported to maximise the outcomes from the CEFC.

## **New Industries**

Clean Energy represents the creation of a new industrial sector and this requires the successful development of technology, of new business models, of investment strategies and innovative companies. The greatest challenge of all is to synchronise all of these. It is not unusual for the technology to outstrip commercial capability and risk-appetite (currently the case in life-sciences). On the other hand, commercial potential and investment appetite can outstrip the capacity of research & technology to deliver the necessary products and services (such as wireless applications). In each of these cases opportunity and capacity get out of kilter, resulting in sub-optimal overall economic performance. This challenge is exacerbated when a particular national agenda is overlain on this and it is desirable to have the research, investment, company development and commercial success all delivered within the Australian economy.

UNSW has direct experience of this in the PV space. Whilst we have been extremely successful in winning research funding and developing the technology, we have had less success in attracting Australian investment in the commercial development of the technology and a lack of demand from Australian companies in working with us. The result is that our major commercial partner is from outside Australia and while this is excellent in terms of international engagement, it limits the potential benefits to the Australian economy.

## **The Necessary Approach**

CEFC can play a vital role in synchronising the technical and commercial capacity of Clean Energy in Australia by acting across the entire system and enabling collaboration and cooperation. This will involve an intelligent approach to supply-side and demand-side development, including creation of incentives and removal of obstacles to participation.

- These new industries require a technological underpinning that can be delivered by Australia's research base.
- Investors must be encouraged and incentivised to invest in Australian companies in this space at an early stage.

- Companies must be encouraged and incentivised to engage with the research base in order to develop the necessary technologies.
- Universities must be encouraged and incentivised to engage with companies in order to deliver technology into the market.

The relationship must be collaborative and straightforward, with the investment and intellectual property (IP) positions clear and simple from the outset. UNSW has recently introduced a new approach to University/Industry partnerships which we think will be a useful model for CEFC to consider as a basis for its approach to funding. The UNSW “Easy Access IP” model, which was launched in November 2011, gives entrepreneurs and industry an opportunity to license valuable Intellectual Property from the university **for free**. The model has been well received by the university researchers, university stakeholders and by industry itself, with the first UNSW “Easy Access IP” deal announced in The Australian newspaper on the 7<sup>th</sup> of December.

It is important to recognise that each actor within the system is seeking a slightly different type of success and CEFC can support the entire system by putting in place support and incentives to achieve each of these:

For the Investment Community: Success can be measured through ROI. Incentives need to help increase the potential ROI and to help limit the risk associated with unsuccessful investments:

- CEFC could develop a co-investment scheme whereby they co-invest with other investors. Schemes exist whereby Angels and VCs act as lead investor and that CEFC would act as a follow-on investor on exactly the same terms. This limits the need for CEFC to act as lead investor and incentivises other investors to engage because of risk-sharing.
- Tax-relief on investments in Clean Energy again limits the downside for external investors. CEFC could act as manager of a focussed scheme, encouraging investors to participate and confirming eligibility for tax relief before and after investment.

For companies: Success is defined in terms of company progress, company value and job growth. CEFC needs to incentivise company investment in innovation and growth.

- Tax relief for investments in R&D along the current lines, potentially with enhanced relief for clean energy supported by CEFC.
- R&D vouchers, to support companies in engaging in technology and product development

For Universities: Success can be assessed in terms of the application of research outputs, reflecting excellence and relevance and also through reputational growth along the lines of MIT and Stanford.

- Recognition of the value of university engagement in technology development through enhancement of ARC linkage programme and the creation of Clean Energy Centres involving Universities and companies in co-development of products.
- Core funding for University Knowledge Exchange efforts to support the development of University/company collaborations, particularly to reflect university contribution to the system in terms of Easy Access IP.

Success will be achieved only if all of these agendas are aligned and we believe that CEFC could play a critical role in enabling and supporting the entire ecosystem.

We would be delighted to work with the panel to develop these approaches in more detail, particularly those areas affecting research and IP. IP always seems to represent a barrier to collaboration and we think that our recently launched Easy Access IP model could be used as a basis for addressing the investor/company/university IP issues.

Yours faithfully,



**Dr Kevin Cullen**  
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