# Submission to the Clean Energy Finance Corporation Review Panel

## 1 Introduction

REpower Australia is a leading turnkey constructor, operator and maintenance service provider of grid-connected wind farms in Australia. We directly employ over 250 people, and have built over 900 megawatts of wind energy projects valued at more than $2 billion in Victoria, South Australia and New South Wales. We now have 36% of the installed wind turbine market in Australia.

On behalf of the Suzlon Group we are developing the Ceres Project in South Australia, and jointly developing the Rugby Wind Farm in New South Wales with Windlab Systems. The Ceres Project will deliver up to 600 megawatts of clean energy, and will include a submarine high voltage electrical cable to Adelaide. We are trying to integrate other renewable energy technologies into the Ceres Project, such as biomass.

Our parent company, Suzlon Energy Limited, is the 5th largest wind energy supplier globally with operations in 32 countries.

As a result of our extensive experience building wind farms around the world, we have a very good understanding of the market barriers facing the deployment of renewable energy projects.

We welcome the opportunity to make a submission on the design of the Clean Energy Finance Corporation (CEFC). This initiative will help support delivery of the Government's 20% renewable energy target by 2020, a key milestone in the move towards a low carbon economy.

## 2 Role of the CEFC

The CEFC has a critical role to play in supporting the widespread deployment of renewable energy, energy efficiency and low emissions technologies by unlocking private sector investment into clean energy projects.

The following table highlights how the CEFC could support different types of projects.

| **Maturity of project** | ● | ●● | ●●● |
|---|---|---|---|
| **Project risk** | ●●● | ●● | ● |
| **Project examples** | Emerging technologies, such as:<br>- cyclone proof wind turbines | Innovative applications, such as:<br>- connection of storage to large-scale wind farms<br>- offshore wind in the Australian context<br>- manufacturing innovation<br>- demand side management to balance naturally variable renewables | Mature applications facing commercial barriers, such as:<br>- remote area supplies for mining operations |
| **Rationale for support** | Demonstration to reduce risks for future projects<br>Support moving technologies down the cost curve | Demonstration to reduce risks for future projects<br>Support moving technologies down the cost curve | Make project more attractive to private sector investors by sharing risks |
| **Type of financial support** | Grants<br>Venture capital support | Equity investment | Loans<br>Loan guarantees<br>Policy risk insurance<br>More favourable terms than the market can offer (eg longer terms) |

# 3 Key design considerations

To support the effective operation of the Clean Energy Finance Corporation, we recommend that the following design criteria be considered.

## 3.1 Flexible approach

The criteria for funding projects in the CEFC should be broad enough to allow a range of projects to be considered, such as:

- projects that require a level of public investment in order to leverage private sector finance;
- investment in established technologies to stimulate the necessary scale and efficiencies needed to move down the cost-curve;
- investment in technologies that have been successful in other countries, but have not yet been deployed in Australia;
- investment in new and innovative technologies;
- projects that facilitate the widespread deployment of clean energy, including:
    - improving efficiencies in the manufacturing of clean energy technologies;
    - facilitating a greater penetration of clean energy infrastructure, such as through strategic investment in network infrastructure, and innovative approaches to storage and demand side management.

## 3.2 Project assessment

Broad funding criteria will mean that the CEFC will attract applications for a broad range of opportunities, based on different technologies, and at various stages of maturity. In recognition of this, each project will need to be assessed on its individual merits, which will require a range of skills and expertise from different sectors.

## 3.3 Focus on deployment

The transition to a low carbon economy will require a transformation in the way we use and supply energy. In particular, the shift away from greenhouse intensive electricity generation will require a significant investment in new renewable energy generators, and the associated transmission infrastructure.

It is therefore important that the CEFC priorities investment in projects that can be delivered and have the potential to lead to widespread deployment of clean energy technologies in the future; such as demonstration projects that reduce the investment risk for future projects.

## 3.4 Appropriate funding objectives for generation projects

Clean energy generators will not deliver least-cost greenhouse abatement in the short-term. However, Investment in clean energy generation is essential for transforming the energy sector so that it can deliver greenhouse abatement in the long-term. When assessing generation projects, it is therefore important that the CEFC is focused on cost-effective clean energy production, not least cost greenhouse abatement.

## 3.5 Bridging the skills gap

The CEFC has an important role to play in providing projects with the investment needed to bridge the gap between what the market is prepared to offer, and what a project needs in order to proceed.

However, there can be other barriers to the successful deployment of clean energy projects. For example, projects that bring together multiple stakeholders can fail as a result of unclear management structures and organisational differences. The CEFC could play a role in facilitating access to management expertise if required, whether directly or through complementary Government initiatives.

In addition, the process of securing finance can be challenging. The CEFC can play an important role in helping identify other sources of finance (both from Government and the private sector) that projects can access, as well as helping ensure projects are presented in a way that maximises their chance of securing finance.

### 3.6 Coordination

It is important that the activities of the CEFC complement existing Government initiatives.

Of particular concern to our sector is ensuring that the operation of the CEFC is managed in a way that maintains the integrity of the Large-Scale Renewable Energy Target (LRET).

## 4 Project examples

While wind is a mature technology, there are a number of opportunities where assistance from the CEFC could help to deliver projects that would otherwise not stack up given normal financing constraints.

### 4.1 Grid investments

Renewable energy development is already facing serious transmission constraints in some parts of Australia. A project to invest in the electricity network to unlock areas of renewable energy generation potential would help to increase the penetration of clean energy in Australia. However, this is unlikely to be financed in the current market as the costs would need to be spread across several renewable energy projects and the development time for these projects would exceed the investment horizons of lenders. This activity could be staged to provide initial support for early stages of grid expansion that could then attract investment to fund further stages.

### 4.2 Managing naturally variable renewable supply

A potential constraint to future wind energy projects is the ability of the network to balance increasing levels of naturally variable supply. The effective participation of Demand Side Management and Storage in the market could help the network support an increased amount of energy from renewable sources.

### 4.3 Offshore wind

Offshore wind is well developed in Europe, with over 3 gigawatts of operating capacity, and a further 150 gigawatts at various stages of planning.

In Australia, offshore wind cannot currently compete with onshore wind energy opportunities, but could be a viable option in the future, particularly with higher offshore wind speeds, a coastal population, and ongoing developments in floating foundations.

### 4.4 Wind technology for cyclone regions

Wind development in Australia has mostly been in the southern states as the average wind speeds are higher and the extreme wind speeds are lower. CEFC investment could allow wind turbines designed for cyclone regions to be trialled in northern Australia.

### 4.5 Remote area supplies for large users (i.e. mines)

Mining operations and other large energy users in remote areas are interested in renewable energy to reduce their energy costs and to protect against rising fossil fuel prices. However, the operating life of the mine or other infrastructure is often too short to make the investment feasible. There is not currently a used equipment market for renewable energy generators in Australia but there is no reason that such a market could not be created. Assurance of a buy-back price or other financial mechanism would make these projects feasible.

The other major concern of such remote infrastructure is security of supply. As renewable resources are variable for such projects to be feasible they would need to be integrated with energy storage or backup generation. This has been demonstrated at small scale in Australia, for instance the King Island projects, but not at large scale.

### 4.6 Manufacturing

We welcome the CEFC's mandate to invest in manufacturing businesses that provide inputs for the renewable energy sector. Early discussions with key suppliers indicate that this initiative could unlock significant opportunities to drive innovation in the supply chain for renewable energy projects in Australia.

## 5 Conclusion

We welcome the opportunity to provide input into the design of the CEFC. This is an exciting initiative, and has the potential to support the transformation of Australia's energy sector. We would be very pleased to meet with members of the Review Panel to discuss our experience of project financing in our Australian and global businesses.

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