

**Expert Review**

8 Dec 2011

**Clean Energy Finance Corporation***Submission by e-mail*

Dear Sir / Madam,

**Samsung C&T Australia: Clean Energy Finance Corporation (CEFC) Consultation**

Samsung C&T Australia is pleased to provide this submission in response to the call for consultation by the Expert Review Panel, charged with developing the appropriate implementation plan and investment mandate for the CEFC.

Samsung C&T Australia was recently established as an Australian branch office of the Samsung C&T Corporation headquartered in Seoul, Korea, which is the investment & trading arm of the Samsung Group. The business is seeking investment opportunities in three principal business sectors, one of which is the renewable energy sector – targeting significant investment in wind and solar generation projects around the country, through the provision of financing, equity investment, and construction services.

Samsung has been investigating potential investments in the renewable energy sector since early 2010, seeking to take advantage of the opportunities offered by three key drivers, namely:

- A clean energy policy that requires significant new development in the immediate future;
- World-class wind and solar resources;
- A relatively new market, with a mix of large players and niche operators, requiring significant capital investment.

Samsung therefore welcomes the introduction of the Clean Energy Future legislative package, which will provide further long-term support to the renewable energy over and above that offered by the large-scale renewable energy target (LRET). As part of that package, Samsung believes that the Clean Energy Finance Corporation has an important role in facilitating the development of renewable energy projects, in parallel with the other policy drivers.

Please note that, given Samsung's interest in the renewable energy sector, the following comments are largely focused on how the CEFC can facilitate investment in that sector (rather than in energy efficiency).

***Current Scenario***

Before commenting on the scope of the CEFC and ways it can catalyse private investment in the renewable energy sector, it is worth considering the present climate for developing renewable energy projects. As noted, the primary driver for new renewable energy projects is the requirement for 20% of electricity to be generated from renewable energy sources by 2020, equivalent to 45,000 GWh. Of this, the LRET total of 41,000 GWh requires up to 10,000 MW of new projects by 2020.

Despite this policy driver, the renewable energy sector has only seen fitful growth over the last 9-10 years, characterized by 'boom & bust' cycles (for example, only around 2200MW of wind capacity has been built, with a further 900MW under construction, since 2001 when the RET policy was first introduced; and most other renewable energy technologies have been dependent on other public support programs to progress (eg Solar Flagships)).

Such fitful growth, caused in part by policy uncertainty, has certainly discouraged private sector investment into the sector, with a number of other key issues holding back development:

- Low priced electricity (black) and renewable energy certificates (green) being insufficient for financial viability of projects;
- Industry structure, with three dominant 'gentailers' – electricity retailers with around 60% of the retail market, who also own significant generation capacity and hence are able to squeeze new entrants into the electricity market;
- The sector being relatively immature in comparison with alternative infrastructure investment sectors, and hence at a disadvantage when competing for private sector investment funds;
- The limited options for financing from Australian-based institutions, due to a combination of lending limits and withdrawal of international institutions following the global financial crisis in 2008/09;
- The challenges and costs of connection into the electricity grid, particularly for renewable energy projects in remote locations where network augmentation is usually required (at direct cost to the project under National Electricity Rules) and there may be significant loss factors.

The objectives of the CEFC must therefore be to overcome these factors and increase the attractiveness of the sector for private sector investment, through options such as those outlined below.



### ***The scope for the operations of the CEFC***

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

Samsung considers that the optimum approach would be for the CEFC to implement measures that reduce risks in the development of renewable energy project development, and therefore give more confidence and certainty to private sector investors.

Of the various measures that could be implemented, Samsung's preferred approach would be the provision of specific financial support for large-scale connection / transmission that links significant renewable energy resources (wind, solar, geothermal) to the national electricity market, thus enabling the private development of major renewable energy projects. There are a number of such transmission options that have been identified within the NEM, but have not progressed because of the financial risk of the costs of development falling on a single large project or on multiple smaller projects owned by different developers.

Other possible measures include:

- Facilitating public-private partnership-type deals to drive project development
- Spot purchase of large-scale generation certificates (LGCs) to provide a price floor;
- Providing loan guarantees to support project financing;
- Providing debt at interest rates lower than commercial rates;
- Providing debt with a longer term than typical commercial loans;
- Providing investment equity to achieve project gearing to attract private sector financing.

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

Samsung considers that the starting point for any investment by the CEFC should be financial viability, albeit within the framework of how CEFC may support that viability.

However, given financial viability, there are several principles that should be considered in prioritising investment, such as:

- Investments in infrastructure that catalyse large-scale renewable projects, enabling efficient exploitation of Australia's world-class resources to deliver significant proportions of the LRET;
- Investments that offer the opportunity to replace existing high-emission generation with low / no emission generation (e.g. replacement of brown coal generation);
- A focus on projects / technologies that are established / mature, and hence are able to deliver the promised energy outcomes;
- A focus on projects / technologies that offer 'learning' opportunities for exploitation on

subsequent projects, either in Australia or elsewhere in the world.

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

Given that the CEFC is intended to be an independent investment body, commercially-oriented to make a positive return on its funds, it would be logical that CEFC seeks to partner with established private-sector investment managers.

Such an approach would enable the CEFC to utilise their skills and experience, as well as knowledge and understanding of the private sector finance market, rather than try and duplicate them internally, to deliver the most efficient investment outcome.

This could be implemented by giving mandates to individual investment fund managers to deliver on specific investment objectives, overseen by the CEFC team.

Such an approach would also facilitate the development of effective PPP projects, bringing together finance from both public (via CEFC) and private sectors to support renewable energy projects.

***The market gap in financing low emissions technologies***

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

As noted in 1. above, Samsung believes that the primary focus of the CEFC should be to facilitate large-scale renewable energy through direct support for infrastructure development. Supporting investment in connection / transmission, could catalyse the successful development of new renewable projects financed by the private sector, through:

- Providing network access to remote areas with significant renewable energy resources; such as the wind resources in the Eyre Peninsula in South Australia, the wind and solar resources in the Flinders Shire region in Queensland, the geothermal resources in Cooper Basin in South Australia;
- Providing funding support for new transmission that is designed for large-scale renewable overcoming the constraints of full costs being borne by 'first movers', the potential for 'free riders', and the risk of connection sizing being driven by individual projects not regional potential;
- Reducing individual project risks through the confirmation of transmission / connection and associated reduced connection costs, thereby making projects more attractive to both developers and private sector financiers.
- Providing investment equity for both transmission and potentially individual projects that ensures project gearing is at a level that attracts private sector financing, through investment into a project, supporting smaller developers who may struggle to raise the equity necessary to achieve adequate levels of gearing for project financing.



**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 ?**

Samsung has yet to progress project investment / development in Australia to the extent of needing secure finance. However, Samsung is progressing renewable energy projects elsewhere around the world, including Ontario in Canada and California in the US.

This global experience, coupled with previous experience of the sector in Australia and anecdotal evidence has suggested that some of the key issues in trying to obtain finance include:

- Inability to secure key terms for power purchase agreements – including price (due to current low price for LGCs, coupled with low black power pricing); and term (mismatch between financier requirements (10+ years) and options from retailers);
- Availability of funds overall – many potential investors / financiers are not ‘engaged’ with the sector, preferring more mature and well-known infrastructure sectors, and hence are not able to provide funds to the sector;
- Availability of funds overall – similarly, as noted, the withdrawal of a number of international financial investors from Australia, some of whom were actively engaged in the renewable energy sector, has limited the potential available ‘pool’ of funds;
- Availability of funds for individual projects – the amount of financing available from any one institution for renewable energy sector projects tends to be constrained in the order of \$50-75 million, hence most projects will need a number of financial institutions to raise the necessary funds, making the process more complex, time-consuming and costly.

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

There are a number of factors that continue to inhibit the successful development of clean energy projects, some of which have previously been noted, including:

- Policy uncertainty: the various changes to the main policy driver, the Renewable Energy Target (RET) scheme, has resulted in a ‘boom & bust’ cycle within the sector (with wide swings in the price of LGCs (previously renewable energy certificates)) which has not helped investors and financiers to be confident in financing renewable energy projects;
- Project development: development of renewable energy projects, particularly wind, has faced various challenges (such as changes to planning systems, community & regulatory concerns, sector-specific guidelines, connectability issues) that have typically made the process more costly and time-consuming than for equivalent infrastructure projects;
- Grid Connection: the nature of renewable energy means that much of the resource (wind, solar, geothermal) is in remote locations, away from the integrated electricity grid that links to the demand (and hence revenue from power generated). Hence access to the best resources is constrained by the need for projects to support the potentially high cost of grid connection.

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

n/a

### ***How the CEFC could work with other government and market organizations***

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

There are essentially three strands to the Federal government's initiatives on clean energy:

- Support to established technologies: broad policy support through the RET and the carbon price mechanism, to provide the appropriate long-term price signals to ensure that renewable energy projects are price-competitive with existing fossil fuel projects. At this stage, these policy mechanisms are likely to support wind and solar projects, as the most mature technologies.
- Support to commercially-emerging technologies; specific support through ARENA for emerging renewable energy technologies that require assistance to reach commercialization. At this stage, this is likely to support technologies such as geothermal, solar thermal, and wave / tidal technologies, as these develop into commercially feasible options.
- Support to early stage technologies: specific support through the Clean Technology Program for technologies that are at the R&D stage, where other funding sources are scarce and there is no certainty of a commercial outcome.

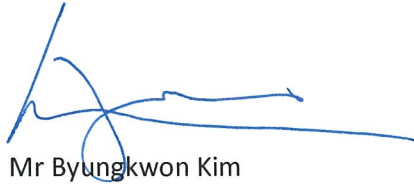
Within these three strands, Samsung believes that the CEFC should largely be independent of the two specific support initiatives, focused on providing targeted commercial support (using measures outlined previously to unblock key barriers) to help drive the achievement of the RET by 2020. This will help create a sustainable renewable energy sector in Australia, able to demonstrate its commercial viability to attract ongoing funding from the private sector.

Over time, it is expected that technologies supported by ARENA will become commercially viable in their own right, and hence will 'move up' the support chain to be eligible for commercial support from CEFC. Given that, CEFC and ARENA will need to maintain a close contact to ensure that CEFC is aware of the development / commercialization of emerging technologies.

It will also be important to ensure that there is no duplication of support between Federal government programs and State government programs, to avoid over-stimulating particular technologies (as happened with domestic roof-top solar).

Samsung C&T Australia would be happy to discuss this submission further in person, if required. In the meantime, if you have any questions or require further information, please contact Neil Weston on 02 8267 1004.

Yours Faithfully,

A handwritten signature in blue ink, appearing to be "Byungkwon Kim", written over a horizontal line.

Mr Byungkwon Kim  
Managing Director  
Samsung C&T Australia

