CEFC Expert Review Submission

Sydney Capital Partners & SIM Venture Securities Exchange

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Preamble

Background on Sydney Capital Partners

Sydney Capital Partners is a boutique corporate advisory firm located in Sydney with representatives in North America, SE Asia and Europe. It specialises in assisting emerging technology and high growth, mid market public and private companies with strategic and capital markets support.

Our specific experience in relation to clean energy funding and strategy support relates to:

- 1. Assisting emerging technology companies through the technology commercialisation process to deliver prototypes to *in situ* testing sites;
- 2. Assisting companies with proven technology, validated across a number of *in situ* testing locations, with expansion funding; and
- 3. Assisting project development companies source project finance for renewable energy projects.

The clean energy technologies with which Sydney Capital Partners has had direct experience includes:

- **§** Solar PV project development, project funding
- **§** Tidal, marine & run of river Technology commercialisation, early stage funding, project development and project financing
- **§** Biomass gasification Technology commercialisation, early stage funding, project development, equipment financing and project financing
- **§** Geothermal (Hot sedimentary aquifers & ground source heat pumps) strategy consulting, project evaluation, equity capital raising
- **§** Smart grid / metering / demand management / sustainable building technology Technology commercialisation and early stage funding
- § Automotive bio-fuels project funding, corporate venturing & technology development

Further, Sydney Capital Partners recently commissioned a report into the status of clean energy funding, particularly early stage technology commercialisation. The report, titled *"Investing in Early Stage Green Tech Projects: Australia"*, was authored by Macquarie Graduate School of Management's MBA student Giovanni Valenti and supervised by Nigel Garrow. A copy of this report is attached for reference as it forms a significant basis of Sydney Capital Partners' submission to the expert review of the Clean Energy Finance Corporation. The key themes of this report include:

- **§** An overview of global clean tech investment trends;
- § Focus on venture capital and private equity investment, particularly clean tech incubators; and
- **§** The status and constraints of investment in the clean tech sector across key Australian investor classes institutions, venture capital funds and self managed super funds / business angels.

Background on SIM Venture Securities Exchange

The SIM Venture Securities Exchange (SIM VSE) is a regulated Stock Exchange licensed by the Australian government and supervised by ASIC. The focus of the exchange is to provide issuer companies with a listing venue that is positioned for the Asian region with a particular emphasis on the China market in addition to the more traditional sources of investment and trading.

SIM VSE is committed to reducing barriers to the development of certain market sectors including clean technology, renewable energy and related technology, life sciences and related service companies, and providing the most cost effective and efficient listing process within the structure of a regulated and licensed market place

Sydney Capital Partners & the SIM VSE support the creation of the Clean Energy Finance Corporation Sydney Capital Partners and the SIM VSE support the objectives of the proposed Clean Energy Finance Corporation (CEFC) to overcome capital market barriers that hinder the financing, commercialisation and deployment of renewable energy, energy efficiency and low emissions technologies.

In particular, Sydney Capital Partners supports the industry and employment creation emphasis of the CEFC through its preference to invest in firms and projects utilising these technologies as well as manufacturing businesses that focus on producing the inputs required. It is currently supporting a key client, Tenax Energy develop a technology commercialisation consortium for a 10MW tidal energy pilot project located near Darwin, Northern Territory and focused on SE Asian export market opportunities. It will be supported by a collaborative research and technology commercialisation facility, to be based at Charles Darwin University and comprised of a number of commercial and academic technology development partners with support from the NT Government. A confidential project concept paper is available on request.

Impediments to funding emerging Australian clean technology businesses

Our collective experience indicates a number of impediments to emerging Australian clean energy technology firms securing investment funds. These include:

1. Technology risk / access to 'cornerstone customers'

There is significant technology risk with any clean energy project, will the technology work as planned or will it be superseded mid-project. Unlike some other technology risks this may not be mitigated with high potential upsides (as in, say, pharmaceuticals, because many energy markets have a fixed equity rate of return regulation which limits the upside gains).

Further, access to 'cornerstone customers' prepared to accept the (likely) inferior performance of early generations of emerging technologies is critical to enable the promoters of these technologies to progress down the 'experience curve' and reduce the marginal economics /relatively high levelised cost of electricity (LCOE) in terms of capital cost & outprice per kWh as an example for alternative generation technologies. Ultimately, the commercialisation of clean energy technologies must be market driven.

2. Access to early stage venture capital

Access to early stage venture capital in Australia is difficult – the local venture capital asset class has a patchy track record at best in delivering investor returns, due in large part to the nature of a US centric model being transplanted to a much smaller Australian market, weak taxation incentives and an inability to attract appropriately conservative local superannuation funds. The most recent Pepperdine Private Capital survey for Summer 2011 highlighted that over 50% of the 104 VC companies surveyed globally have moved to investing in later stage companies, and over 50% of the companies surveyed expect that trend to continue into the future. This move to safer investments can only be exacerbated by the extended paralysis in global capital markets.

There has been a flow of superannuation funds into off-shore (foreign) clean energy developments in the past 5 yrs. The investments made into the renewable electricity market in South America carries less risk than the Australian electricity market, which is an indictment on our local industry stimulation & development capacity for clean energy technologies.

3. Political/market risk

There is significant risk over the future prices for feed-in tariffs and renewable energy certificates dependent as they are on the political decisions on the management of carbon reduction schemes. This ultimately translates into a market risk on future prices. The State based structure of the generation industry and the unpredictability of State Government policy with respect to renewable energy subsidies adds to this uncertainty.

4. Rapid access to export markets

Australia has a relatively small potential market size for emerging clean energy technologies. It is also a highly competitive market with many clean energy technology sub-sectors dominated by non-Australian multi-national companies. There is an opportunity to leverage this situation to Australia's advantage by having the CEFC enable collaboration with Austrade and EFIC to have Australian technologies commercialised (once incubated in Australian markets through proactive procurement and taxation policies for local energy development & generation businesses) in large, rapidly growing SE Asian markets.

5. Project funding considerations

There is a further hurdle to market adoption once emerging clean energy technologies are validated in the market environment. There is a second 'valley of death' for many proven clean energy technologies associated with the significantly large capital expenditure for installing and operating many generation technologies. Often associated with early stage venture funding, this second 'valley' based on the ability to arrange enough debt funding at pricing able to deliver sufficiently attractive returns to equity investors in a project is a key execution risk and is typically the sole domain of large corporate capable of carrying multiple risks (market, technology, O&M etc) on their balance sheet.

6. Local investor preferences - Capital preservation & liquidity

Australian early stage investors have a strong preference for capital preservation, liquidity and short term returns, as evidenced by the large number of early stage resources business listed on the Australian Stock Exchange regularly attracting risk equity. In contrast, many emerging clean energy technologies are typically illiquid, require 'patient' equity and require commercialisation in export markets to deliver the desired level of investor returns.

Further, there are broader considerations outside the scope of this request for submission associated with a taxation policy which encourages investment in residential housing (negative gearing) over emerging technology based investment assets with export earning capacity through emerging technology commercialisation.

7. Project lifecycle

New clean energy projects, especially those with newer technologies such as tidal or geo-thermal, have a significantly longer than normal profile for investment returns due to both technology validation and commercialisation requirements and project funding hurdles.

8. Constrained global capital markets

On top of these standard factors, there is the current issue of a still globally challenged capital and credit market. Security and capital preservation are given much higher weighting in investment decisions currently, and so projects that have a higher risk profile, yet with good income potential are underfunded.

Central role of CEFC in overcoming constraints

These factors indicate that the central role for CEFC is to provide finance in a way that reduces the risk of other sources of capital and in doing so, is able to attract investment from local superannuation funds. This has its own issues from a Government finance point of view, but it is clear that Government is better placed to manage or influence many of the above factors. Specifically, as Government is the determinant of the political/market risk, it is by nature able to be a patient investor and it is a critical player in facilitating growth of capital and credit markets to fuel overall economic growth, as well as using it's procurement power to act as a 'cornerstone customer'.

Export market focus through a portfolio approach

The Australian Government's objective for a clean energy future is global, not local. Investments that create the possibility for global application are to be preferred. This will require the collaborative, proactive engagement of other Federal Government agencies, such as Austrade and the Export Finance Investment Corporation (EFIC) to create an integrated, export market orientation.

This approach also requires identifying and investing in those sectors which have capacity building requirements that will need to be funded to extract additional value in terms of industry development and employment creation benefits. Rather than an approach of picking individual winners, a model which adopts a sector / supply chain development focus and creates a collaborative incubation environment (ie through promoting standardisation where possible) is preferred. In keeping with that principle the investment portfolio needs to support a wide array of technologies, at various stages of market adoption / commercialisation; especially those that are not yet widely deployed commercially, yet have a significant potential cost advantage over fossil fuels.

Sydney Capital Partners' response to submission questions

- 1. How do you expect the CEFC to facilitate investment?
 - Emerging international best practise provides a useful initial comparison, particularly for funding infrastructure projects deploying proven technologies, such as wind & solar electricity generation. Significant effort in developing a Green Investment Bank model has been undertaken in the UK. This model identifies many of the challenges in stimulating investment in green technologies. The three key interventions proposed are:
 - i. Risk mitigation First loss debt in each of construction & operating phases of projects;
 - ii. Innovative finance mechanisms Upfront refinancing commitment to guarantee bank exit post construction; and
 - iii. Capital provision Equity and senior debt on market terms to provide additional capital.

A copy of the "Update on the design of the Green Investment Bank" report is attached for reference.

However, this approach on infrastructure projects focuses on mature technologies developed, commercialised and manufactured outside Australia, leaving limited scope for industry development and employment opportunities beyond installation and operations & maintenance support. The Canadian approach in establishing a marine power industry through creating an integrated pilot testing and research commercialisation facility which takes a holistic supply chain orientation is commended, particularly with the export market potential for tidal energy in SE Asia. A copy of the report *"Charting the course: Canada's marine renewable energy technology roadmap"* is attached for reference.

The business model proposed for CEFC is to support technology acceleration through creating a collaborative *"incubator"* environment which draws into a supply chain based ecosystem which includes:

- ü end customers,
- ü support services (environmental, engineering, legal & financial),
- ü local manufacturing capacity,
- **ü** skilled workforce development; and
- ü research institutions to commercialise locally created clean energy intellectual property.

The Canadian approach of creating a collaborative commercialisation environment (as opposed to picking specific winners) requires refinement to overcome the key financing gap of early stage venture capital funding in order to be successfully adapted to the Australian situation & opportunities. Australian technology commercialisation and infrastructure investments face two core financing issues:

- i. Cost of funds
- ii. Availability of funds

Specifically, the role of the CEFC is to deal with both technology commercialisation and infrastructure risk by being a long term, patient investor. This may be addressed in a number of ways:

- i. Assume two equity classes external investors get treated as preference shares and the CEFC equity gets its returns later once the project reaches further maturity. Further, the external investors have preference in liquidation etc.;
- Lowering the weighted average cost of capital (WACC) to improve external equity investor returns by adopting a co-investment model with a fixed cost of equity (say BBSY + 2%) for the CEFC to provide at least 25% of the risk equity required for early stage venture capital investment;
- iii. Attract superannuation funds into the sources of funds mix through providing capital preservation mechanisms, such as underwriting or insuring a proportion of their investment in return for a nominal cost of funds fee. This would be preferred to legislative intervention to mandate a minimum portfolio holding in clean technology venture capital and infrastructure funds given, the potential for abuse and significant adverse outcomes;

- iv. Providing incentives for individuals (as sophisticated / angel investors) to invest via self managed super funds, either through tax rebates (in parallel to the CEFC) and / or capital preservation mechanisms by underwriting a proportion of their investment in return for a nominal cost of funds fee made available through a pre-qualified competitive tender process;
- v. Preserving the CEFC's own capital base through taking security over intellectual property rights which can be deployed in other businesses within its portfolio in a liquidation event;
- vi. Provide mezzanine / subordinated debt finance capacity for infrastructure projects and market rates of return; and
- vii. Ability to accelerate time to market through adopting a streamlined funding process which reduces the lag time between funding application and delivery of grant funds.
- 2. Are there principles beyond financial viability that could be used to prioritise investments, such as emissions impact or demonstration affect?

Financial viability is to be viewed as a threshold, rather than a goal / end in itself. Taking a longer term, industry & employment creation approach requires selecting projects against criteria beyond short term profitability. Such criteria may include:

- i. Novelty of technology focus on technologies, such as tidal energy, which have a potential LCOE lower than coal, despite the relative infancy
- ii. Export market / industry expansion potential (including services such as education)
- iii. Ability to source 'cornerstone customer(s)' to co-commercialise technologies under development
- iv. Environmental impact / benefits ability to contribute to biodiversity, reduce footprint through waste reduction potential / reusing waste materials
- 3. What are the opportunities for the CEFC to partner with other organisations to deliver its objectives? A core principal of the CEFC is that it should never meet with projects / parties seeking investment funds. Instead, the CEFC is ideally placed to leverage a network (or panel) of corporate advisory, venture capital, investment bank and research commercialisation firms. In doing so, it only deals with financiers to augment the funds the financier is raising through a co-investment model. The imprimatur of the CEFC as a co-investor with its own thorough due diligence process is likely to be a critical factor in attractive private sector investment.

Other potential models worthy of investigation as part of the co-investment model are community funding initiatives via trust structures which gain be utilised to source seed funding for projects and promote alignment of various stakeholder interest groups.

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

Australian retail superannuation funds are incentivised to focus their portfolio on mature assets, typically ASX200 stocks, for capital preservation and liquidity purposes. One option may be to create one or more listed funds focused on a specialist clean tech exchange, such as the SIM VSE (<u>www.simvse.com.au</u>) with the explicit mandates of holding a portfolio of clean tech technology commercialisation and / or infrastructure construction and commissioning assets at pre-IPO stage. The role of the CEFC is to provide 25% capital to seed such funds and / or to insure a proportion of co-investment by superannuation funds to address their capital preservation position.

Other complementary initiatives may include an investment return multiplier to enable investment in infrastructure projects. For example the tax treatment the wind sector received in India to encourage Indian

capital to remain in the country whilst driving growth in skills development, manufacturing and industry participation, is an example of complementary initiatives.

Another option is to smooth investor cash flows by providing non-recourse loans to infrastructure projects in their early stages to enable dividend payments to investors before the project is in a position to generate its own cash flows.

Further, see answers to 1 and 3.

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?

Sydney Capital Partners' experience in raising early stage and expansion finance across a number of sectors indicates a strong preference away from clean energy technologies. Aside from the political uncertainty over recent years, there has been greater availability of funds for resources projects and adjacent industries.

Where we have been able to obtain funds, these are either coming from off-shore (Asia and to a limited extent EU) or locally at terms which seek to protect the capital of incoming investors and / or at terms which seek to multiply their returns at the expense of existing shareholders. An example includes local institutional / venture investors requiring aggressive terms for a clean energy technology commercialisation business, including:

- **§** Options / rights to re-invest monies paid out whilst retaining original investment holding / Preference shares or convertible notes with free equity carry;
- **§** Minority 'drag & tag' rights to compel a liquidity event that suits one group of shareholders, rather than benefitting company growth;
- **§** Other terms which significantly dilute existing shareholders and therefore act as a disincentive to founding shareholders / creators of intellectual property;
- § 3 times liquidated damages on exit
- **§** Power of veto for certain operational & capital decisions
- § Control of board (including Chairman) even though not controlling interest
- § Fees for involvement in the business in executive or consulting capacity
- § Founders / executives to work for sweat equity (ie no salary)
- § Rights of refusal for business partners & incoming shareholders

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

Observations:

- S Nature of technology intermittent generation capacity / generation output misaligned with peak demand requirements necessitating energy storage
- § Uninsurable risk associated with emerging technologies / preparedness to insure technology risk. Insurance companies are unwilling to insure generation technologies with less than 2,000hrs (minimum) operating time to validate reliability, performance etc. This has a flow-on impact on securing project finance and therefore slows the rate of technology adoption.
- § In certain regulated markets, such as the Northern Territory, there are balancing requirements which act as strong disincentives for clean energy generation technologies with intermittent or variable generation capacity. More a local regulatory issue – not entirely relevant to this paper?
- S The big three Australian gen-tailers are on the record as stating they have no need to construct new clean energy capacity until post 2015, at which time the price of LGCs are expected to be sufficient to underwrite a project. In the latter half of the decade, it is expected that Australia will experience

significant capacity constraints in the electricity supply chain, as close to 10GW of wind energy projects are constructed within a five (5) year period to meet Australia's renewable energy target.

§ Availability of skilled vocational labour, particularly in light of the attractiveness of the resources sector from a relative wage position.

It is imperative that an environment is fostered which supports the strengthening of the supply chain and support services networks (environmental, engineering, legal and financial), local manufacturing capacity, skilled workforce development and research capability to enable Australia to compete on a global scale. This approach also requires stimulating and observing social change in domestic and commercial energy consumption. The alternative is to import the skills and support, placing a reliance on foreign interests to meet Australia's critical infrastructure needs.

A number of clean tech projects require electricity infrastructure investment in transmission and distribution capability. There may be an expectation that new clean energy generation projects will need to be situated adjacent to existing transmission infrastructure, built to accommodate significant generation capacity that are situated on large fuel sources. Clean energy developments are constrained by the need to extend transmission infrastructure to accommodate a project, or the need to reinforce capacity in lighter distribution networks, particularly when proposing large scale distributed energy projects close to the customer or end-user.

A key inhibitor to getting clean energy projects started in Australia is the need to find an off-take for the electricity generated. There are primarily three companies in the Australian market that have influence over the price and availability of an off-take, and they currently have no need to expand their clean energy portfolio.

Consideration should be given to funding structures that encourage the development of a more competitive market in this regard as well as initiatives to increase the incentives to expand the clean energy demand of the major energy generators and retailers.

The CEFC can also provide enabling investment to support the development of critical infrastructure.

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

- Observations
 - § The well known misalignment of incentives between tenants and landlords for sustainable building upgrades There is typically significant tenant inertia to accept any disruption and increase in rents for nominal short term gains associated with energy efficiency. There is an attempt to overcome this hurdle through Environmental Upgrade Agreements (EUAs), which are tripartite agreements between Local Government, Lender and Building Owners. The CEFC could accelerate the adoption of EUAs by stepping in and finance a 'loan' to the landlord to fund an incentive (say 20% of savings) that would then be recouped after the EUA repayment period completes effectively extending the financing of the upgrade within the EUA savings differential.

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

- i. Renewable Energy Venture Capital Fund Co-investment approach to leverage grants as the critical component to accelerating technology commercialisation & capturing export market opportunities
- ii. Australian Renewable Energy Agency (ARENA) Requires creation of a focused tidal / marine energy program by extending the emerging renewable energy program.

- iii. Carbon price & mechanism designed to stimulate capital replacement / investment to replace coal fired generation capacity. A complementary position which will likely have the impact of accelerating replacement with renewable generation technology. CEFC may usefully provide a hedge to underpin the carbon price for certain investment structures.
- iv. Renewable energy target This is already influencing capital investment planning decisions. The structure of the program has been improved through the expanded renewable energy target adjustments. CEFC industry knowledge can inform the RET review process
- v. Tax breaks for green buildings Complementary scheme designed to align incentives between landlords & tenants. Model concepts could be extended to adoption of domestic smart grid / metering / demand management technologies.
- vi. Low carbon communities Complement adoption of renewable energy sources in remote communities
- vii. Clean energy skills Adopting the industry development stimulation model will require further investment through this program.

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