New Energy Solar

Quarterly Update

June 2016

Market Update

Australian renewable and solar market update.

The submission period for a share of the Australian Renewable Energy Agency (**ARENA**) $100 million large-scale solar PV grants program closed on 15 June, with 20 of the 22 shortlisted projects submitting detailed proposals. The 20 eligible proposals are seeking a combined $211 million of funding towards projects with a combined capacity of 757 Megawatts (**MW**) and total value of $1.6 billion. ARENA announced a key observation from submissions received was the rapidly falling cost of building new solar plants, as momentum in the sector builds and supply chains become more established. ARENA noted in grant submissions at the expression of interest phase in November 2015, that grant funding requirements for new projects were around $0.43/Watt (**W**). As at the binding submission deadline of 15 June, funding requirements had fallen to an average of $0.28/W in full applications, highlighting the rapidly improving economics of utility-scale solar PV plants. ARENA expects to announce the successful grant applicants in September.

The implementation of Power Purchase Agreements (**PPA**) is an important trend for the growth of the Australian solar industry, as it gives solar PV farm developers and investors certainty about the future revenue streams of generated energy and helps to de-risk projects. In May, one of the large Australian utilities announced it had signed a 13-year PPA for the output of the 100 MW Clare solar farm in North Queensland; the second major Australian solar PPA of the year, following the same utility signing a 15-year PPA for the output of the 57MW Moree solar farm in New South Wales (**NSW**). Interestingly, the solar farm was not one of the projects short-listed for grant funding assistance from ARENA. Ergon has also been active in signing renewable energy PPAs, announcing agreements with a 4.5 MW solar farm in March and 170 MW wind farm in May.

Australian state governments are progressively increasing their support for the development of solar PV in Australia. In August 2015, the Queensland government announced it would provide long-term financial support, via contracted revenue agreements, for up to 60 MW of large-scale solar generation, under a "Solar 60" program. Last month, the Queensland (**QLD**) government decided to increase the scale of the grant program to 120 MW, and renamed it "Solar 120". This is over and above the announced 150 MW of large-scale renewables, mostly solar, to be contracted by the state-government owned regional utility, Ergon Energy. The Solar 120 program aims to encourage new large-scale renewable energy projects in the state, reduce the cost and risk of future renewable energy projects by demonstrating financial and technology feasibility, and provide tangible learnings across development and supply chains.

In June 2016, the NSW government announced it would purchase 92 Gigawatt Hours of energy from solar projects,

equivalent to approximately 40 MW of solar capacity. Similar to the Solar 120 program, the move is expected to improve the viability of the eight NSW solar projects shortlisted in the current ARENA funding round.

The Victorian government announced in June, a renewable energy target of 40% by 2025, making it the latest state in Australia to introduce a target for large-scale renewables development. The ambitious plan will require some 5,400 MW of large-scale wind, and large and small-scale solar to be built in less than one decade. That compares to the current state capacity of 1,200 MW of large-scale wind and 930 MW of small-scale solar. The targets will be met with the help of reverse auctions modelled on the successful scheme pioneered by the ACT government, which aims to reach 100% renewable energy by 2020. Details will be released later this year, and the legislation enacted in early 2017.

In March 2016, the Clean Energy Finance Corporation (**CEFC**) announced the creation of a Clean Energy Innovation Fund (**CEIF**), which will commence operation in July 2016. The purpose of the CEIF is to support innovative, clean energy investments in renewable energy, energy efficiency, and low emissions technologies. The CEIF will focus on providing venture capital (debt and/or equity) to businesses and projects at early stages of development, which are seeking growth capital to further commercialise their projects. The CEIF will start with a $100 million investment mandate and will receive an additional $100 million for investment each year until the fund has scaled up to a size of $1 billion.

United States (US) renewable and solar market update

The US solar industry had a strong opening quarter of 2016 with 1,665 MW of solar PV installed in the US. During this period, the solar industry added more new capacity than coal, natural gas and nuclear combined. According to GTM Research and the Solar Energy Industries Association's (SEIA) US Solar Market Insight Q2 2016, the 1,665 MW accounted for 64 % of all new electric generating capacity brought on-line in the first quarter of the year.

This growth builds off the momentum of a record 2015, in which solar exceeded natural-gas capacity additions on an annual basis for the first time ever. The SEIA report also predicts that in 2016, the US solar industry will install a record 14.5 Gigawatts (**GW**) of capacity, representing a 94% increase over the 7.5 GW in capacity installed in 2015. The rapid pace of growth in solar installations in the US is effectively highlighted by SEIA's interim president Tom Kimbis, who recently stated: "While it took us 40 years to hit one million US solar installations, we're expected to hit two million within the next two years". North Carolina and California continue to dominate the growth of the solar PV market, accounting for 63% of 2016 installations thus far.

Last month, electric car company Tesla Motors made headlines when it announced a USD$2.8 billion bid to acquire renewable energy business SolarCity, the largest US solar panel maker, via a stock-swap deal. The bid signals Tesla's ambition to become the world's first vertically integrated energy company offering end-to-end clean energy products. The consolidation would allow customers to generate solar power from Tesla rooftop installations, store the energy in Tesla batteries and transfer the energy into Tesla electric cars. Increasing utilisation of electric cars would generate strong momentum for solar PV farms, and the broader renewable energy generation sector, given the higher energy demands of transitioning from petrol to electric cars.

A key uncertainty in the US market is the future of the assets and project pipeline of bankrupt global renewable energy company SunEdison. In the midst of bankruptcy proceedings, SunEdison still has 2.4 GW of projects in development that were projected to come on-line in 2016. SunEdison has engaged Rothschild and McKinsey to assist in Chapter 11 reorganisation. The liquidation of SunEdison's solar PV plants and pipeline could potentially increase the number of acquisition targets for the Fund in the US.

Global renewable and solar market update

Globally, solar PV production costs have continued to rapidly decline. The Mexican solar PV market made headlines in April following the conclusion of the government's first Clean Energy Auction for energy, power and Clean Energy Certificates for purchase by Mexico's only utility. The lowest PPA price bid was an astonishing US$35.44/Megawatt Hour (**MWh**) for a 427 MW project by Enel, setting a new world record for the lowest price per MWh for a solar project. The extent of the Mexican solar PV market's competitiveness was unanticipated and prompted dramatic revisions to growth forecasts. GTM is now predicting solar in Mexico will grow by 521% in 2016, as opposed to an earlier 267% growth forecast. The rapid growth of the Mexican solar market is underpinned by low labour costs, excellent irradiation, a stable economy, historically rising electricity prices and issuance of PPAs by a government-backed utility.

The world record for lowest production costs of Solar PV set by Mexico was short-lived. Weeks later a renewable energy tender in Dubai received a bid for unsubsidised Solar PV generation at US$29/MWh. The bid was for the addition of 800 MW capacity to an existing 13 MW solar PV plant, with another 200 MW already under construction. Unsubsidised solar PV pricing has declined, on average, 30% per year since 2013.

Another notable global trend is the increasing uptake of solar PV by developing countries. GTM Research expects

India to solidify as a major market, growing from 4% of the global market in 2015 to 13% by 2020. Should the forecast prove accurate, India would install as much solar in 2020 as all of Europe. GTM also predicts Latin America will double in size over 2016. Mexico's recent auction results have positioned the nation on-par with Brazil as the two most promising regions in Latin America. With over 12.5 GW of solar projects registered for Brazil's October 28 reverse auction, it will be interesting to see if solar PV generation prices are driven further downwards.

Fund Update

Transaction Update

On 1 August, the Fund was pleased to announce it had executed binding agreements to acquire a majority interest in its first asset, the 43.2 MW (DC) NC-31 Solar Power Project in Bladenboro, North Carolina (**Project**), from Vivo Power USA LLC (**Vivo**), for a total consideration of US$41.7 million (excluding transaction fees). Vivo will retain a minority interest and will be involved in the ongoing management of the asset. The Project's objective is to achieve an initial 5-year average annual yield of 6.4% based on the Fund's US$41.7 million investment[1].

The transaction is expected to be completed in early 2017 once the Project reaches operational completion and begins selling power.

The Project is an ideal asset for the Fund due to the quality of the equipment, including modules from Canadian Solar, the second largest supplier of modules globally, and the long-term energy off-take contract from the highly rated Duke Energy Progress, Inc, which is part of the largest electric power holding company in the United States.

For further details see the Fund announcement dated 1 August 2016.

Transaction pipeline

Along with negotiating and executing the acquisition of the first asset, the Fund has been engaged in developing a pipeline of transaction opportunities. Since inception the Fund has:

- Developed a database of 10 GW of prospective projects in Australia
- Reviewed 1,500 MW of solar projects in Australia
- Conducted in-depth review of 600MW globally (Australia, US, Singapore, Korea, Brazil)
- Submitted bids or expressions of interest for 250 MW, with a total equity value of more than $175 million
- Entered into binding agreements to acquire 43 MW

The Fund is continuing to engage with developers, contractors, manufacturers, utilities and other stakeholders to identify quality acquisition prospects. In Australia, much attention is focused on the outcome of the ARENA funding process, and the complementary QLD and NSW government schemes to write PPAs. The large utilities are approaching the PPA market cautiously, given the current oversupply of traditional generation capacity and changing market dynamics, which is challenging for developers who require the revenue certainty of PPAs in order to finance projects.

The US solar industry is substantially more developed than in Australia, with approximately 29 GW of installed solar PV capacity; enough to power 5.7 million American homes. By contrast, Australia has an installed solar PV capacity of slightly over 5 GW. This amount is less than the 7.3 GW installed in the US during last year alone and substantially less than the 16 GW forecasted to be installed in 2016.

The greater size of the US solar industry translates to abundant opportunities for prudent investors. As the US market has grown in size, new investment niches have developed. A growing sector of the US solar market is the smaller scale commercial/industrial (**C&I**) space, which involves solar plants of around 1-5 MW in size. GTM Research estimates the US C&I market will install 1.3 GW of solar PV plants over 2016, representing a 30% year-on-year increase.

C&I-scale solar installations are typically installed for large corporates and institutions who are motivated by the costs benefits of producing energy for daily operations from solar generation located on-site, as opposed to purchasing from the local utility at a retail, regulated or negotiated tariff. After signing long-term PPAs with these off-takers, investors fund and own the plants, and earn a return from contracted energy sales. The off-takers avoid committing their own debt or equity to fund construction of the solar generation, and enjoy the cost benefit of lower cost solar energy. These off-takers are commonly large, quality US corporates, some with investment-grade credit ratings, or other large entities that carry the credit backing of the Government (such as municipalities, schools and hospitals).

The C&I space is particularly interesting, as the most capable originators and developers build large portfolios of many smaller assets which are appealing to investors from a return and diversification perspective. It is anticipated that over time the C&I market will likewise develop in Australia, producing enticing domestic investment opportunities in this space.

1 The yield received by investors will be lower once the agreed fees of the Manager and Responsible Entity are deducted.

Team update

During the quarter there have been a number of positive additions to the team.

Tom Kline
Chief Executive Officer (CEO)

Tom will now be dedicated full time to the Fund and brings considerable experience in funds management, infrastructure and energy markets.

Tom was previously Chief Operating Officer of Walsh & Company, the funds management division of Dixon Advisory. Tom continues to work closely with the senior management of Walsh & Company to drive the growth and performance of the business and deliver investment opportunities for investors.

Before Dixon Advisory, Tom worked at UBS AG in Sydney. During his time at UBS, he was a member of the Power, Utilities and Infrastructure team and advised on a wide range of public and private M&A and capital market transactions. Tom advised some of Australia's leading energy generators and infrastructure players, including EnergyAustralia and Transurban. Tom also advised Australian energy and utility companies on the proposed introduction of the Carbon Pollution Reduction Scheme, and implications for fossil fuel and renewable energy generation.

Prior to joining UBS AG, Tom served in the Corporate Finance division of Deloitte. While at Deloitte, he worked in the Transaction Services, Business Modelling and Valuations Teams.

Tom is also a Director of Fort Street Real Estate Capital, Chairman of Australian Masters Yield Fund No 4 Limited and Australian Masters Yield Fund No 5 Limited, and a Director of Walsh & Company Investments Limited, the responsible entity of the New Energy Solar Fund, US Select Private Opportunities I, II & III, Emerging Markets Masters Fund, Australian Property Opportunities Fund I & II and US Masters Residential Property Fund.

Tom has a Bachelor of Commerce and Bachelor of Laws (with honours) from the Australian National University.

Liam Thomas
Director – Investments

Liam has extensive experience with large, listed companies in the areas of mergers and acquisitions, corporate and business development, projects, contracts and commercial management, across the energy, infrastructure, mining and agribusiness sectors.

Liam joined the Fund as Director - Investments in April 2016 and prior to this he was a senior member of the International Development team at Origin Energy, focused on the investment and development strategy for utility-scale solar portfolios, along with hydro and geothermal development projects, in Latin America and South-East Asia.

His previous roles include General Manager of Commercial Development at Aurizon, Australia's largest rail operator, focused on the acquisition and development of large-scale rail and port infrastructure projects and joint ventures; Commercial Manager for the North West Infrastructure iron ore port joint venture; and Project Manager at Orica, focused on the expansion of Orica's iron ore business and manufacturing capability in Western Australia and other growth projects across Australia.

Earlier in Liam's career, he worked in the agricultural commodities sector with AWB Limited.

Liam holds a Bachelor of Agribusiness and Master of Science from Curtin University, and a Master of Business Administration from Melbourne Business School.

About the Fund

New Energy Solar is a new, sustainable investment fund initially focused on investing in large-scale solar farms.

The Fund's objective is to help investors generate positive social impact alongside attractive financial returns through the combination of distributions from operating solar assets and growth through to new acquisitions and developments in the solar and renewables sectors.

The Fund will focus on acquiring and maintaining a diversified portfolio of solar and renewable energy assets across the globe, with an initial focus on solar assets with contracted cash flows in the US, Australia, and select Asian Markets.

The Fund is an unlisted stapled entity consisting of New Energy Solar Fund (**Trust**) and New Energy Solar Limited (**Company**) (together **New Energy Solar** or the **Fund**).

Boards of the Fund

Alex MacLachlan
Chairman of the Responsible Entity and the Company

- CEO Funds Management Dixon Advisory
- Previously Head of Energy, Australasia, for UBS AG
- Advised many of the world's leading energy companies, including BHP Billiton, Woodside, Oil Search, and Shell

Tristan O'Connell
Director of the Responsible Entity

- Chief Financial Officer, Dixon Advisory
- 20 years' experience in corporate, financial and management roles
- Previously financial controller of Tullett Prebon in Australia, one of the world's leading inter-dealer broker firms

Tom Kline
Director of the Responsible Entity and the Company

- Chief Executive Officer, New Energy Solar
- Previously a member of the Power, Utilities and Infrastructure team at UBS AG where he advised some of Australia's largest energy generators such as EnergyAustralia
- Advised Australian energy and utility companies on the proposed introduction of the Carbon Pollution Reduction Scheme

Warwick Keneally
Director of the Company

- Head of Finance, Funds Management Dixon Advisory
- Previously worked at a number of chartered accountancy firms including KPMG in Australia and London
- Expertise in complex insolvency and restructuring engagements across Europe, UK and Australia

For additional information see: **http://www.newenergysolar.com.au/**