



Project Update

Week ending 29 June 2018

Suntech and Biosar Australia PTY Ltd. (Aktor SA group) signed a supply agreement on PV modules

20 June

Wuxi Suntech Power Co. Ltd. (Suntech) announced that has signed a new supply agreement on PV modules with Biosar Australia PTY Ltd., a subsidiary of Aktor group of companies.

The cooperation between Suntech and Biosar affiliate companies ("Biosar") goes back to as early as 2009 and has set in operation already more than 260 MW of PV power stations, mostly in Continental Europe and the UK, while this is the first supply agreement between Suntech and Biosar for the most promising market of Australia, where both companies hold ambitious expansion plans. The combination of Suntech's proven quality and reliable technology with Biosar's paramount experience, engineering and execution competence have created dozens of successful installations and out-performing business plans, including pioneer and industry milestone installations.

This time, Suntech and Biosar Australia concluded a supply agreement for PV modules in two ground-mount PV power stations that are currently under construction in Australia. More than 275,000 of Suntech's polycrystalline STP330-24/Vfw Photovoltaic modules (1500V) that would be mount on NEXTracker single axis products are under production and delivery and expected to conclude by August, 2018. In addition, the



parties are actively negotiating on additional orders in Australia.

Dr. Aris Polychronopoulos, General Manager of Biosar stated that there couldn't be more meaningful way to enter into the second decade of cooperation between Biosar and Suntech than this agreement the Australian market, where both companies are strategically interested to expand and further invest.

Mr. HE Shuangquan, the President of Suntech, stated that in Australia, solar irradiation in over 80% of the total country area is more than 2000 KW/m²/H, so this country is of abundant solar power production resources. Therefore, with the same system cost, Australia has advantage in the photovoltaic power generation than other countries and regions. In addition to a variety of supportive policies promulgated by the local government, it's beneficial for Australia to develop and apply solar energy. Suntech has a long standing and excellent cooperation with Biosar that has succeeded to deliver projects in many countries across the world that have embraced solar PV technologies for power production, so far, and we intend to further strengthen and broaden this cooperation. By virtue of our global footprint and Suntech's excellent products, we enjoy wide recognition by a series of global players, such as Biosar, but also utilities, financiers, investors and

other stakeholders of the industry. We will never forget our original intention and we are committed in moving forward delivering clean and sustainable electric power by sun, the most abundant source of energy and create a better life.

Source: Suntech

Acquisition of first Australian asset

25 June

New Energy Solar to acquire 55.9MWdc Manildra Solar Project in NSW

Acquisition Highlights:

- Operating 55.9MWDC/ 46.7MWAC solar power plant
- 10-year PPA with EnergyAustralia and an option to extend to 2030¹
- Gross five-year average yield of 7.6% per annum² improves overall portfolio yield
- Strongly complementary to US assets and solid foothold for growth in Australia
- The total portfolio has a weighted average PPA term of 17 years³

New Energy Solar (ASX:NEW) announced that it has entered into an agreement to acquire the [Manildra Solar Farm](#) (Manildra) from a subsidiary of First Solar, Inc. (Nasdaq:FSLR, or First Solar). Using First Solar's advanced thin film photovoltaic solar modules, Manildra is already operating and delivering electricity into the National Electricity Market. Once full commercial operation is achieved, the plant will sell power and Large Scale Generation Certificates (LGCs) generated to EnergyAustralia, the third largest electricity retailer in Australia servicing more than 1.7 million customers.

John Martin, CEO of NEW said, "Acquiring Manildra is another impressive growth milestone for New Energy Solar. We have now added a very high-quality, operational asset in Australia to our existing portfolio of 20 power plants in the United States. With some of the highest levels of solar radiation in the world, Australia has enormous renewable energy

potential and Manildra gives us a strong foothold here.

"As we approach A\$1 billion of portfolio value, there is no doubt that our expertise in selecting and financing these assets is becoming more recognised, and we are delighted to be consolidating our relationship with First Solar through the acquisition of Manildra. Our relationships with solar technology providers, developers, contractors, electricity buyers, and financiers position us well in the global transition to renewable energy."

Manildra, in Central West NSW, will sell electricity under a 10-year Power Purchase Agreement (PPA) with an option to extend to December 2030⁴. The acquisition is based on an enterprise value of approximately A\$113 million (excluding transaction costs and stamp duty), with a target unlevered five-year annual average gross yield of 7.6%⁵ per annum compared to the current gross annualised yield on NEW's existing operating portfolio of approximately 6.6% per annum. The project yield is expected to grow with underlying price escalation in the PPA.

New Energy Solar's Head of Investments, Liam Thomas said, "Manildra reflects the very disciplined approach we have taken to acquiring all of our assets. It is an operational plant with a long-term offtake agreement to a creditworthy counterparty, and as such, it is consistent with our investment strategy and complementary to our existing US portfolio. It also has the added benefit of strong A\$ cash yields. When combined with our other acquisitions since listing in late 2017, New Energy Solar has assembled a high-quality portfolio of 21 contracted projects across the US and Australia – making it the largest ASX-listed investor in solar generation."

Kent Draper, First Solar's Vice President of Project Finance for Asia Pacific said, "This is an important milestone for our development activities in Australia and we are pleased to continue our support of New Energy Solar's renewable energy strategy as they acquire

their first solar asset in Australia. Local investment appetite is growing and the Manildra Solar Farm demonstrates the viability of reliable solar energy as a competitive, predictable asset”.

Subject to the satisfaction of conditions precedent customary for a transaction of this nature, NEW will acquire Manildra on a levered basis, funded with cash reserves, existing and new debt facilities. The project’s construction debt facility provided by Société Générale and MUFGBank will convert to an A\$ term facility at completion, with the underlying interest rate 75% hedged throughout the initial debt term, reducing exposure to future movements in domestic interest rates. Once completed, NEW’s gearing will move toward the target long-term gearing ratio of 50%.⁶

Constructed by RCR O’Donnell Griffin (ASX:RCR), one of Australia’s oldest and most experienced engineering and infrastructure construction providers, the plant is expected to generate more than 118,000 megawatt hours of electricity annually. This is equivalent to displacing more than 91,000 tonnes of CO2 emissions per annum, powering 14,000 average NSW homes, or removing 24,000 cars from the road.⁷

First Solar Energy Services will provide operations, maintenance and asset management services to the project under long-term contracts.

Once the Manildra transaction is complete and NEW’s committed and in-construction assets in the US are operational, NEW’s portfolio will comprise interests in over 730MWDC of operating solar projects across the US and Australia with a weighted average PPA term of 17 years.

NEW’s contribution to producing emissions free electricity continues to grow with the total portfolio expected to generate more than 1,500,000 megawatt hours of electricity annually.⁸

This is equivalent to displacing more than 986,000 tonnes of CO2 emissions, powering 170,000 US and Australian equivalent homes, or removing 237,000 US and Australian equivalent cars from the road, every year.⁹

1 Both NEW and EnergyAustralia will have unilateral options to extend the PPA to December 2030.

2 Unlevered five-year annual average gross yield before transaction cost, fees, interest and tax.

3 As at 30 June 2018 and assuming the option to extend the Manildra PPA is exercised.

4 Both NEW and EnergyAustralia will have unilateral options to extend the PPA to December 2030

5 Gross yield is measured before transaction costs, fees, interest and tax. The operating portfolio gross yield reflects the expected average gross yield during 2018 of the five assets currently operating in the US.

6 Unaudited estimate of gross debt divided by gross assets once the acquisition is completed.

7 Environmental estimates provided by First Solar.

8 Generation is illustrative of the total production of each asset based on P50 forecasts and all projects commissioned as expected. NEW’s effective equity accounted share of generation is expected to be approximately 1,375,000 megawatt hours

9 US CO2 Emission Reduction is calculated using the United States Environmental Protection Agency’s “Avoided Emissions and Generation Tool”, which estimates the regional displacement of fossil fuels for a new solar PV installation. Australian environmental estimates provided by First Solar.

Source: New Energy Solar

NEW PROJECT

Tidal turbine trial in Gladstone

25 June

Queensland's largest trading port is breaking new ground in the renewables space, after gaining approval for a tidal energy demonstration.

Gladstone Ports Corporation (GPC) has partnered with MAKO Tidal Turbines Pty Ltd (MAKO) to investigate how tidal flows at the Port of Gladstone can be harnessed to produce electricity.

Transport and Main Roads Minister Mark Bailey said it is the first demonstration of its kind in Australian tropical waters using port infrastructure.

"We are excited to see how government owned Port of Gladstone can work with MAKO to harness tidal energy and potentially contribute to Queensland's energy mix," Minister Bailey said.

Energy Minister Anthony Lynham said, "Queensland already is setting the pace on renewable energy via solar, wind and hydro. This very well could be another string to our bow."

GPC has already delved into the world of renewable energy, with a solar demonstration trial late last year.

GPC CEO Peter O'Sullivan said the Corporation is committed to energy efficiency and long-term sustainability.

"These initiatives are just the start of our renewable energy journey," Mr O'Sullivan said.

"We are excited to be partnering with MAKO to demonstrate the turbine's capabilities, particularly within a port environment."

The tidal turbine will be installed at the Port of Gladstone's Barney Point Terminal during the next two months.

Source: Gladstone Ports Corporation

Reliable renewable energy is possible with the Solar River project

26 June

A company based at the University of Adelaide's ThinkLab has been given the go ahead to proceed with one of the world's largest solar power projects.

The [Solar River Project](#) aims to supply 90,000 South Australian homes with affordable, reliable, solar energy.

Construction on the solar array is due to start in early 2019 at a site near Robertstown in South Australia's Mid North, halfway between Burra and Morgan. The Solar River Project has received Development Approval from the Minister for Planning.

The 200-megawatt array will include more than 3kms of solar cells connected to one of the largest batteries in the Southern Hemisphere a 120 megawatt hour battery.

The project has the support of the South Australian Government and the Ngadjuri Nation Aboriginal Corporation.

The Solar River Project CEO Mr Jason May said, "The Solar River Project is a 100% privately funded development which will create over 350 regional jobs in South Australia.

"A Mid North Regional Community Fund and the Ngadjuri Nation Aboriginal Corporation Heritage Agreement has been established for, community, employment, education, sport and arts programs over the next 25 years.

"A nature reserve will also be established near the site for research and flora, fauna protection programs."

Other project partners include Frazer-Nash Consultancy, Blackwood Heritage Consulting, Nature Foundation SA and Kleinfelder Australia.

The Solar River Project is a fast-moving South Australian company based at the University of Adelaide's new venture incubator, ThinLab.

Professor Mike Brooks, Deputy Vice-Chancellor (Research) at the University of Adelaide, said: "We can only marvel at the imagination and drive of The Solar River Project team. At the University of Adelaide, we have been delighted to host and support the company at our ThinLab innovation hub."

Stage 1 of the project will see the first electricity generated in late 2019.

For further updates: www.srproject.com.au

Source: University of Adelaide

NEW PROJECT

Barunggam Solar Farm

Location: 453 Engine Rd, Baking Board, Queensland

Capacity: 140 MW

Developer: Ubergly

LGA: Western Downs Regional Council

Description: Project site is on a 215 hectare property at Baking Board, 14km from the town of Chinchilla. The land is flat, so preparation and levelling costs will be low and there should be no reflectivity problems. The location has good access to 132KV transmission lines located 1.6km away. Development approval expected to be submitted in early July, with in principle approval from Powerlink. Memorandum of Understanding signed with Trina Solar, who are also partners in the project.

Contact: Anthony Element

Ubergly

Email: anthony.element@ubergy.com.au

Big carbon polluters meeting government

26 June

Today the Minerals Council, the Business Council, BHP and Bluescope are meeting with the Government.

Big industry.

Big carbon polluters.

The same industry that helped scrap the carbon price.

What do they think about the National Energy Guarantee?

They love it.

It's complex.

It's rushed.

But best of all, for them, it will close down the renewable industry for a decade.

No renewables from 2020 till 2030.

Their message for Tony Abbott and Co?

Mate – get on board.

This NEG is gold.

A decade of locking in fossil fuels.

A decade of locking out renewables.

If you love carbon pollution – it doesn't get better than this.

These carbon boosters are clinging onto the past.

As an industry group – we represent more than a thousand companies who are building the future.

- Solar companies.
- Wind companies.
- Battery companies.

Slashing power bills for ordinary Aussies.

Creating jobs.

Cleaning up the environment.

For us the NEG is aptly named – it represents NEGLIGENCE.

- Negligent leadership
- Negligent economics
- Negligent on the environment

To the federal government we say this:
We see clearly.

And we will never support a NEG that locks in coal.

A NEG that locks out renewables.

A NEG that stops the states from taking action on climate change.

Our position is clear

State and Territory Governments must reject the NEG - until strong emissions reduction targets are locked in and the States can push ahead on renewables.

It's finally time for the future to triumph over the past ...

Kind Regards,
John Grimes
CEO, Smart Energy Council

Aggreko targets renewable energy and battery storage at Gold Fields' Granny Smith Mine

26 June

Exactly 2 years after replacing the existing diesel power station with a high-speed, gas-fuelled reciprocating engine station, Aggreko is now working with Gold Fields to introduce renewables at its Granny Smith gold mine in Western Australia.

Aggreko won the contract to build and operate the 21MW power station in 2016, and has since worked with Gold Fields on plans to provide 7.3MW of solar power generation, as well as a 2MW/1MWh battery system, to be integrated with the existing gas supply as a hybrid power station.

Since acquiring battery storage company Younicos last year, Aggreko has been able to bring together multiple technologies and power sources to support off-grid applications at remote mine sites. "We recently announced the availability of microgrids-as-a-service for customers who want to leverage the benefits of hybrid energy solutions while minimising capital outlay," said Karim Wazni, Managing Director of Younicos. "This system will be the first time Aggreko incorporates battery storage into a hybrid power system, and - significantly - it's a rental, which underscores the value and appeal of this new model."

"Our mining clients have faced a challenging market place and power generation is a significant proportion of operating costs. Our global capability offers additional flexibility which reduces investment and operational risk," said George Whyte, Managing Director of Aggreko AusPac. "Aggreko's focus is on fuel efficiency and reliability in line with the power demand over the life of the mine," Mr Whyte said.

Stuart Mathews, Executive Vice President Australasia at Gold Fields, said that in addition to the cost efficiency and reliability benefits of the new hybrid power station, the upgrade reflected Gold Fields' commitment to the increased usage of renewable and low-carbon energy sources throughout the Group. Gold Fields is committed to using renewables for at least 20% of total life-of-mine power requirements in new projects.

Gold Fields currently operates all three of its Western Australian gold mines by using gas-powered electricity.

The proposed new hybrid power station, combined with a thermal station expansion at Granny Smith mine will meet the increased daily power needs of the entire mine of 24.2MW, with 8MW allocated to the Wallaby underground mine and the remaining 16.2MW for the processing plant, associated facilities and the mine camp.

Source: Aggreko

New Energy Solar and Clean Energy Finance Corporation sign binding agreements for a \$50 million facility

26 June

New Energy Solar (ASX:NEW) announced that it has entered into binding agreements with the Clean Energy Finance Corporation (CEFC) for the establishment of a new A\$50 million acquisition facility (Facility).

John Martin, CEO of NEW said, “Establishing the Facility is an important milestone for New Energy Solar to facilitate its growth in the Australian market. NEW has announced the acquisition of its first solar plant in Australia, Manildra, and the Facility provides NEW with funding flexibility that will assist it to acquire further Australian assets. Australia has enormous renewable energy potential and we look forward to seeing further growth in investment in Australian renewables.”

CEFC CEO Ian Learmonth said, “New Energy Solar’s plans to expand its portfolio with Australian solar farms such as Manildra is great news for investors and for large-scale solar in Australia. By working with New Energy Solar we’re looking to catalyse further private investment that supports the sector and contributes to the on-going decarbonisation of Australia’s electricity network.”

Source: New Energy Solar

Statement on the National Energy Guarantee

26 June

The ACT today expressed its surprise and dismay at the Federal Energy Minister’s comments welcoming the building of new coal-fired power plants as part of the National Energy Guarantee, or NEG.

“In some ten months of negotiations, today’s comments from the Federal Energy Minister that he would welcome new coal-fired power stations have come as quite the unwelcome surprise,” ACT Minister for Climate Change and Sustainability Shane Rattenbury said today.

“Electricity prices are already high, and consumers will only bear further costs unless the Coalition embraces the modern age of cheap, reliable, renewable energy. Despite the protestations of Mr Abbott, and now it seems, Mr Frydenberg, the era of coal is over. We need to phase out this technology if we’re to have any chance of a decent future for energy and the environment in Australia,” Mr Rattenbury said.

The NEG plan does not anticipate sudden exits of coal-fired power stations, despite the recent closure of the Hazelwood in Victoria “triggering a spike in electricity prices”, Mr Rattenbury said. The brown coal-fired power station gave just six months’ notice of its closure in March 2017—an increasingly likely scenario that the NEG had yet to account for.

“With some of the lowest electricity prices in the country, the ACT is already showing the way with renewables. We will have 100% renewable electricity by 2020 and expect to achieve zero net emissions by 2045 at the latest,” Mr Rattenbury added.

Last week the 2018 Lowy Institute’s annual poll on Australian attitudes found that almost all Australians (84%) agree the government should focus on renewables. Only 14% said that the Federal government should focus on energy sources such as coal and gas.

Source: ACT Government

GE focuses portfolio for growth and shareholder value creation

26 June

- Company to focus on Aviation, Power and Renewable Energy
- Healthcare to become standalone company; GE expects to monetize 20% and distribute remaining 80% of GE Healthcare to shareholders tax-free
- Plans to fully separate Baker Hughes, a GE company (BHGE)
- Strengthening the balance sheet: Clear path to reduce debt by \$25 billion, achieve Industrial net debt to EBITDA of less than 2.5x by 2020 and further de-risking GE Capital
- Businesses as center of gravity: Leaner corporate structure with \$500+ million in savings
- Plans to maintain current quarterly dividend through completion of Healthcare separation
- Larry Culp to succeed Jack Brennan as lead director
- Company to host a call with investors at 8:30 am ET

GE (NYSE: GE) today announced the results of its strategic review. GE will focus on Aviation, Power and Renewable Energy, creating a simpler, stronger, leading high-tech Industrial company. In addition to the pending combination of its Transportation business with Wabtec, GE plans to separate GE Healthcare into a standalone company, pursue an orderly separation from BHGE over the next two to three years, make its corporate structure leaner and substantially reduce debt. GE's Board of Directors unanimously approved the plans announced today.

John Flannery, chairman and CEO of GE, said, "Today marks an important milestone in GE's history. We are aggressively driving forward as an aviation, power and renewable energy company—three highly complementary businesses poised for future growth. We will continue to improve our operations and balance sheet as we make GE simpler and stronger."

Flannery continued, "GE Healthcare and BHGE are excellent examples of GE at its best—anticipating customer needs, breaking barriers through innovation and delivering life-changing products and services. Today's actions unlock both a pure-play healthcare company and a tier-one oil and gas servicing and equipment player. We are confident that positioning GE Healthcare and BHGE outside of GE's current structure is best not only for GE and its owners, but also for these businesses, which will strengthen their market-leading positions and enhance their ability to invest for the future, while carrying the spirit of GE forward."

GE of the Future

GE will be a focused high-tech industrial company that will be easier for investors to follow and measure with a significantly improved balance sheet to support its remaining businesses:

- GE Aviation continues to be a leader in the aviation industry. GE technology powers two out of every three commercial departures around the world and GE's global installed base includes more than 65,000 engines.
- GE's energy strategy, driven by GE Power and GE Renewable Energy, is based on offering a full range of energy solutions across the electricity value chain that bring affordable, reliable, efficient energy to businesses and consumers. GE powers more than one-third of the world's electricity and has a valuable installed base of approximately 7,000 gas turbines, with a track record of increasing productivity.
- GE will continue to invest for the future and lead in innovative technologies like additive manufacturing and digital to lead the next wave of industrial productivity.

GE is making fundamental changes to how it will run the company. The new GE Operating System will result in a smaller corporate headquarters focused primarily on strategy, capital allocation, talent and governance. It will result in better execution, increased speed and is expected to generate at least \$500 million in corporate savings by the end of 2020. Under the new GE Operating System,

most resources and services traditionally held at the headquarters level will be realigned to the businesses.

GE is targeting an Industrial net debt-to-EBITDA ratio of less than 2.5 times and a long-term A credit rating. GE also plans to reduce Industrial net debt by approximately \$25 billion by 2020 and maintain more than \$15 billion of cash on the balance sheet.

GE expects to maintain its current quarterly dividend, subject to Board approval, until GE Healthcare is established as an independent entity. At that time, the new GE Healthcare Board of Directors will determine GE Healthcare's dividend policy, which GE expects to reflect healthcare industry practices. Also at that time, the GE Board expects to adjust the GE dividend with a target dividend policy in line with industrial peers.

Creating GE Healthcare as a Standalone, Pure-Play Company

Kieran Murphy, president and CEO of GE Healthcare, will continue to lead GE Healthcare as a standalone company, maintaining the GE brand.

"GE Healthcare's vision is to drive more individualized, precise and effective patient outcomes. As an independent global healthcare business, we will have greater flexibility to pursue future growth opportunities, react quickly to changes in the industry and invest in innovation. We will build on strong customer demand for integrated precision health solutions and great technology with digital and analytics capabilities as we enter our next chapter," said Mr. Murphy.

Flannery added, "GE Healthcare is an industry leader with financial strength, global scale and cutting-edge technology. Our talented Healthcare team will continue delivering precision health solutions, building on our heritage of technology innovation that delivers patient outcomes."

GE Healthcare recorded over \$19 billion in revenues in 2017 and posted five percent revenue growth and nine percent segment profit growth in the same year. The business provides medical imaging (including contrast agents), monitoring, biomanufacturing and cell therapy technology, leveraging deep digital, artificial intelligence and data analytics capabilities. Its products and services are valued by customers in 140 countries around the world.

GE expects to generate cash from the disposition of approximately 20% of its interest in the Healthcare business and to distribute the remaining 80% to GE shareholders through a tax-free distribution. The structure, sequence and timing of these transactions will be determined and announced at a later date, but are expected to be completed over the next 12 to 18 months. GE Healthcare will conduct business as usual throughout this process, continuing to serve its partners and customers.

BHGE

GE plans to fully separate its 62.5% interest in BHGE in an orderly manner over the next two to three years. BHGE's full stream offering brings together equipment, services and digital solutions to help its customers be more productive—a unique and powerful value proposition in a changing market. The separation will provide BHGE with enhanced agility and the ability to focus on leading in the oil and gas industry.

GE Capital

GE continues to work to make GE Capital smaller and more focused on supporting its core industrial businesses. The company intends to materially shrink the balance sheet of GE Capital targeting sales of \$25 billion in energy and industrial finance assets by 2020. The company is assuming an approximately \$3 billion capital contribution to GE Capital in 2019. In addition, the company is actively exploring options to reduce its insurance exposure.

Source: GE

Baker McKenzie acts on AUD \$500 million Macarthur Wind Farm refinancing

27 June

Baker McKenzie successfully represented a syndicate of lenders on the successful refinancing of the approx. AUD \$500 million debt facility and hedging arrangements in relation to the Malakoff Corporation Berhad's (MCB) 50 per cent interest in the [Macarthur Wind Farm](#). The Macarthur Wind Farm is located in south-west Victoria. MCB is a Malaysian power producer which acquired 50 per cent stake in the Macarthur Wind Farm in June 2013.

Baker McKenzie lead partner on the refinancing, Sean Rush stated: "The Macarthur Wind Farm is the biggest in the southern hemisphere, comprising 140 turbines with 420 megawatts (MW) of capacity. Construction of the \$1 billion Macarthur Wind Farm took approximately 2.5 years and has been in operation since January 2013. The 420 MW Macarthur Wind Farm can generate enough clean energy to power the equivalent of approximately 154,000 average Australian homes."

Sean further commented: "We were delighted to have acted, following previous involvement in the acquisition and financing by MCB of its interest in the Macarthur Wind Farm and subsequent sale by AGL of its interest in the Macarthur Wind Farm to private equity firm, HRL Morrison & Co. Not surprisingly, we had an excellent knowledge and understanding of the project and hence, were well positioned to advise the incoming lenders." The financiers included Black Rock, BNP Paribas, ING, Mizuho, OCBC and Société Générale.

Sean was assisted by a Baker McKenzie team comprising: senior associate, Robyn Farrell and lawyer, Luis Grech (Banking & Finance team) along with partner, Paul Curnow; special counsel, Kate Phillips; and lawyer, Ritu Thomas (Environmental Markets team).

In late March, Baker McKenzie advised the financiers on the project financing of the Bulgana Green Power Hub (BGPH) in Victoria, an integrated wind farm and battery storage facility - Neoen's largest single-stage project in Australia. Located in Stawell, regional Victoria, the BGPH will comprise a 194 MW wind farm with Siemens-Gamesa wind turbines, combined with a 20 MW / 34 MWh lithium-ion battery provided by Tesla.

Source: Baker McKenzie

Energy Security Board – draft detailed design of the National Energy Guarantee: consultation paper

The draft Detailed Design of the National Energy Guarantee (Guarantee) has been released by the independent Energy Security Board for public consultation. The Guarantee has been designed with the intention to deliver more reliable, affordable and cleaner energy to Australian consumers.

The Energy Security Board is now seeking feedback from stakeholders on the draft Detailed Design.

Detailed Design Process

The Energy Security Board's [high level design proposal](#) for the Guarantee was presented to a meeting of the COAG Energy Council on 20 April 2018. It was agreed the Energy Security Board should progress development of the detailed design of the Guarantee, for determination at the COAG Energy Council's August 2018 meeting.

The Energy Security Board released a series of issues papers in May 2018 to facilitate discussions with jurisdictions and Technical Working Groups on several detailed design elements. The feedback from these discussions has informed the draft Detailed Design.

To provide further detail on some of the technical elements of the draft Detailed

Design, the Energy Security Board released a series of Technical Working Papers on 22 June 2018. The Technical Working Papers build on the issues papers released in May and feedback from stakeholders.

[Further details on the National Energy Guarantee](#)

Public consultation

The Energy Security Board is consulting broadly in finalising the design of the Guarantee.

A public forum and live webcast will be held on Monday 2 July 2018 to discuss the National Energy Guarantee. The event and webcast will provide an opportunity for members of the Energy Security Board and the Project Team to speak to the draft Detailed Design of the Guarantee and hear from stakeholders.

The public forum will be held at Melbourne Convention Centre on Monday 2 July at 10:00am - 1:30pm AEST. To register your interest in attending the public forum, please send an email with your first and last name to info@esb.org.au Please note that all attendees must register to attend this event.

A webcast of the public forum will be available live and a recording of the webcast will be made available online in the days following the event. To participate in the live webcast, please register your interest [here](#)

The forum and webcast are public events and are open to anyone with an interest in the the development of the Guarantee.

Should you have any further questions, please contact the Secretariat at info@esb.org.au.

Submissions

The Energy Security Board is seeking feedback on the draft Detailed Design by 13 July 2018. Late submissions will not be accepted. The feedback received in response to the paper will help inform the Energy Security Board's final design that will be considered by

the COAG Energy Council at its meeting on 10 August 2018.

All reviewed submissions will be published on the COAG Energy Council's website, subject to any claims of confidentiality. All submissions should be sent to info@esb.org.au.

Submission close date	13 July 2018
Lodgement details	Email to: info@esb.org.au
Naming of submission document	[Company name]
Form of submission	Clearly indicate any confidentiality claims by noting "Confidential" in document name and in the body of the email
Late submissions	Late submissions will not be accepted.
Publication	All submissions will be published on the COAG Energy Council's website, following a review for claims of confidentiality.

Next steps

Following the consultation process, the detailed design will be finalised and presented to the COAG Energy Council at its meeting on 10 August.

If the COAG Energy Council approves the final design of the Guarantee at its August 2018 meeting, it is expected that draft legislation will be finalised for introduction to the South Australian Parliament by the end of 2018.

The Commonwealth Government has prepared a draft detailed design document, [National Energy Guarantee Draft Detailed Design - Commonwealth Elements](#), for consultation on the design elements that are its responsibility.

Source: COAG

Carnegie and Tag Pacific to merge EMC and MPower to create leading regional renewables, storage and microgrid specialist

28 June

Carnegie Clean Energy (ASX: CCE) ("Carnegie") and Tag Pacific Limited (ASX: TAG) ("Tag") today announce the signing of an Implementation Deed which sets out the terms and key steps for the acquisition by Tag of Carnegie's Energy Made Clean (EMC) to create one of the region's largest, specialist Engineering, Procurement, Construction (EPC) and Build, Own, Operate (BOO) specialists in the rapidly growing off-grid and fringe-of-grid solar, battery and microgrid markets.

Upon completion of the transaction, the combined ASX-listed business will be renamed MPower and will have enhanced national reach, with over 130 staff on both coasts of the country. It will be a leading renewables, battery storage and microgrid developer, designer and constructor in the region with active projects across Australia, New Zealand and the Pacific.

As consideration for EMC, Carnegie will receive 58,507,377 fully paid ordinary shares in Tag which will be distributed in-specie by Carnegie to its shareholders. This corresponds to approximately 32% of the fully paid ordinary shares on issue in Tag post completion of the transaction but pre-capital raise by Tag (see transaction summary below). Carnegie shareholders will continue to retain their existing fully paid ordinary shares in Carnegie.

The proposed, combined entity would have had combined pro forma revenue in FY2018 in excess of \$50 million. In line with market growth expectations, revenue of the enlarged group is expected to increase in FY2019 and beyond. The combined entity would start FY2019 with a combined committed order book of approximately \$20 million and once the EMC business and the MPower business

are fully integrated, the combined business is expected to have sufficient scale to enable profitability to be achieved.

Upon completion of the transaction, Carnegie will continue as a renewable energy company focusing on commercialising its CETO wave energy technology. It will also retain 100% ownership of the Garden Island Microgrid, and its current 50% ownership of the Northam Solar Farm. As a consequence of the transaction, Carnegie will also preserve its eligibility for the R&D tax cash back incentive.

CEO and Managing Director of Carnegie, Dr Michael Ottaviano said:

"This is a compelling opportunity to unlock the significant potential from the microgrid market in Australia, New Zealand and the Pacific, bringing together two of the leading entities in Australia to create a national champion.

"A scrip based merger of EMC with MPower provides Carnegie shareholders with direct ownership of a specialist microgrid market leader and a strong financial platform for the 2019 financial year and beyond. The Carnegie board believes this is a more compelling alternative for shareholders than an organic growth strategy with EMC which would require additional working capital over a longer time frame."

Tag Chief Executive Officer, Nathan Wise, said:

"We are excited by the opportunity to bring together two leading renewable and battery storage businesses and to welcome Carnegie's shareholders into our group."

"The microgrid market is growing rapidly and consolidation in the sector is inevitable. The enlarged MPower business will be well placed to take a leadership position and dominate this market. We have plans to grow the combined group rapidly across our EPC, Build Own Operate (BOO) and Products divisions. We also plan to establish a dedicated vehicle to house our BOO solar and battery energy storage assets as they are developed."

The combined business will integrate the engineering, procurement and construction activities of both existing businesses, maintaining their strong presence in WA and NSW to deliver a national and regional capability. It will also integrate EMC's solar project development pipeline in order to create a stand-alone build, own and operate solar and microgrid asset portfolio.

The microgrid market in Australia has been forecast to represent in excess of \$1.6 billion over the decade from 2016 to 2026¹ and globally the market is forecast to grow over 10-fold through to 2020 from 2013².

The ASX-listed MPower will be led by current Tag Pacific CEO, Nathan Wise, with a Board and Management team combined from each business. As the first step in a board renewal process, Tag would invite CCE to nominate two directors to join the MPower board from completion of the proposed transaction.

The proposed transaction is subject to a number of conditions precedent including the execution of binding legal documents, a number of key contract novations and third party consents, and approval of both TAG and CCE shareholders. Shareholder Meetings are expected to be held in August and more information will be provided to shareholders ahead of this.

Upon completion of the transaction, MPower intends to undertake a capital raising to fund the growth of the enlarged group and the development and financing of Build, Own, Operate projects.

1. Energeia (2016), Cutting the Cord: The Australian Outlook for New Microgrids to 2026
2. Navigant Research (2013)

Source: Carnegie Clean Energy/Tag Power

PROJECT NEWS

Kaimai Wind Farm

Ventus Energy has applied for resource consents from the Hauraki District Council and Waikato Regional Council for the 24-turbine, 100 MW [Kaimai Wind Farm](#) project in the northern Kaimai Ranges near Paeroa, New Zealand. The \$180 million project will connect to the grid via existing 110kV power lines.

Palaszczuk Government helps to fast track energy storage industry

28 June

Queensland's renewable future is taking another step forward with the Palaszczuk Government looking for businesses to help fast track battery energy storage.

Energy Minister Dr Anthony Lynham is urging businesses to get involved in the *Interest free loans for solar and storage* program which will see 1500 battery energy storage systems installed across the state later this year.

Premier Annastacia Palaszczuk and Dr Lynham on Monday launched the interest-free solar system loan program, which will see 3500 households gain packages for up to \$4500 to install a solar system. Battery storage is the next step.

"In Queensland we have one of the highest penetrations of rooftop solar in the world - currently there are more than 479,000 households with rooftop solar, and the next chapter in our renewable journey is to store this solar power via battery systems," Dr Lynham said.

"Soon battery energy storage will be a standard part of our power technology mix - consumers will have the choice to use their solar power when it suits them- not just when the sun is shining.

"And to help kick-start its uptake, later in 2018 the Palaszczuk Government will be offering households and small businesses

grants and interest free loans for the purchase and installation of battery systems.

“We are calling for a panel of pre-qualified battery retailers to supply and install the 1500 battery systems for households and businesses as part of our *Interest free loans for solar and storage* program.

“These retailers must have a demonstrated commitment to safety, quality and industry best practice, and this tender is open to companies big and small across Queensland.

“If your business is a signatory to the Clean Energy Council Solar Retailer Code of Conduct, or an equivalent retailer code, or if you are applying to be a signatory, then I encourage you to get involved.

“In late 2018 the *Interest free loans for solar and storage* program will offer grants of up to \$3000 and interest-free loans of up to \$10,000 for systems with battery storage.

“Queenslanders who receive a loan or grant will need to purchase their storage system from one of the panel’s retailers.

“Not only is this government providing innovative ways to access renewable energy storage, it’s also creating employment opportunities and helping to grow the state’s renewable industry,” Dr Lynham said.

Businesses wanting to become a pre-qualified battery retailer for the *Interest Free Loans for*

Solar and Storage program can access the tender documents through [QTender](#).

Tenders are open to 24 July 2018.

Source: Queensland Government

TENDERS

Barwon Water projects

Barwon Water is seeking to appoint a suitably qualified and experienced Principal Contractor to complete the following works:

Design, supply, installation and commissioning of a 2.0 MWpDC ground mounted solar array at the Black Rock Water Reclamation Plant, Connewarre, Victoria.

Enquiries should be made to:

gerardtognon@barwonwater.vic.gov.au

Barwon Water is seeking to appoint a suitably qualified and experienced Principal Contractor to complete the design, supply, installation and commissioning of a Low Voltage Grid-Connected 300 kWpDC ground mounted solar array plus a maximum 180 kVA / 200 kWh of battery storage or alternate solution, to be constructed at the Wurdee Boluc Water Treatment Plant.

Enquiries should be made to:

Zac Elsworthy on 03 5226-9153 or email: zac.elsworthy@barwonwater.vic.gov.au

Closes 25 July 2018

More information available from <https://www.tenderlink.com/barwonwater/>