



# Renewable energy. Sustainable investments.

New Energy Solar is an award-winning sustainable investment business focused on investing in large-scale solar power plants that generate emissions-free power. As Australia's first ASX-listed solar infrastructure business, we have invested over A\$860 million¹ in solar plants across the United States (US), helping investors generate positive social impact alongside attractive financial returns. To learn more about New Energy Solar, please visit www.newenergysolar.com.au.

# **Summary**

Following the successful Initial Public Offering (IPO) and ASX-listing in 2017, New Energy Solar (NES, NEW, the Business) has had a strong start to 2018, acquiring two significant assets from the 2 GW pipeline identified during the IPO. In February, NES announced the acquisition of the Mount Signal 2 (MS2) project, a 200 MW $_{\rm DC}$  plant to be constructed in southern California, as well as an interest in the Boulder Solar 1 plant, an operational 125 MW $_{\rm DC}$  solar facility in Nevada. Both plants have long-term contracted offtake with investment-grade counterparties and together, represent an unlevered investment of approximately US\$350m.

Construction on NES' North Carolina projects has progressed well, with six plants now under construction – the first of which has reached mechanical completion.

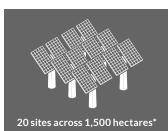
During the first quarter (**Q1**) of 2018, NES' five operating solar power plants performed in line with expectations, generating 99,700 megawatt hours<sup>2</sup> (**MWh**) of electricity.

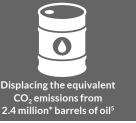
**Did you know:** NES' combined solar power plants would cover an area over five times the size of the Sydney CBD.<sup>4</sup>

#### **FINANCIAL SUMMARY 31 MARCH 2018**

Market Capitalisation	\$475 million
Stapled Security Price	\$1.44
Target 2018 Distribution per Stapled Security	7.75 cents
Target 2018 Distribution Yield	5.4% <sup>3</sup>

# PORTFOLIO HIGHLIGHTS







Capacity weighted average Power Purchase Agreement term of 17.5 years with investment-grade offtakers<sup>6</sup>



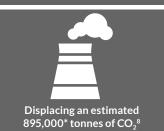
More than 1.5 million solar panels generating emissions-free electricity<sup>7</sup>



Distributed A\$13 million to investors in February



Total portfolio capacity of 680 MW<sub>DC</sub>\* making NES one of the largest renewable investors in Australia





Powering the equivalent of 156,000\* homes<sup>9</sup>

<sup>\*</sup>Estimates assume all construction and committed projects are operational and all projects and plants are owned on a 100% basis. <sup>1</sup> Figure based on an approximate total purchase price for NES' projects of US\$664 million converted to A\$863 million assuming a USD/AUD exchange rate of \$1.30. <sup>2</sup> Based upon NES' equity interest in each plant. <sup>3</sup> Based on 2018 distribution of 7.75 cents per Stapled Security and Stapled Security price of \$1.44 at 31 March 2018. <sup>4</sup> Based on NES portfolio size of 1,500 Hectares and Sydney CBD size of 280 Hectares. <sup>5</sup> Calculation based on the US Environmental Protection Agency's Greenhouse Gas Equivalences Calculator. Carbon dioxide emissions per barrel of crude oil are determined by multiplying heat content (5.8 mmbtu) times the carbon coefficient (20.31kg) times the fraction oxidized (100%) times the ratio of the molecular weight of carbon dioxide to that of carbon(44/12). <sup>6</sup>PPA terms of committed projects are averaged from commercial operations date. <sup>7</sup> Number of solar modules sourced from independent engineer reports commission for NES. This figure excludes the 'Rigel' portfolio. <sup>8</sup> Solar energy plant CO<sub>2</sub> emission reduction calculated using the US Environmental Protection Agency's AVoided Emissions and geneRation Tool (AVERT). CO<sub>2</sub> emissions dupon an average house utilising approximately 8,375 KWh per annum (based upon the average annual electricity consumption of Australian and US households).

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# **PORTFOLIO SUMMARY**



NEVADA PLANTS			
NAME	CAPACITY (MW <sub>DC</sub> )	LOCATION	OFFTAKER
Boulder Solar 1	125.0	Clarke County	NV Energy
Total	125.0		



Key
Operational
Acquired and under construction
Committed

CALIFORNIA PLANTS			
NAME	CAPACITY (MW <sub>DC</sub> )	LOCATION	OFFTAKER
Mount Signal 2	200.0	Imperial Valley	Southern California Edison
Stanford SGS	67.4	Rosamond	Stanford University
TID SGS	67.4	Rosamond	Turlock Irrigation District
Total	334.8		

ADDITIONAL COMMITTED US PROJECTS			
NAME	CAPACITY (MW <sub>DC</sub> )	LOCATION	EXPECTED OFFTAKER
Rigel Portfolio <sup>1</sup>	87.4	North Carolina and Oregon	Duke Energy Progress and PacifiCorp
Total	87.4		

	NORTH	I CAROLINA I	PLANTS
NAME	CAPACITY (MW <sub>DC</sub> )	LOCATION	OFFTAKER/EXPECTED OFFTAKER
NC-31	43.2	Blandenboro	Duke Energy Progress
NC-47	47.6	Maxton	Duke Energy Progress
Arthur	7.5	Columbus	Duke Energy Progress
Hanover	7.5	Onslow	Duke Energy Progress
Heedeh	5.4	Columbus	Duke Energy Progress
Organ Church	7.5	Rowan	Duke Energy Carolinas
County Home	7.2	Richmond	Duke Energy Progress
Total	125.9		

**Notes:** Includes plants that are either wholly or partly owned by NES. Total portfolio of 680 MW<sub>DC</sub> includes plants that are operational, acquired and under construction or committed. <sup>1</sup> Rigel Portfolio refers to portfolio of assets NES has acquired, or has committed to acquire from Cypress Creek Renewables.

# **ACQUISITIONS DURING THE QUARTER**

	BOULDER SOLAR 1
Purchase price	US\$55 million <sup>10</sup>
MW <sub>DC</sub>	125
Number of panels	287,000
Modules	SunPower
Land size (Ha)	219
PPA Term	20 years
Counterparty	NV Energy (subsidiary of Berkshire Hathaway Energy)
Operational date	December 2016
Annual generation (MWh)	279,000
CO <sub>2</sub> displacement (tonnes)	210,00011
Equivalent homes powered	28,500



Boulder is a significant renewable energy asset, generating over 279,000 megawatt hours of electricity annually. The electricity generated by Boulder is one of the energy sources that has allowed Las Vegas to become the largest US city to rely solely on renewable energy for city facilities.

### Q1 2018



MS2 is NES's largest investment to date in terms of generation capacity and, once operational, it will almost double the Business' positive environmental impact. MS2's location in southern California will enable the plant to benefit from the regions' strong solar irradiance.

Purchase price US\$290 million  MW <sub>DC</sub> 200  Number of panels 464,220  Modules First Solar  Land size (Ha) 532  PPA Term 20 years  Counterparty Southern California Edison  Expected operational date Late 2019  Annual generation (MWh) 458,489  CO <sub>2</sub> displacement (tonnes) 245,000 <sup>11</sup> Equivalent homes powered 45,000	MOUNT SIGNAL 2		
Number of panels464,220ModulesFirst SolarLand size (Ha)532PPA Term20 yearsCounterpartySouthern California EdisonExpected operational dateLate 2019Annual generation (MWh)458,489CO2 displacement (tonnes)245,00011	Purchase price	US\$290 million	
Modules First Solar  Land size (Ha) 532  PPA Term 20 years  Counterparty Southern California Edison  Expected operational date Annual generation (MWh) 458,489  C0 <sub>2</sub> displacement (tonnes) 245,000 <sup>11</sup>	MW <sub>DC</sub>	200	
Land size (Ha) 532  PPA Term 20 years  Counterparty Southern California Edison  Expected operational date Late 2019  Annual generation (MWh) 458,489  CO <sub>2</sub> displacement (tonnes) 245,000 <sup>11</sup>	Number of panels	464,220	
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Expected operational date  Annual generation (MWh)  C0 <sub>2</sub> displacement (tonnes)  Late 2019  458,489  245,000 <sup>11</sup>	PPA Term	20 years	
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	Annual generation (MWh)	458,489	
Equivalent homes powered 45,000	CO <sub>2</sub> displacement (tonnes)	245,00011	
	Equivalent homes powered	45,000	

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# **PORTFOLIO UPDATE**

# **Operating Projects**

Five projects totalling 350.6  $MW_{DC}$  of capacity 12

With the addition of the Boulder Solar 1 plant to NES' operating portfolio, NES now has five fully operational plants in California, Nevada, and North Carolina. During Q1, these plants generated approximately 99,700 MWh.<sup>13</sup> Plant availability during the period was in line with management's expectations.

With the northern hemisphere spring and summer approaching, production from the portfolio is expected to increase materially in coming months.

Production from NES' operating plants displaced the equivalent of 61,500 tonnes of  ${\rm CO_2}^{14}$  emissions during the quarter, which is comparable to removing nearly 14,600 cars<sup>15</sup> from the road.

# Projects acquired and under construction

Seven solar projects totalling 241.9 $MW_{DC}$  of capacity

Construction activities associated with five North Carolina (Arthur, Hanover, Heedeh, Organ Church and County Home) solar projects and one Oregon (Bonanza) project acquired from Cyprus Creek Renewables (CCR) progressed well over the quarter. A subsidiary of CCR is responsible for the construction of the projects, with independent engineering firm ICF monitoring progress to ensure the plants are built to specification and delivered on time.

#### Monthly generation profile<sup>16</sup>









 $^{12}$  Includes operating plants on a 100% basis.  $^{13}$  Based upon NES' equity interest in each plant.  $^{14}$  Solar energy plant CO $_2$  emission reduction calculated using the US Environmental Protection Agency's AVoided Emissions and geneRation Tool (AVERT). CO $_2$  emissions displacement is calculated as the emissions that would be produced during the calculation period if the same amount of energy was produced by a coal fired plant instead.  $^{15}$  Based upon an average of 4.2 tonnes of CO $_2$  emissions per car per annum. Equivalent number of cars is calculated as the number of cars during the period that produce an equivalent amount of CO $_2$  emission to what is estimated to have been displaced.  $^{16}$  Includes operating plants on a 100% basis. Includes Boulder Solar 1 production from 15 February 2018, NC-31 production from 1 April 2017 and NC-47 production from 1 June 2017.

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The mechanical completion milestone was achieved at the Heedeh site, with commercial operations scheduled to commence next quarter. Meanwhile, construction nears mechanical completion at Hanover, while work at County Home continues well ahead of schedule, with all solar modules installed and major electrical components in place. The Arthur site has also progressed well, with 50% of modules successfully installed. Mobilisation commenced at the Organ Church site with construction work scheduled to begin in early April. After successfully achieving financial close on the Bonanza project, construction for this project will also begin in April.

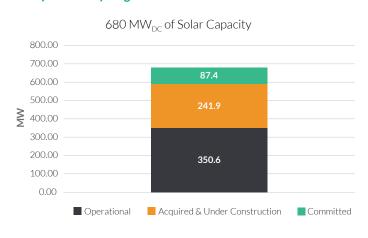
On 20 March, NES successfully closed the acquisition and financing of 100% of the cash equity interest in the 200 MW<sub>DC</sub> Mount Signal 2 Facility from D.E Shaw Renewable Investments. MS2 is located in the Imperial Valley of southern California, approximately 175 km east of San Diego. The project is expected to be operational by late 2019 and will sell 100% of the power and renewable energy credits generated to Southern California Edison under a 20-year Power Purchase Agreement (PPA) beginning in mid-2020. Limited notice to proceed has been issued to the construction contractor, with full construction activities expected to commence in accordance with the schedule later in 2018.

# **Committed Projects**

Eight solar projects totalling 87.4  $MW_{DC}$  of capacity

NES has committed to acquire a further eight solar projects from CCR in North Carolina and Oregon, which are expected to commence construction in 2018 subject to the completion of certain conditions.

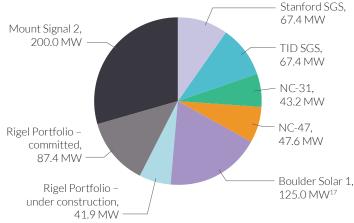
## NES portfolio by stage<sup>18</sup>



# TID SGS solar plant September 2017



#### **NES** portfolio composition



#### Important Notice

This Quarterly Update (**Update**) has been prepared by the Investment

Manager (New Energy Solar Manager Pty Limited) of New Energy Solar. An investment in the Business is subject to various risks, many of which are beyond the control of the Investment Manager and the Responsible Entity of the Fund. The past performance of the Business is not a guarantee of the future performance of the Business. This Update contains statements, opinions, projections, forecasts and other material (forward-looking statements), based on various assumptions. Those assumptions may or may not prove to be correct. None of the Investment Manager and the Business, their officers, employees, agents, analysts nor any other person named in this Update makes any representation as to the accuracy or likelihood of fulfillment of the forward-looking statements or any of the assumptions upon which they are based. Unless otherwise specified, all references to currency are to Australian dollars.