



23 May 2018

NEW ENERGY SOLAR (ASX: NEW) PRESENTATION EVANS DIXON US FOCUSED INVESTOR CONFERENCE

Today, New Energy Solar¹ presented at the Evans Dixon US Focused Investor Conference. The presentation is attached.

For further information, contact:

Fleur Jouault GRACosway 0405 669 632

About New Energy Solar

New Energy Solar was established in November 2015 to invest in a diversified portfolio of solar assets across the globe and help investors benefit from the global shift to renewable energy. The Business acquires large scale solar power plants with long term contracted power purchase agreements. In addition to attractive financial returns, this strategy generates significant positive environmental impacts for investors.

Since establishment, New Energy Solar has raised over A\$500 million of equity, acquired a portfolio of world-class solar power plants, and has a deep pipeline of opportunities primarily across the United States and Australia. New Energy Solar's initial public offering was led by Morgan Stanley and its securities trade on the Australian Securities Exchange under the ticker, NEW.

New Energy Solar is a listed stapled entity consisting of New Energy Solar Fund (ARSN 609 154 298) and New Energy Solar Limited (ACN 159 902 708). For more information, visit: <u>www.newenergysolar.com.au</u>

New Energy Solar

Australia

Level 15, 100 Pacific Highway North Sydney NSW 2060 T 1300 454 801 F 1300 883 159

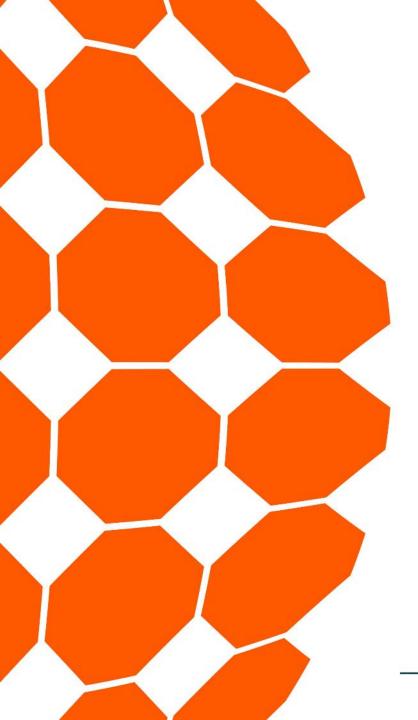
United States

140 Broadway, 28th Floor, New York NY 10005 **T** 646 860 9900

E info@newenergysolar.com.au W nes.com.au

Walsh & Company Investments Limited (ACN 152 367 649) (AFSL 410 433) as responsible entity for New Energy Solar Fund (ARSN 609 154 298) New Energy Solar Limited (ACN 609 396 983)

¹ New Energy Solar Limited (**Company**) and Walsh & Company Investments Limited as responsible entity of New Energy Solar Fund (**Trust**), together **New Energy Solar**.





New Energy Solar

US Investor Conference

New York, 22 May 2018

Presenter

John Martin, Chief Executive Officer

Disclaimer



This document is prepared by New Energy Solar Manager Pty Limited (ACN 609 166 645) (**Investment Manager**), a corporate authorised representative (CAR No. 1237667) of Walsh & Company Asset Management Pty Limited (ACN 159 902 708, AFSL 450 257), and investment manager for New Energy Solar Fund (ARSN 609 154 298) (**Trust**), and New Energy Solar Limited (ACN 609 396 983) (**Company**). The Trust and the Company (together with their controlled entities) are referred to as the '**Business**', '**NEW**' or '**New Energy Solar**'.

This document may contain general advice. Any general advice provided has been prepared without taking into account your objectives, financial situation or needs. Before acting on the advice, you should consider the appropriateness of the advice with regard to your objectives, financial situation and needs.

This document may contain statements, opinions, projections, forecasts and other material (forward looking statements), based on various assumptions. Those assumptions may or may not prove to be correct. The Investment Manager and its advisers (including all of their respective directors, consultants and/or employees, related bodies corporate and the directors, shareholders, managers, employees or agents of any of them) (**Parties**) do not make any representation as to the accuracy or likelihood of fulfilment of the forward-looking statements or any of the assumptions upon which they are based. Actual results, performance or achievements may vary materially from any projections and forward looking statements and the assumptions on which those statements are based. Readers are cautioned not to place undue reliance on forward looking statements and the Parties assume no obligation to update that information.

The Parties give no warranty, representation or guarantee as to the accuracy or completeness or reliability of the information contained in this document. The Parties do not accept, except to the extent permitted by law, responsibility for any loss, claim, damages, costs or expenses arising out of, or in connection with, the information contained in this document. Any recipient of this document should independently satisfy themselves as to the accuracy of all information contained in this document.



Agenda





















Stanford SGS – September 2017



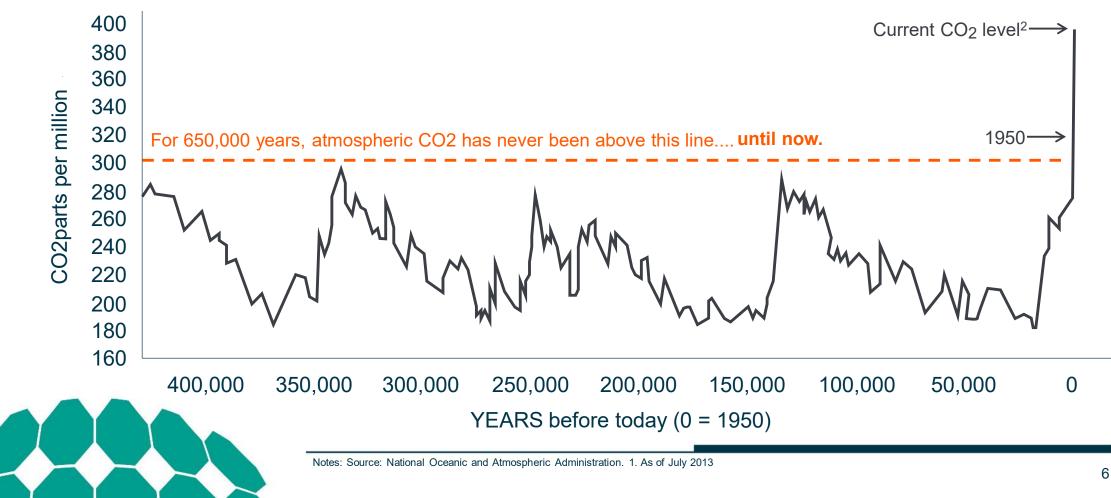
1 Renewables and efficiency



The impact of climate change



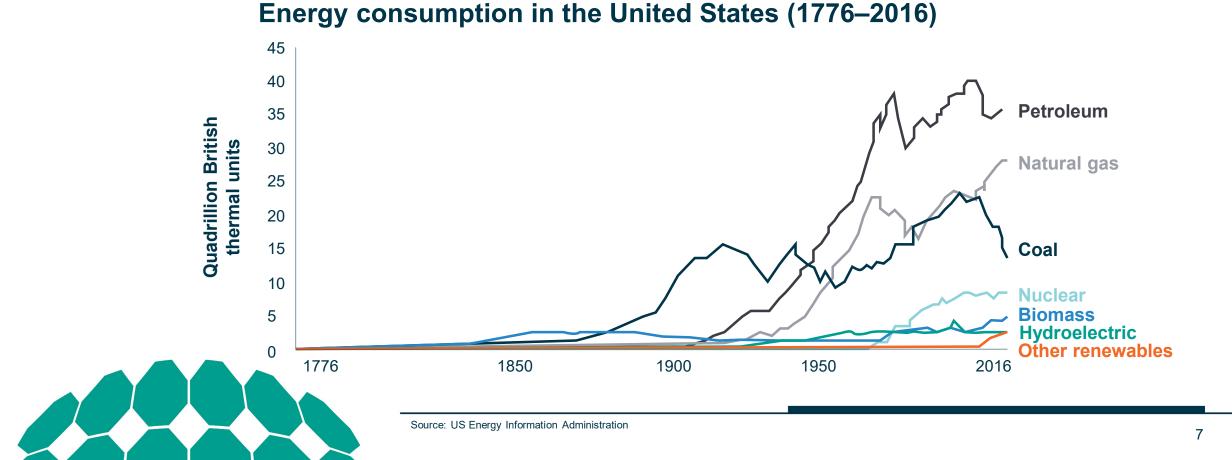
The boom of renewable energy was initially driven by climate change concerns



Historical energy use



The adoption of new energy has been driven by economic efficiency



Technological change and economic efficiency



The economic driver for technological change is an ongoing need for efficiency – producing more with the same or fewer resources



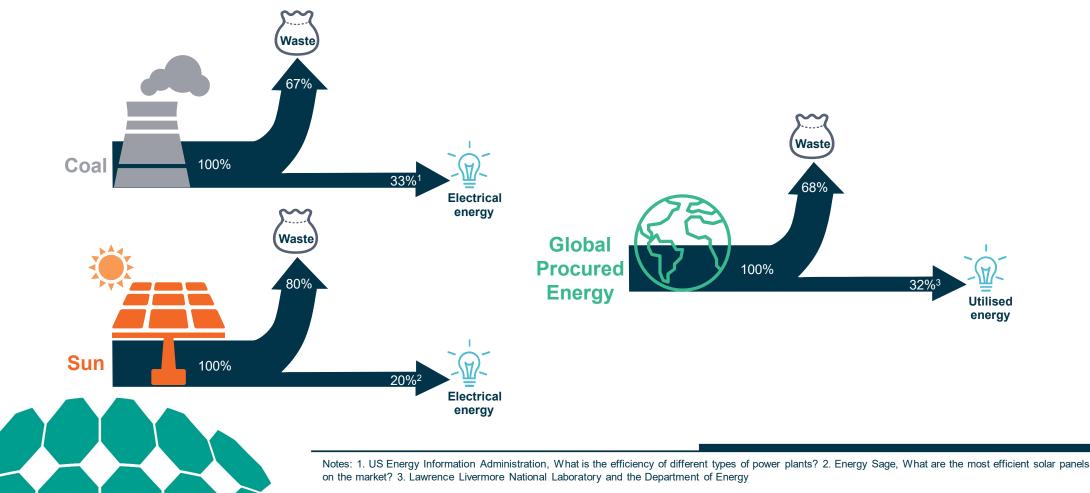


The engineering view of efficiency



9

The energy conversion efficiency of solar is comparatively low

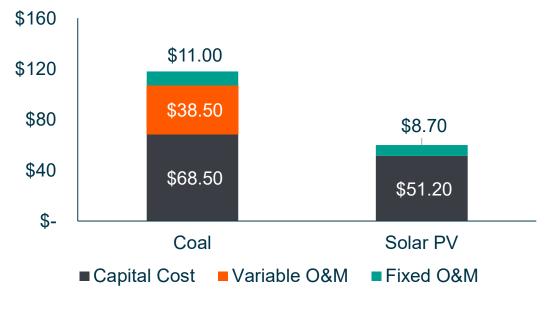


The economic view of efficiency

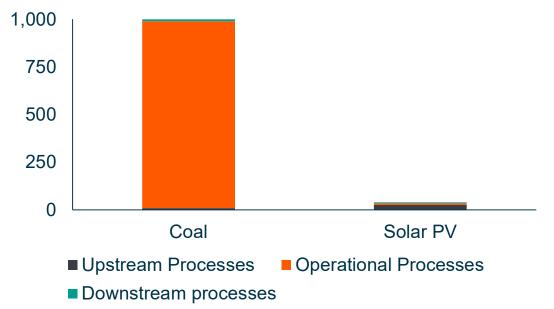


The economic efficiency of solar is high, particularly if CO₂ emission externalities are factored in

Levelised cost of electricity by stage of asset life¹ US\$/MWh



Lifecycle CO_2 emissions by stage of asset life² grams CO_2/KWh





Economics is driving rooftop solar



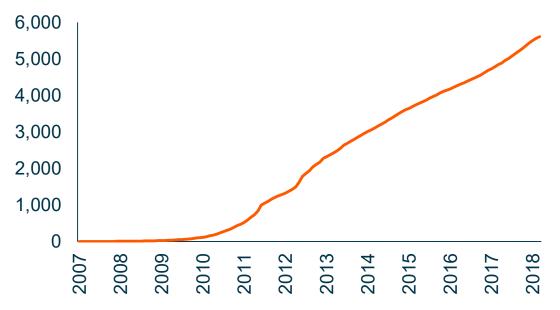
11

The rooftop solar boom is driven by more than just environmental concerns

Levelised cost of a 5KW rooftop PV system vs retail electricity price¹ A\$/KWh



Cumulative residential rooftop solar capacity in Australia² MW



Notes: 1. Australian Energy Council Analysis, January 2018. Central estimate assuming 6.53% discount rate. 2. Australian PV Institute (APVI) Solar Map, funded by the Australian Renewable Energy Agency, accessed from <u>pv-map.apvi.org.au</u> on 3 May 2018.

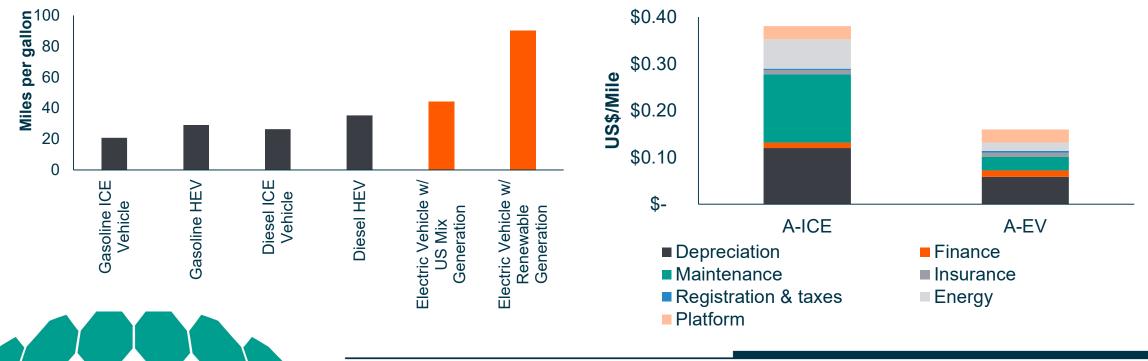
Electric vehicles and efficiency



Electric Vehicles (EV) offer significant thermal and economic efficiency gains over vehicles with Internal Combustion Engines (ICE) and Hybrid Electric Vehicles (HEV)

Well to wheel thermal efficiency of vehicle engine types¹

Projected autonomous vehicle fleet costs in 2021²



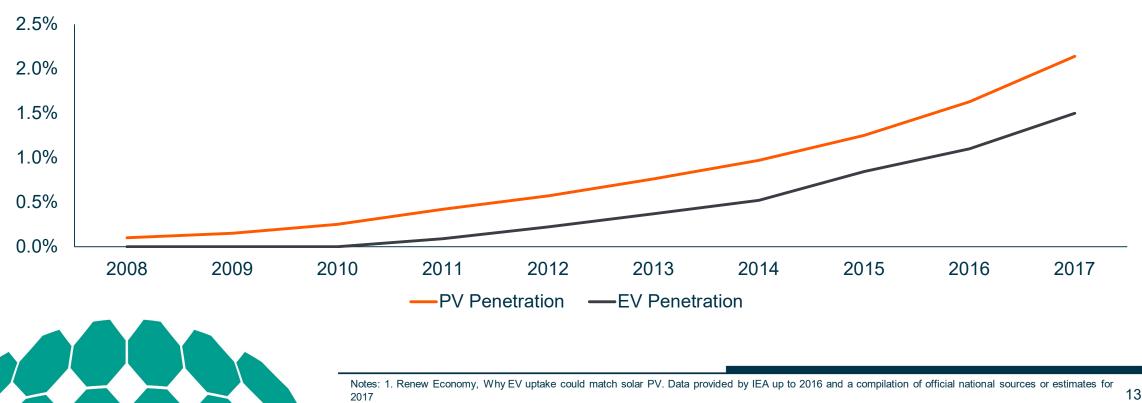
Notes: 1. The Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation (GREET) Model. Software: GREET 1, Version 2011 Copyright © 1999 UChicago Argonne, LLC, and Software: GREET 2, Version 2.7 Copyright © 2007 UChicago Argonne, LLC. 2. RethinkX, Rethinking Transportation 2020-2030

Improving economics drives change



The improving economics of renewable technologies and EVs is driving exponential increases in adoption

Global market penetration of Solar Photovoltaic (PV) and Electric Vehicle (EV) technologies over time







2 Renewable energy outlook



Renewable penetration



Renewable generation is increasing steadily in both the US and Australia

US electricity generation by fuel type

9%	11%	10%	13%	12%	13%	13%	14%	15%	18%
22%	24%	24%	25%	31%	28%	28%	33%	34%	32%
20%	20%	20%	19%		400/	400/			52 /0
			1070	19%	19%	19%	19%	20%	20%
48%	44%	45%	42%		000/	222/			
		4070	4270	37%	39%	39%	33%	30%	30%
2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
		■Coal ■O	■Oil ■Nuclear ■Natural gas ■Renewables (including hydro)						

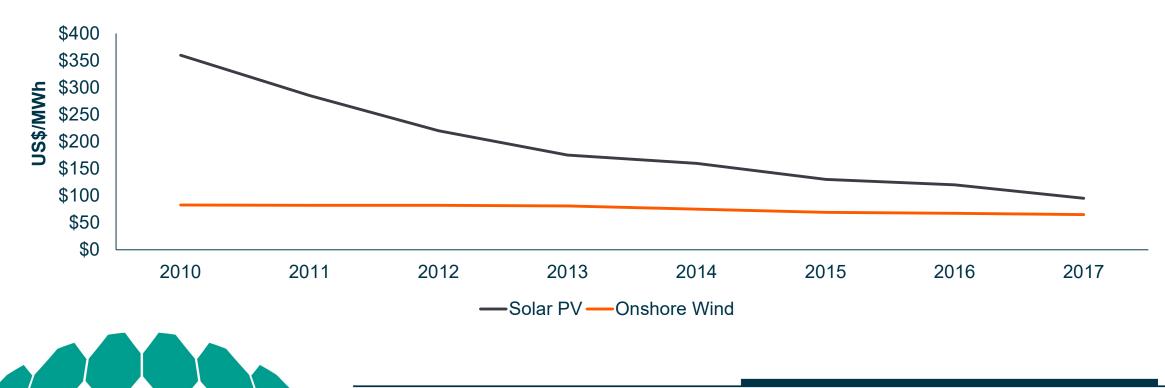


The cost argument



Renewable technology is quickly becoming the most cost effective means of producing electricity

Global weighted levelised cost of Solar PV and onshore wind

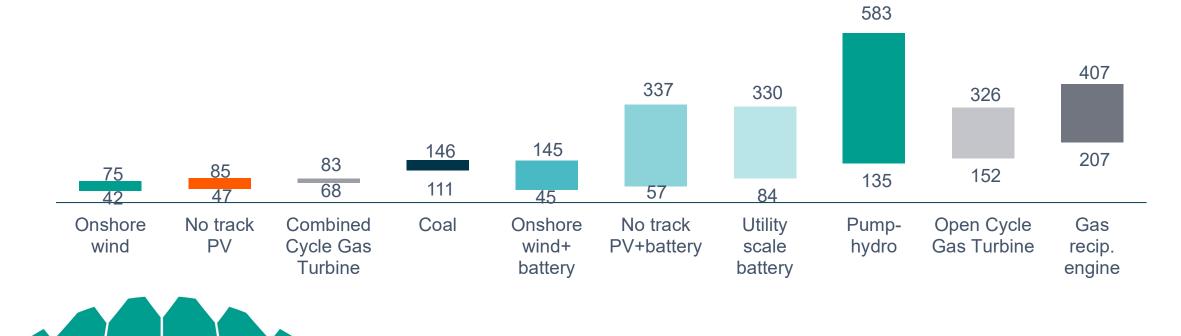


The cost argument



Renewable technology is quickly becoming the most cost effective means of producing electricity

Levelised cost of electricity 1H 2018 Australia US\$/MWh

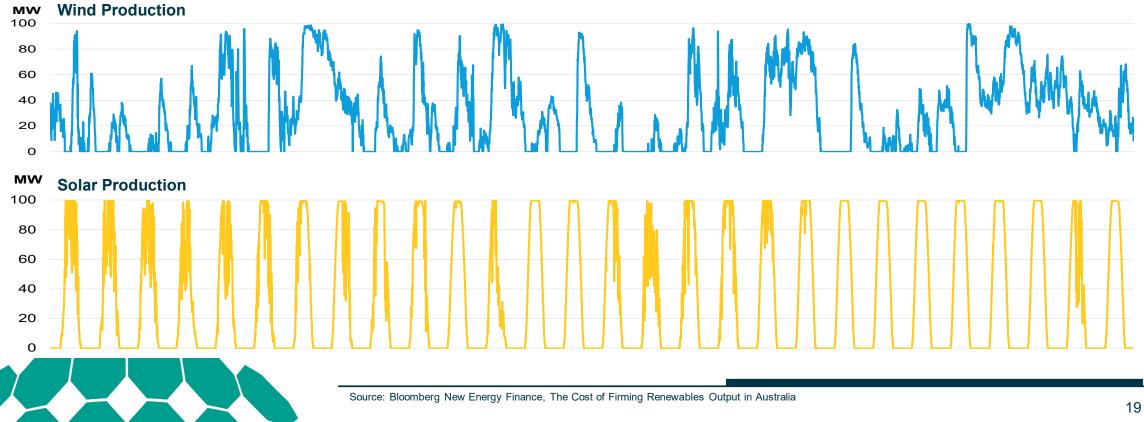


Renewable intermittency



Electricity generation from renewable sources can be unpredictable and intermittent

Renewable energy generation example monthly profiles

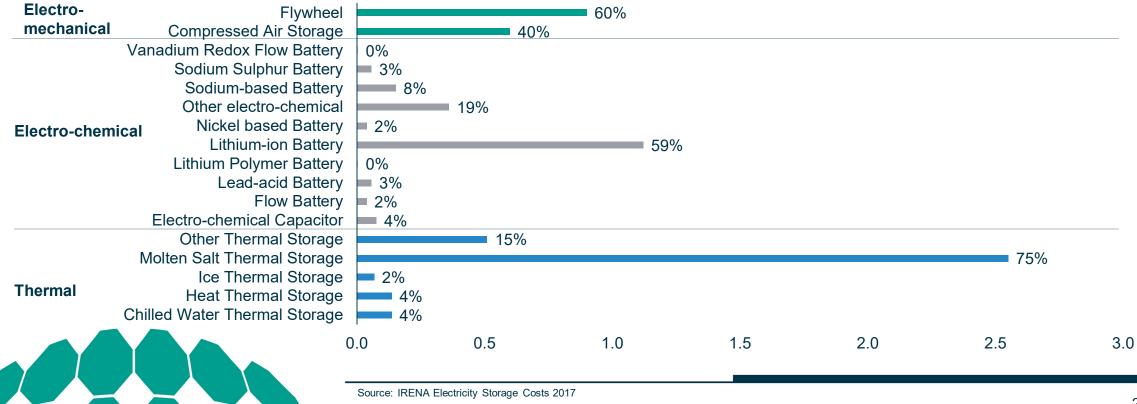


Storage alternatives



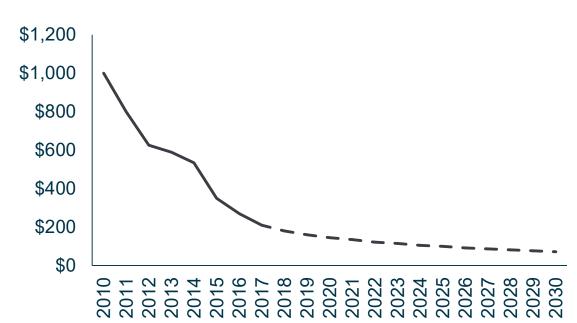
Of the 170GW of electricity storage that exists globally, Pumped Hydro makes up 96%

The remaining 4% of global energy storage by type GW



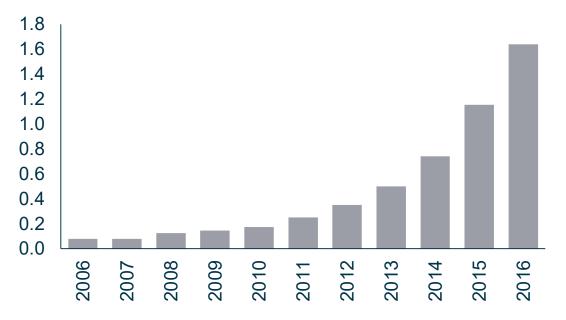
The rise and rise of battery storage adoption

As batteries become cheaper and more efficient, adoption is increasing exponentially



LI-ION battery price forecast¹ US\$/KWh

Global electro-chemical storage capacity² GW





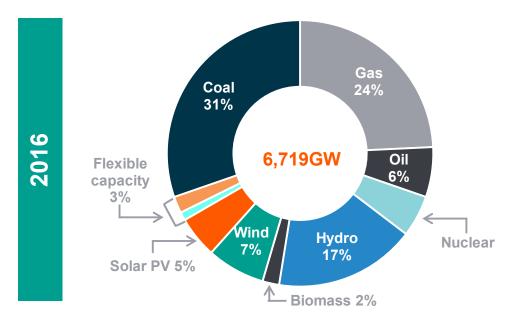


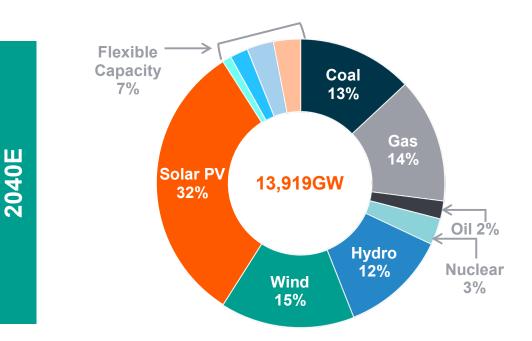
Projection of global generation capacity



By 2040, solar PV is projected to represent 32% of global installed electricity generation capacity, up from 5% in 2016

Global installed generation capacity





Stanford SGS - September 2017



3 Divestment in fossil fuels

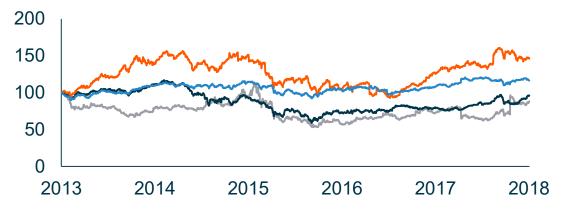


Trends in global energy investing



The current market capitalisation of the energy sector is in excess of US\$5 trillion

Market cap movements of relevant indices, rebased to 100 as at 18 May 2013¹



-----Bloomberg World Coal Index

----Bloomberg World Oil and Gas Index

 Wilderhill New Energy Global Innovation Index
Bloomberg World Utilities Index

Market cap of relevant indices as at 18 May 2018

INDEX	MARKET CAP (\$US)
Oil and Gas Investment (Bloomberg World Oil and Gas Index)	\$3.27tn
Coal Investment (Bloomberg World Coal Index)	\$0.19tn
Total Investment in Utilities (Bloomberg World Utilities Index)	\$2.02tn
New Energy Investment (Wilderhill New Energy Global Innovation Index)	\$0.30tn

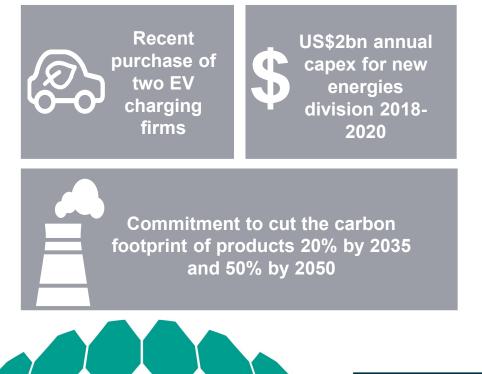
Notes: 1. Bloomberg data sourced 18 May 2018

Case study: Royal Dutch Shell

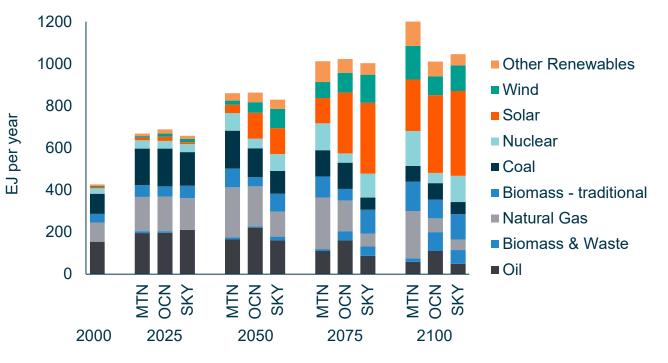


Royal Dutch Shell is preparing for a low carbon future with help from its scenarios team

Royal Dutch shell clean energy initiatives¹



Energy generation forecast by generator type and scenario²



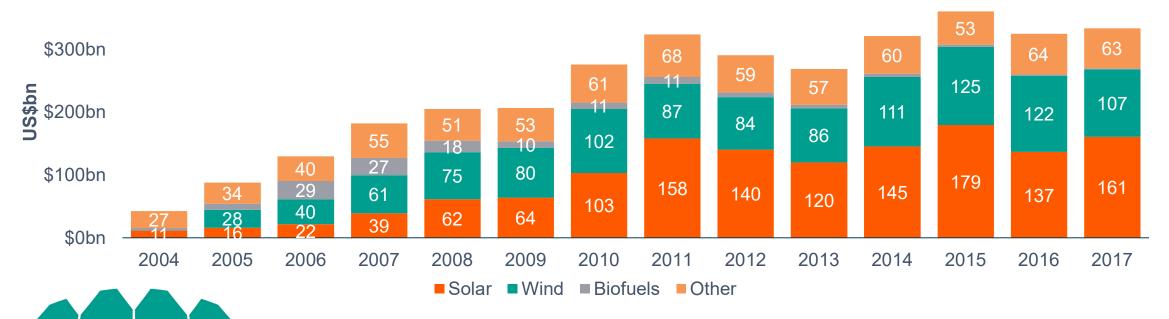
Renewable investment



Renewable investment increases as fossil fuel divestment progresses

Global new investment in clean energy by sector

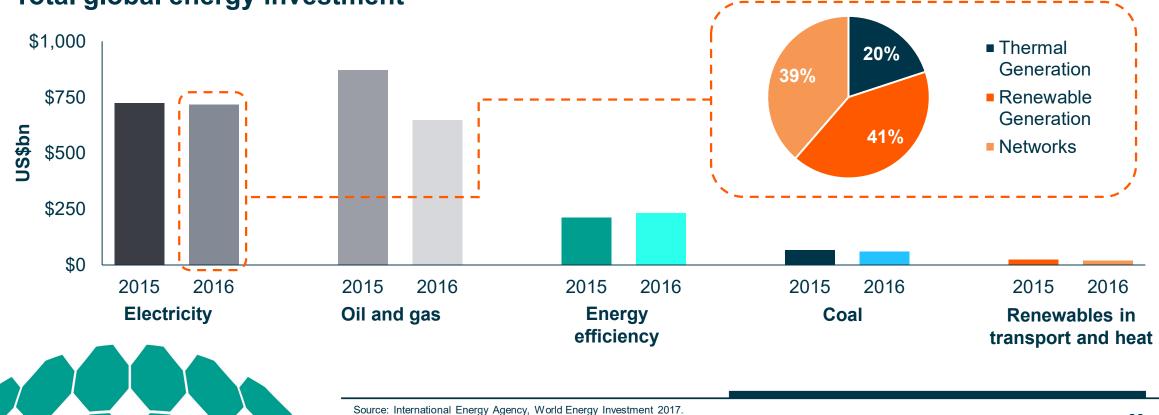
\$400bn



Renewable investment



Renewable investment increases as fossil fuel divestment progresses



Total global energy investment





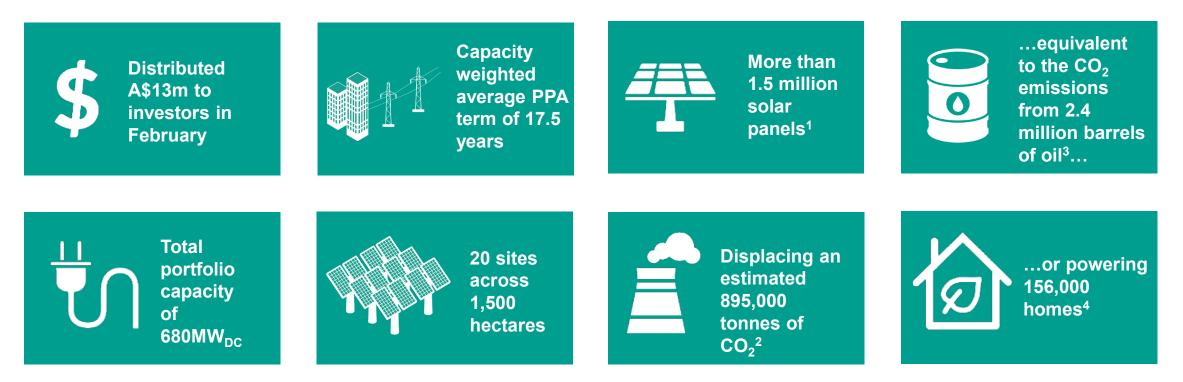
4 Update on NEW



Key achievements



New Energy Solar has delivered financial and environmental returns to its investors





Notes: Estimates assume all construction and committed projects are operational and all projects and plants owned on a 100% basis. 1. Figure excludes Rigel portfolio. 2. Calculated using the US Environmental Protection Agency's Avoided Emissions and generation Tool (AVERT). 3. Calculation based on the US Environmental Protection Agency's Greenhouse Gas Equivalences Calculator. 4. Based upon an average house utilising approximately 8,375 KWh per annum.

Portfolio Summary



20 plants with blue-chip offtake and a capacity weighted PPA term remaining of 17.5 years as at 31 March 2018

Oregon Plants			
Name	Capacity (MW _{DC})	Location	Offtaker
Bonanza	6.8	Klamath	PacifiCorp
Pendleton	8.4	Umatilla	PacifiCorp
Total	15.2		
Nevada Plants			
Name	Capacity (MW _{DC})	Location	Offtaker
Boulder Solar 1	125.0	Clarke County	NV Energy
Total	125.0		
California Plan	ts		
Name	Capacity (MW _{DC})	Location	Offtaker
Mount Signal 2	200.0	California	Southern California Edison
Stanford SGS	67.4	Rosamond	Stanford University
TID SGS	67.4	Rosamond	Turlock Irrigation District

334.8

Total



North Carolina Plants				
Name	Capacity (MW _{DC})	Location	Offtaker	
NC-31	43.2	Bladenboro	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	
Church Road	5.2	Johnston	Duke Energy Progress	
Total	131.1			

Кеу
Operational
Acquired / under construction
Committed

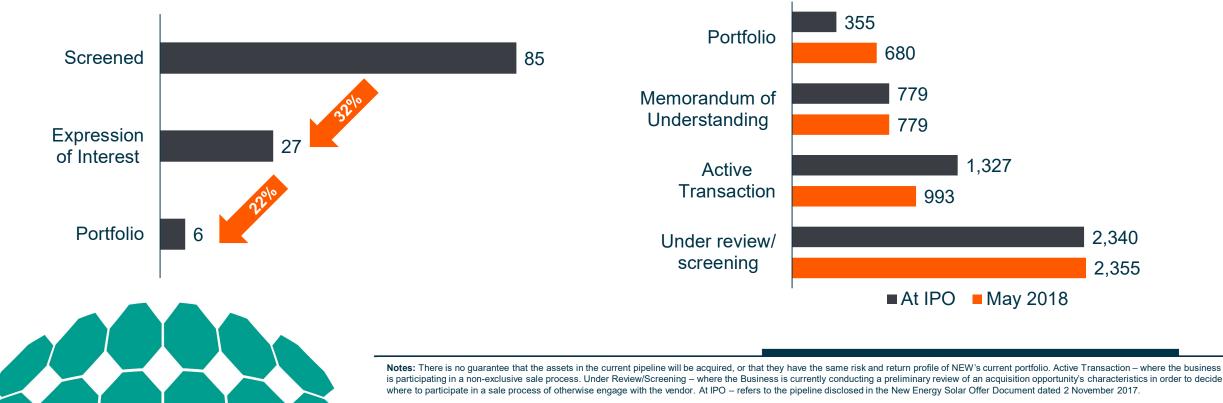
Notes: Includes plants that are either wholly or partly owned by NEW. Total portfolio of 680MW_{DC} includes plants that are operational, acquired and under construction or committed. 1. PPA terms of committed projects have been determined from commercial operations date. 2. Rigel Portfolio refers to portfolio of assets NEW has committed to acquire from Cypress Creek Renewables.

Acquisition update



NEW remains well placed to transact on a significant pipeline of quality opportunities

Pipeline conversion by number of opportunities



Investment opportunity pipeline MW

Acquisition update



Since listing, New Energy Solar has reached financial close on ten assets with combined capacity of 381MW_{DC} whilst further progressing committed assets



Portfolio composition by asset stage



34





5 Conclusion and Outlook

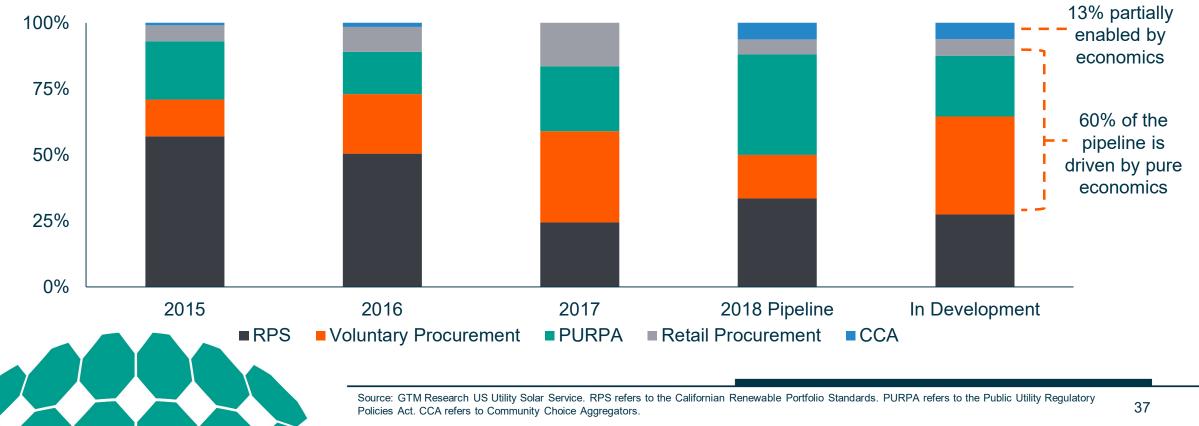


What's next for renewable energy?



Improving economics is expected to continue driving the adoption of renewable generation technology

Operating and contracted us utility scale solar by procurement driver





6 Q&A



Stanford SGS and TID SGS sites at sunset – September 2017





