

Australia Solar Power Sector Future Outlook 2020

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Abstracts

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Australia's solar energy resources are among the best in the world, with high levels of solar radiation and considerable land-mass suitable for large-scale solar developments. With more than 35% of country's land-mass having arid or semi-arid climate including around 20% deserts, solar radiation per square meter in Australia is higher than any other continent. That is why Australia is eyeing to tap these huge and inexhaustible resources to generate substantial proportion of electricity so that it can improve its position from being one of the highest per capita emitter of greenhouse gases. But despite this comparative advantage, the share of solar power based electricity output in Australia still is half the OECD average. The cost of materials and installation, the difficulties in storing solar energy, and the need for substantial additional infrastructure are impediments to the expansion of the industry. However, advances in solar technology and reductions in cost are likely to see the percentage of solar energy increase over coming decades.

Solar PV installations in Australia are mainly categorized according to the size of PV based generation systems – small scale with system size maximum 100 kW, medium scale with system size between 100 kW and 1 MW and large scale with system size over 1 MW. Small scale installations dominate Australia's solar energy sector with total installed capacity of more than 500 MW till June 2016 followed by approximately300 MW of large scale (solar system installed capacity over 1 MW) solar PV projects and 8 MW of medium scale (solar PV system sized between 100 kW and 1 MW in terms of installed capacity).

A large majority of the solar PV systems generating electricity in Australia are roof-top installations in residential buildings with system size below 100 kW. The country has the highest number of residential roof-top solar PV systems and these systems form the



major element of solar energy sector in Australia. As in September 2016, there are about 1.58 Million small scale solar PV installations in homes throughout Australia. In recent years, large scale solar PV installations also have grown substantially.

Solar PV technology and battery energy storage system (BESS) – these two are going to complement to each other for market expansion. As of now, about 30% of the households having roof-top solar PV systems have battery energy storage systems are also integrated. But as the essence of energy storage is becoming more evident to the households particularly for those using solar power, more installations of battery based storage system is going to make major gain in next five years. More than 50% of the future installations of solar PV systems are likely to come with storage system thus growth in solar energy sector is directly creating a market for BESS which is substantial and has enormous potential to grow further.

"Australia Solar Power Sector Future Outlook 2020" Report Highlights::

Australia Solar Power Sector Overview

Australia Solar Power Economics

Solar Feed-in-Tariff by State

Solar Energy Policies & Regulatory Framework

Australia Solar Energy Sector Future Outlook



Contents

1. AUSTRALIA SOLAR POWER SECTOR OVERVIEW

- 1.1 Solar Power Installed Capacity
- 1.2 Trends in Solar Power in Australia
- 1.3 Solar Power Contribution in comparison with other RE Technologies

2. AUSTRALIA SOLAR POWER ECONOMICS

- 2.1 Solar System Costs
- 2.2 Electricity Tariff for Solar
- 2.3 Incentives/Subsidies for Solar System Installation
 - 2.3.1 Small-Scale Technology Certificates (STC)
 - 2.3.2 Large Scale Generation Certificates (LGC)
 - 2.3.3 Feed-in-Tariff (FiT)

3. AUSTRALIA SOLAR FEED-IN-TARIFF

- 3.1 Victoria
- 3.2 New South Wales
- 3.3 Tasmania
- 3.4 South Australia
- 3.5 Queensland
- 3.6 Western Australia
- 3.7 Australian Capital Territory (ACT)
- 3.8 Northern Territory

4. AUSTRALIA SOLAR POWER GROWTH POTENTIAL

- 4.1 Projected Installed Capacity
- 4.2 Projected Capacity by Users

5. AUSTRALIA SOLAR ENERGY POLICIES FRAMEWORK

- 5.1 Renewable Energy Target Scheme
- 5.2 Solar Towns
- 5.3 Solar Communities



6. AUSTRALIA SOLAR ENERGY REGULATORY BODIES

- 6.1 Australian Renewable Energy Agency (ARENA)
- 6.2 Clean Energy Regulator
- 6.3 Clean Energy Finance Corporation
- 6.4 Clean Energy Council

7. AUSTRALIA SOLAR ENERGY REGULATORY FRAMEWORK

- 7.1 Roles of Different Regulatory Bodies
- 7.2 Ensuring Solar Products are Safe
 - 7.2.1 Solar PV Panel Approval
 - 7.2.2 Inverter Approvals
 - 7.2.3 PV Mounting Frames
- 7.3 Ensuring that Products are Produced to the certification Standards

8. AUSTRALIA SOLAR ENERGY MARKET FAVORABLE PARAMETERS

- 8.1 Suitable Climatic Conditions
- 8.2 Attractive Retail Electricity Tariff
- 8.3 Ambitious Target For Renewable Energy
- 8.4 Favorable Policies

9. AUSTRALIA SOLAR ENERGY MARKET CHALLENGES

- 9.1 Absence of Domestic PV Module Manufacturer
- 9.2 Political Risk
- 9.3 Less Attention To Large Scale & Commercial Installation
- 9.4 Diverse Solar Resources
- 9.5 Possible Mismatch Between Electricity Demand & Generation

10. AUSTRALIA SOLAR ENERGY SECTOR FUTURE OUTLOOK

11. AUSTRALIA SOLAR ENERGY COMPETITIVE LANDSCAPE

- 11.1 Canadian Solar
- 11.2 Kyocera
- 11.3 Tindo Solar
- 11.4 Suntech Power



11.5 Solar Shop Australia11.6 SunPower

11.7 First Solar



List Of Figures

LIST OF FIGURES:

Figure 1-1: Australia - Share of Solar PV Technology in Renewable based Electricity Generation (%) Figure 1-2: Australia - Share of Solar PV Technology in Electricity Generation (%), 2016 Figure 1-3: Australia - Solar PV Installed Capacity by System Size (MW), 2016 Figure 1-4: Australia - Solar PV Installed Capacity by System Size (%), 2016 Figure 1-5: Australia - Solar PV Installed Capacity by States/Regions (MW), 2016 Figure 1-6: Australia - Solar PV Installed Power Capacity by States (%), 2016 Figure 1-7: Australia - Cumulative Solar Power Installed Capacity (MW), 2010 - 2016 Figure 1-8: Australia - Solar Power Installed Capacity by Off & On Grid System (%), 2010 Figure 1-9: Australia - Solar Power Installed Capacity by Off & On Grid System (%), 2015 Figure 1-10: Australia - Cumulative Off Grid Domestic Solar Power Installed Capacity (MW), 2010 - 2015 Figure 1-11: Australia - Cumulative Off Grid Non Domestic Solar Power Installed Capacity (MW), 2010 - 2015 Figure 1-12: Australia - Cumulative Grid Connected Distributed Solar Power Installed Capacity (MW), 2010 - 2015 Figure 1-13: Australia - Cumulative Grid Connected Central Solar Power Installed Capacity (MW), 2010 - 2015 Figure 1-14: Australia - Small Scale Solar PV Installations per Year (MW), 2010 - 2015 Figure 1-15: Australia - Cumulative Large-scale Solar PV Installed Capacity (MW), 2010 - 2015 Figure 1-16: Australia - Cumulative Number of Solar Water Heater Installed, 2010 -2015 Figure 1-17: Australia - Electricity Generation by Source (%), 2015 Figure 1-18: Australia - Renewable Electricity Generation by Source (%), 2015 Figure 2-1: Australia - Solar PV Module Prices (AUD/W), 2010 - 2015 Figure 2-2: Australia - Solar PV System Prices (for residential installations) Without Subsidy (AUD/W), 2010 - 2015 Figure 4-1: Australia - Share of Global Population a& Share of Global GHG Emissions (%), 2016 Figure 4-2: Australia - Projected Solar PV Installed Power Generation Capacity by Sectors (GW), 2020 Figure 4-3: Australia - Projected Solar PV Power Installed capacity by Sector (%), 2020



Figure 8-1: Australia & Global Average Retail Electricity Tariff (US?/kWh), 2015 Figure 8-2: Australia - Projected Share of Renewable and Non-Renewable Energy Sources in Total Electricity Generation (%), 2020

Figure 10-1: Australia - Projected Cost of large-scale Solar PV Projects (AUD / MWh), 2016 & 2020



List Of Tables

LIST OF TABLES:

Table 2-1: Australia - Average Electricity Tariff (AUD/ kWh), 2015 Table 3-1: Australia - Solar Energy Sector Regulatory Bodies



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