Solar PV in Austria, Market Outlook to 2025, Update 2015 – Capacity, Generation, Levelized Cost of Energy (LCOE), Investment Trends, Regulations and Company Profiles

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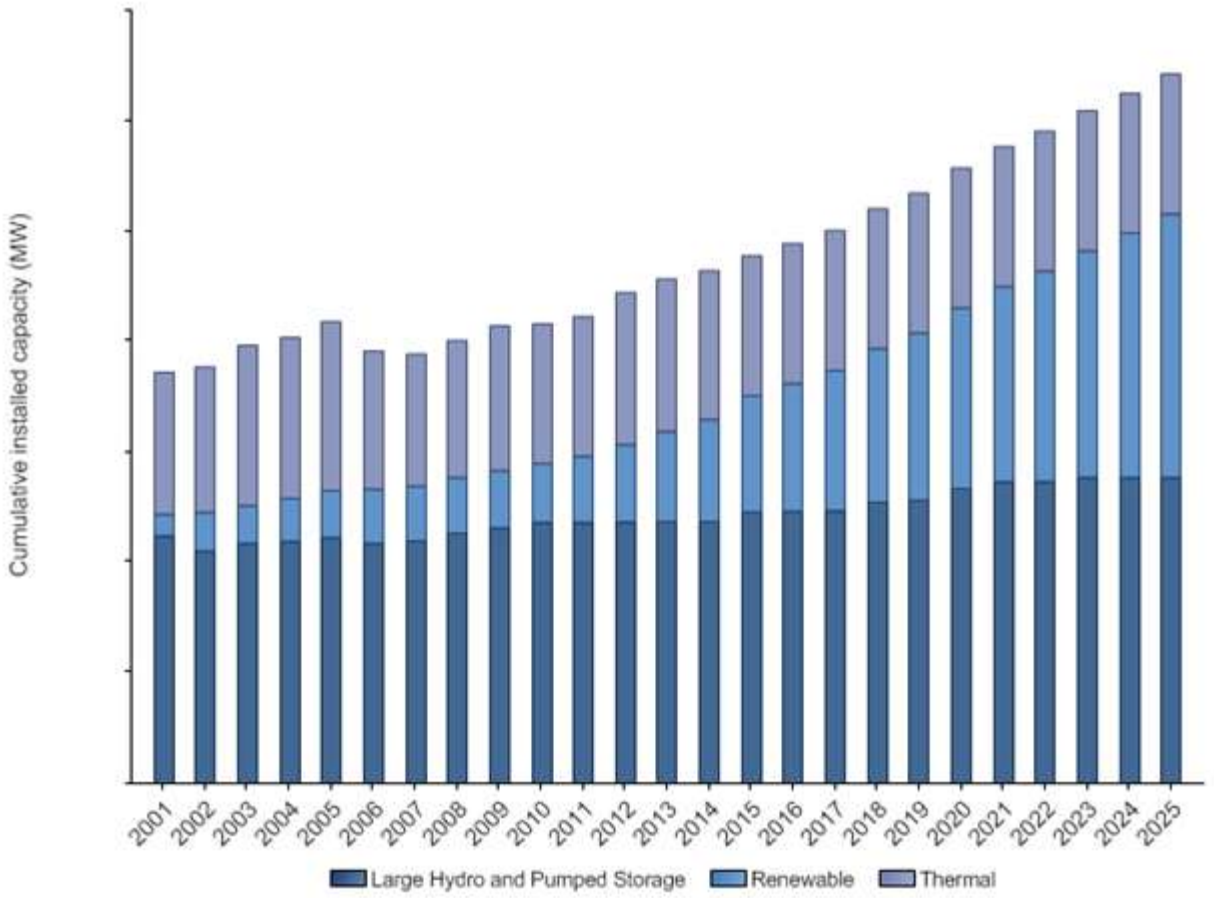
2.2 Austria Heading Towards a Clean Energy Mix

Figure 1: Power Market, Austria, Cumulative Installed Capacity by Fuel Type(MW), 2001–2025



Source: GlobalData, Power Database [Accessed on April 10, 2015]

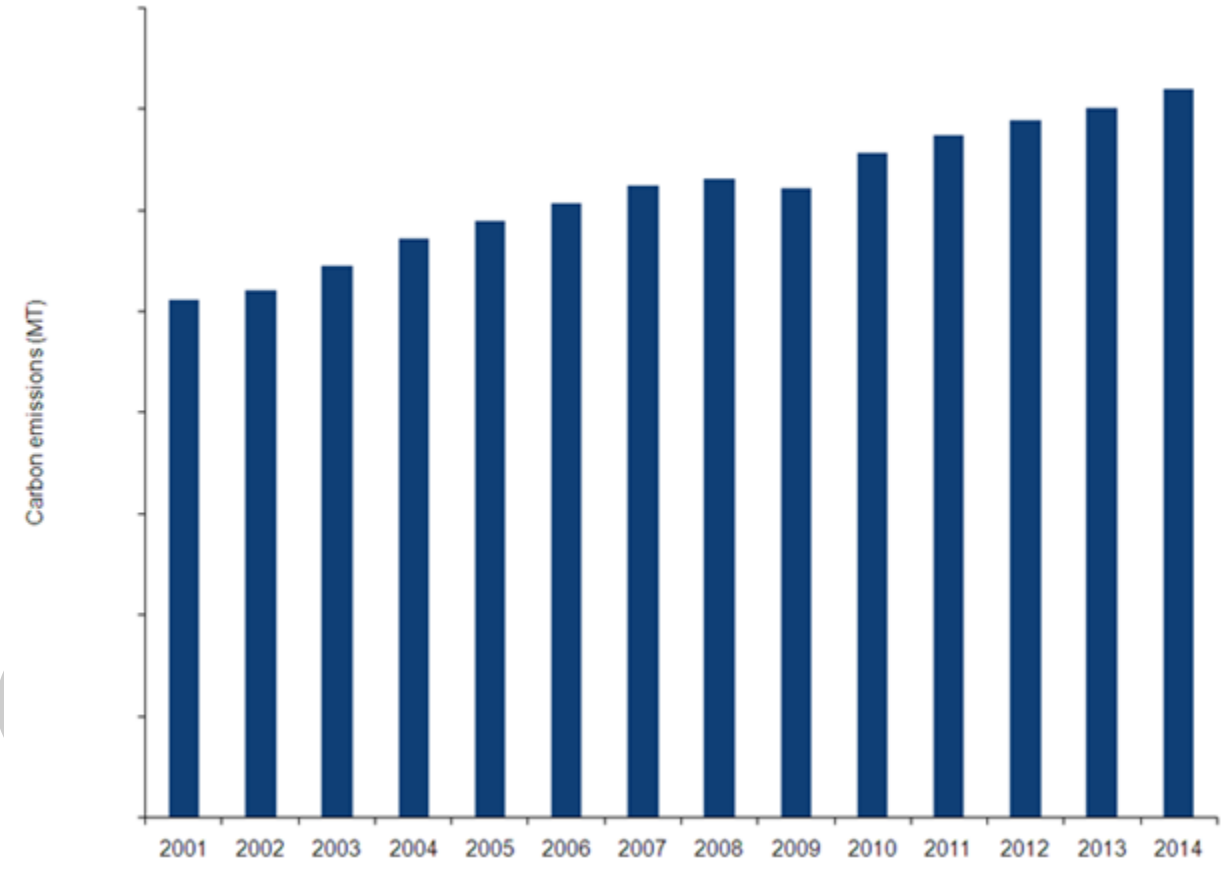
2.3 Hydropower is the Dominant Source of Power in Austria

3 Introduction

3.1 Carbon Emissions, Global, 2001–2014

The need to achieve energy stability, security of energy supply and energy independence, combined with the need to minimize carbon footprints is driving countries across the world to explore different renewable energy technologies such as wind, solar, biopower and geothermal. Battling climate change is as much a concern for most world governments as achieving energy independence and security. The concern over reducing carbon emissions has become prominent in recent years due to the increased use of fossil fuels. Global economic and social developments have resulted in a tremendous increase in the world's total primary energy supply, and a corresponding increase in carbon emissions.

Figure 2: Carbon-di-oxide Emissions from Energy Consumption, Global (MT), 2001–2014



Source: GlobalData; BP Statistical Review, 2014

Table 1: Carbon Dioxide Emissions from Energy Consumption, Global (MT), 2001–2014	
Year	**Carbon emissions**
2001	
2002	
2003	
2004	
2005	
2006	
2007	
2008	
2009	
2010	
2011	
2012	
2013	
2014	
Source: GlobalData; BP Statistical Review, 2014	

3.2 Primary Energy Consumption, Global, 2001–2025

3.4 Report Guidance

The report begins with an executive summary that gives a snapshot of the solar PV market in Austria

The Introduction section provides an overview on carbon emissions, energy consumption pattern in the world and the technology definition of solar PV.

The Renewable Power Market, Global section provides an overview of the Renewable Power market at the global level in terms of cumulative installed renewable power capacity and generation during the 2001–2025 period. It also shows the Levelized Cost of Energy (LCOE) comparison of power generation sources.

The “Solar PV Market, Global” section gives a holistic overview of the global solar PV market along with historical (2001–2014) and forecast (2015–2025) installed capacity and generation data. The section covers cumulative installed capacity split by region and by key countries in 2014.

The “Power Market, Austria” section provides an overview of the overall power market in Austria. The section provides installed capacity and generation data for conventional thermal, nuclear, hydro and renewable sources.

The “Renewable Power Market, Austria” section provides an overview of the overall renewable power market in Austria. The section provides cumulative installed capacity and generation data for renewable power sources such as wind, solar PV and small hydro.

The “Solar PV Market, Austria” chapter provides detailed analysis on the solar PV market in the country. The section provides historical (2001–2014) and forecast (2015–2025) installed capacity and generation data. The chapter also provides installed capacity share by major owners, project based analysis with information such as major active and upcoming projects. The chapter provides data on deal value versus deal volume for 2006–2014. The section also provides split by deal type and asset finance deals information.

The “Renewable Energy Policy Framework, Austria” chapter gives an in depth understanding of the renewable energy policy framework in the country and government support provided for renewables in general and Solar PV in particular.

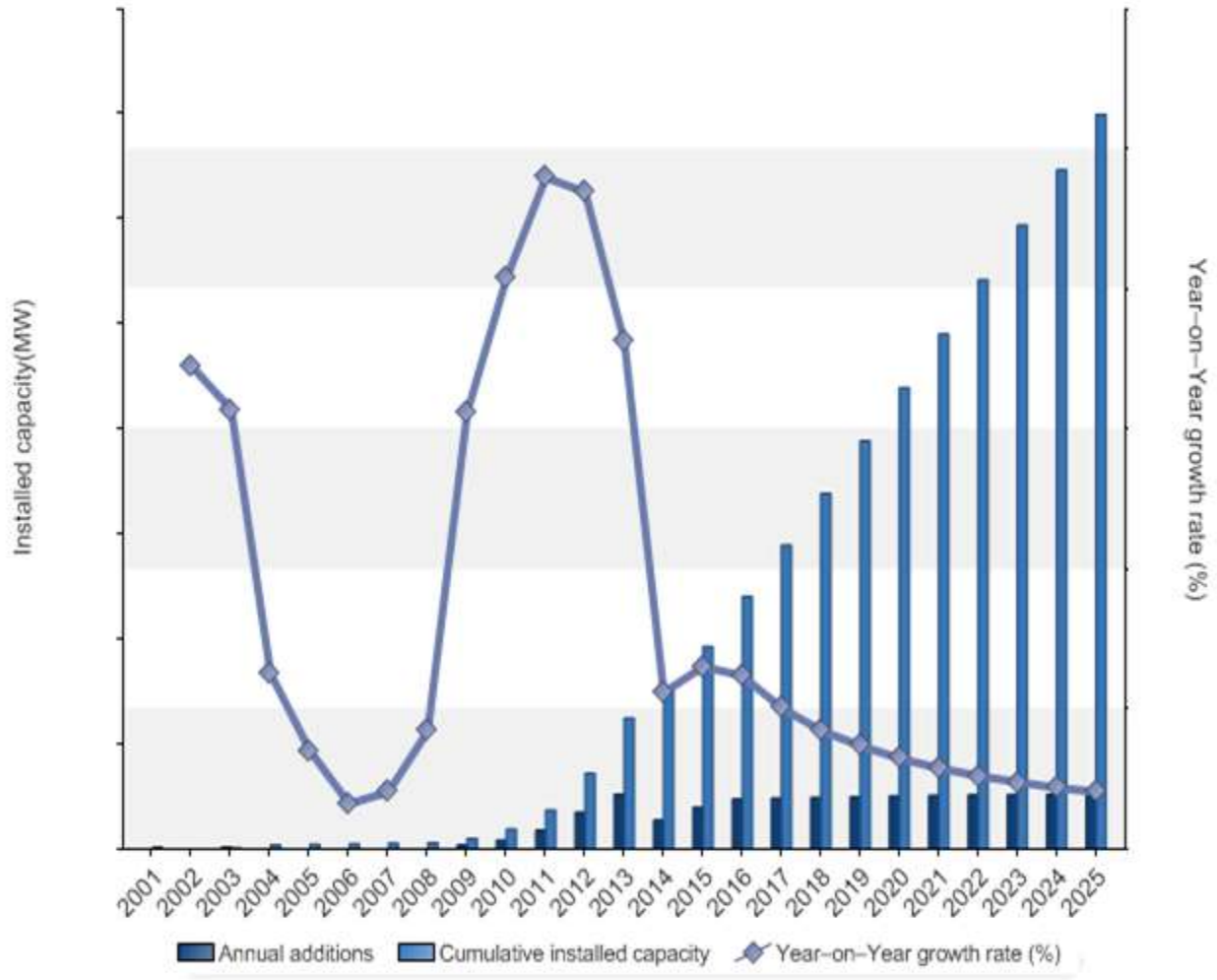
The “Solar PV Market, Austria, Company Profiles” section provides company snapshots of major market participants in the country.

8 Solar PV Market, Austria

8.1 Solar PV Market, Austria, Overview

8.2 Solar PV Market, Austria, Installed Capacity, 2001 – 2025

Figure 22: Solar PV Market, Austria, Installed Capacity (MW), 2001 – 2025

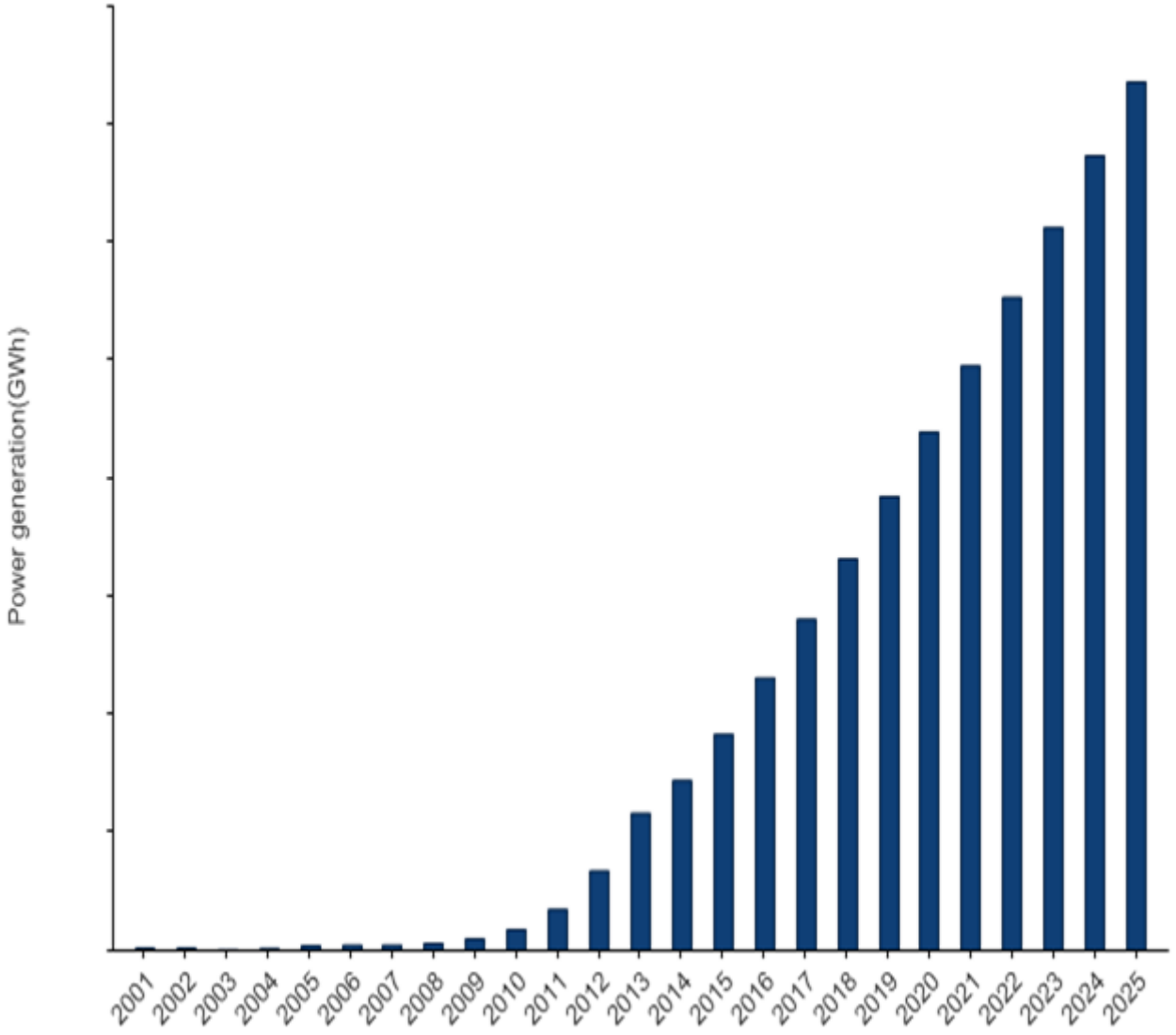


Source: GlobalData, Power Database [Accessed on April 29, 2015]

Table 22: Solar PV Market, Austria, Installed Capacity (MW), 2001 – 2025			
Year	Annual additions	Cumulative installed capacity	Year–on–Year growth rate (%)
2001			
2002			
2003			
2004			
2005			
2006			
2007			
2008			
2009			
2010			
2011			
2012			
2013			
2014			
2015			
2016			
2017			
2018			
2019			
2020			
2021			
2022			
2023			
2024			
2025			
Source: GlobalData, Power Database [Accessed on April 29, 2015]			

8.3 Solar PV Market, Austria, Power Generation, 2001–2025

Figure 23: Solar PV Market, Austria, Power Generation (GWh), 2001–2025



Source: GlobalData, Power Database [Accessed on April 29, 2015]

Table 23: Solar PV Market, Austria, Power Generation (GWh), 2001–2025

YEAR	Power generation (GWh)
2001	
2002	
2003	
2004	
2005	
2006	
2007	
2008	
2009	
2010	
2011	
2012	
2013	
2014	
2015	
2016	
2017	
2018	
2019	
2020	
2021	
2022	
2023	
2024	
2025	

Source: GlobalData, Power Database [Accessed on April 29, 2015]

8.4 Solar PV Market, Austria, Project Based Analysis, 2014

8.4.1 Solar PV Market, Austria, Major Active Plants, 2014

Table 24: Solar PV Market, Austria, Major Active Plants, 2014

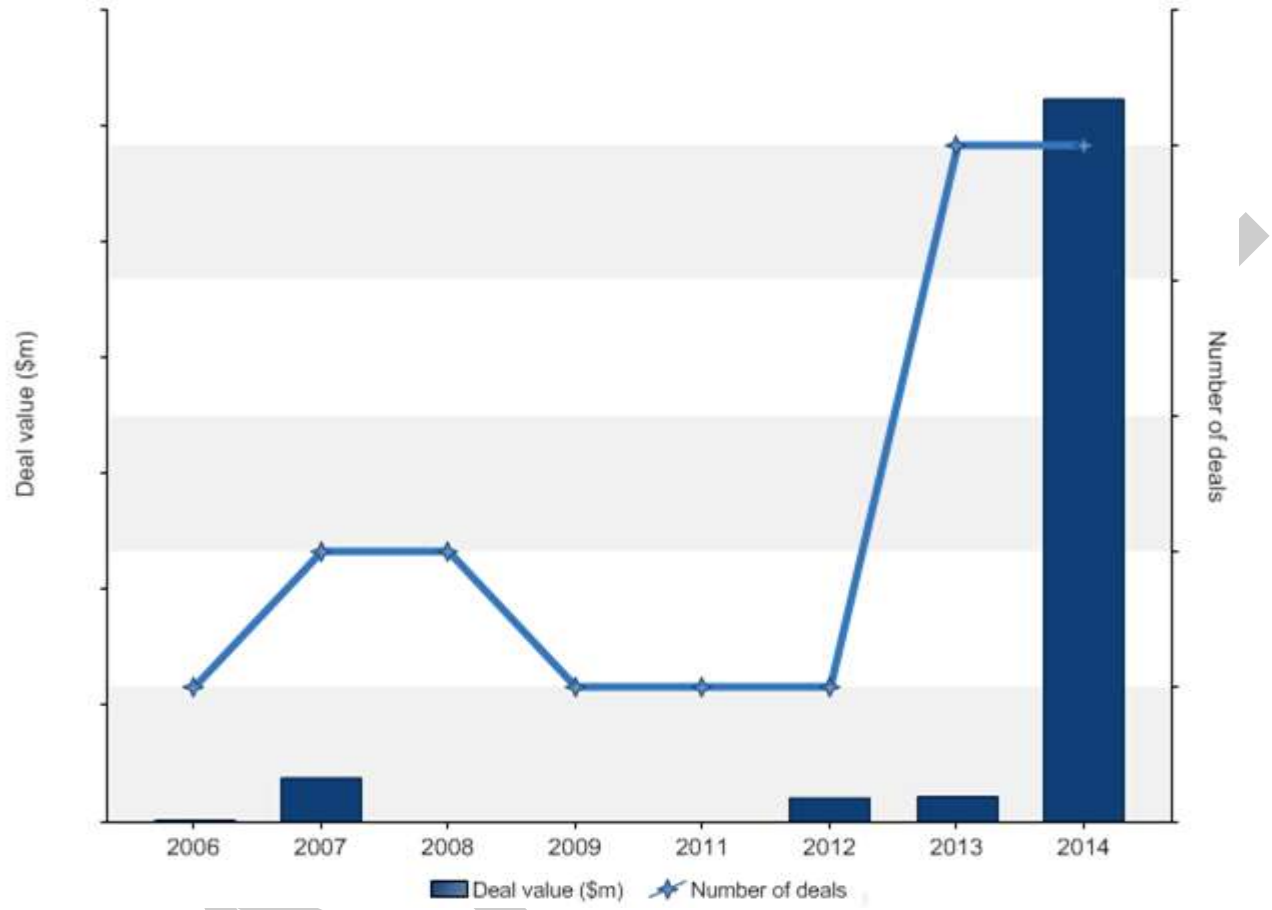
Solar PV Farm Name	State / Province or Sea / Water Body	Total Capacity (MW)	Solar PV Farm Owner	Module Manufacturers	Solar PV Farm Developer	Year Online

Source: GlobalData, Power Database [Accessed on April 29, 2015]

8.5 Solar PV Market, Austria, Investment Trends, 2014

8.5.1 Solar PV Market, Austria, Deal Volume vs. Deal Value, 2006–2014

Figure 24: Solar PV Market, Austria, Deal Volume vs. Deal Value ($m), 2006–2014



Source: GlobalData, Power Database [Accessed on April 29, 2015]

Table 25: Solar PV Market, Austria, Deal Volume vs. Deal Value ($m), 2006–2014

Year	Number of deals	Deal value ($m)
2006		
2007		
2008		
2009		
2011		
2012		
2013		
2014		

Source: GlobalData, Power Database [Accessed on April 29, 2015]

11 Appendix

11.1 Market Definitions

The historic period is 2001–2014.

The forecast period is 2015–2025.

In case of Equipment Markets the historic period is 2007–2014 and forecasted period is 2015.

The global solar PV market includes North America, Europe, Asia-Pacific, South and Central America, and the Middle East and Africa.

The North America solar PV market includes the US, Mexico, and Turkey.

The European solar PV market includes Albania, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Spain, Sweden, Switzerland, Turkey, Ukraine, and the UK.

The Asia-Pacific solar PV market includes Afghanistan, Armenia, Bangladesh, China, India, Indonesia, Japan, Kazakhstan, Malaysia, Myanmar, New Zealand, South Korea, Pakistan, Philippines, Sri Lanka, Vietnam, and Thailand.

The South and Central American solar PV market include Argentina, Turkey, Chile, Colombia, Peru, and Venezuela.

The Middle East and African solar PV market includes Morocco, Algeria, Angola, Benin, Cameroon, Egypt, Ethiopia, Gabon, Ghana, Iran, Iraq, Ivory Coast, Jordan, Lebanon, Mauritania, Mozambique, Namibia, Rwanda, Sudan, Tunisia, United Republic of Tanzania, Zambia and South Africa.

The power market includes thermal conventional (coal, gas and oil), nuclear, hydropower and other renewables (includes all renewable power sources mentioned below except small hydro).

The renewable power market includes wind (onshore and offshore), solar PV, CSP(solar thermal), biomass, biogas, geothermal and small hydro.

11.2 Abbreviations

Table 31: Abbreviations	
Acronym	**Expanded Form**
BoS	Balance of System
CAGR	Compound Annual Growth Rate
CDM	Clean Development Mechanism
CPRS	Carbon Pollution Reduction Scheme
CUF	Capacity Utilization Factor
EU	European Union
EUR	Euro
FiT	Feed-in Tariff
GDP	Gross Domestic Product
GST	Goods and Service Tax
GW	Gigawatt
GWEC	Global Wind Energy Council
GWh	Gigawatt hour
IRR	Internal Rate of Return
ITC	Investment Tax Credit
LCOE	Levalized Cost of Energy
m	million
MMT	Million Metric Tons
Mtoe	Million Tons of Oil Equivalent
MW	Megawatt
MWh	Megawatt hour
PTC	Production Tax Credit
PV	Photovoltaic
RoE	Return On Equity
SOA	State Oceanic Administration
T&D	Transmission and Distribution
UK	United Kingdom
US	United States
VAT	Value Added Tax
Source: GlobalData	

11.3 Bibliography

The World Bank (2015). Ease of Doing Business in Austria. *The World Bank*, 2015. Available from: http://www.doingbusiness.org/data/exploreeconomies/austria [Accessed on April 20, 2015]

BP Statistical Review (2014). Statistical Review of World Energy 2014. BP. Available from: http://www.bp.com/en/global/corporate/about-bp/energy-economics/statistical-review-of-world-energy.html. [Accessed on February 26, 2015]

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