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Germany Solar Photovoltaic Market Outlook to 2015

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GERMANY

GERMANY SOLAR FEED-IN TARIFFS (FIT) PRESENT STATUS AND IMPACT

Germany's feed-in tariffs (FiT) for solar photovoltaic is considered as one of the most sophisticated and effective for reducing investor risk and cost-effectively magnifying the renewable generation. Country's advanced FiT amplifies investor transparency, longevity and certainty while laying out a roadmap to grid parity within an overall cost-benefit structure.

Table: Present Scenario and Impact of Feed-in Tariff Plans in Germany Solar Photovoltaic Market

Policy Implementation Date	Present Scenario	Duration	Impact
	▪		▪

Source: AM Mindpower Solutions

GERMANY SOLAR PV MARKET SIZE, 2006-2010

GERMANY SOLAR PV ON-GRID AND OFF-GRID ANNUAL INSTALLED CAPACITY, 2006-2010

The Germany solar photovoltaic industry installed around ~ MW from nearly one-quarter individual million systems in 2010. The major reason for this incline is the government support mechanism in terms of its feed-in tariff. Though the government has started to showcase a trend of reducing the tariff rates with the declining cost of producing energy and equipments, the annual number of installations has inclined in the country in 2010. This is majorly due to the fall in prices of more than 30% in photovoltaic systems in 2009.

Table: Germany Solar PV Market Size in terms of On-Grid and Off-Grid and Total Annual Installed Capacity in Megawatt (MW), 2006-2010

Years	On-Grid Annual Installed Capacity (MW)	Off-Grid Annual Installed Capacity (MW)	Total Annual Installed Capacity (MW)
2006			
2007			
2008			
2009			
2010			

GERMANY SOLAR PHOTOVOLTAIC POWER GENERATION, 2006-2010

The power generated from solar photovoltaic technology has also registered a considerable growth in the country. Although the power generation using photovoltaic technologies is still expensive as compared to other sources, it is expected that the learning curve will become more convex over a period of time with the innovation in technology and with the achievement of economies of scale. The power generation has increased from ~ GWh in 2006 to ~ GWh in 2009. During the period from 2006-2009, the solar photovoltaic power generation increased at a high CAGR of 43.6%.

Figure: Germany Solar PV Power Generation in Gigawatt hour, 2006- 2009

GERMANY SOLAR PV MARKET SEGMENTATION

BY TYPE OF INSTALLATIONS, 2010

The requirement for PV installation is mostly in the commercial/industrial sector which represents a major chunk of installations in the country. The commercial and industrial applications contributed ~% of the total installations in 2010. Ground mounted is the second largest type of PV installations with the market share of ~% followed by the installations in the residential sector. Residential installation represents ~% of the total installed capacity in 2010 in the country.

Figure: Germany Solar PV Market Segmentation by Type of Installations in Percentage, 2010

Table: Competitive Landscape of Major Solar Photovoltaic Cell/Module Producers in Germany (Q-cells, Bosch Solar Energy, Conergy, Scheuten and Schott Solar)

Major Players	Business Overview	Key Business Segments (Revenue Contribution)	Financials	Geographical Reach
Q.CELLS	▪	▪	▪	▪
BOSCH	▪	▪		▪
CONERGY	▪	▪	▪	▪
Scheuten	▪	▪	▪	▪
SCHOTT solar		▪	▪	▪

Source: Company Reports, AM Mindpower Solutions

GERMANY SOLAR PHOTOVOLTAIC MARKET FUTURE OUTLOOK

GERMANY SOLAR PV CUMULATIVE INSTALLED CAPACITY, 2011-2015

Figure: Germany Solar PV Market Size in terms of Cumulative Installed Capacity in Megawatt, 2011-2015

Source: AM Mindpower Solutions

Note: All the 3 cases are defined in the market definition in the appendix

GERMANY SOLAR PV ANNUAL INSTALLED CAPACITY, 2011-2015

Table: Germany Solar PV Market Size in terms of Annual Installed Capacity in Megawatt, 2011-2015

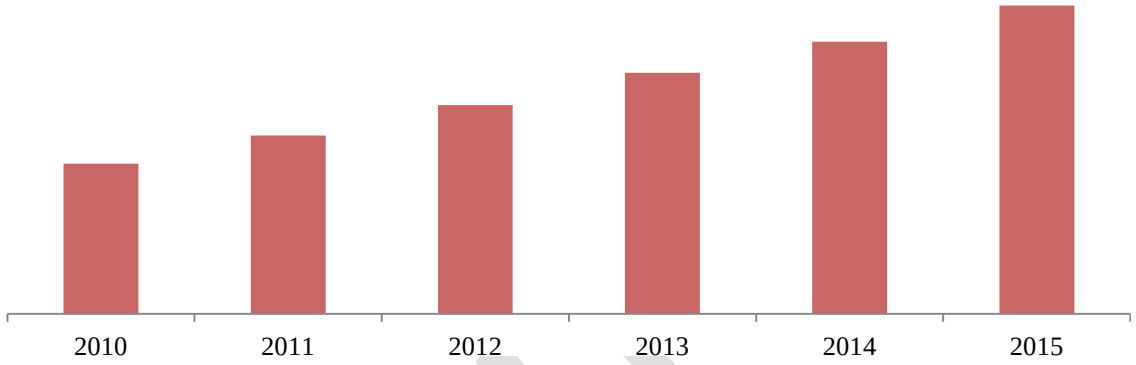
Years	Annual Installed Capacity (MW)		
	Worst Case	Base Case	Best Case
2011			
2012			
2013			
2014			
2015			

Source: AM Mindpower Solutions

GERMANY SOLAR PV POWER GENERATION, 2010-2015

Solar PV generated ~ TWh of electricity in 2010, which is approximately ~% of the total electricity generation in 2010. It is anticipated that solar electricity generation will increase to ~ GWh in 2011 and will reach ~ GWh by 2015.

Figure: Germany Solar PV Power Generation in Gigawatt hour (GWh), 2010-2015



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