Global and China Photovoltaic Glass Industry Report, 2016-2020

Description: Photovoltaic glass (PV glass) is directly used for solar PV power generation and solar thermal power generation system components and plays a role in transmission and sunlight control, or conduction. It mainly includes ultra-clear patterned glass, TCO glass and PV anti-reflective glass.

The global PV industry has developed steadily in recent years. In 2010-2015, the global cumulative PV installed capacity registered a CAGR of 41.6%, which brought rapid growth of PV glass consumption. In 2015, the global PV glass consumption attained 580 million square meters, up 44.4% year on year. The CAGR is expected to stay above 20% in 2016-2020.

China as the world's largest PV glass producer accounts for roughly 75% of total capacity. In 2015, China produced 310 million square meters of PV glass, up 14.1% year on year. The output is expected to reach 350 million square meters in 2016 and exceed 500 million square meters in 2020.

The Chinese PV glass market enjoys a high concentration ratio, with CR5 of 66.3% in 2015. Among them, Xinyi Solar Holding Ltd. occupied the first place with a 26% share. In the future, following the capacity expansion of major PV glass manufacturers, the market concentration will be further improved.

Xinyi Solar upgraded a 500 t/d PV raw glass production line to 600 t/d in 2015. In 2016, it is engaged in building a 900 t/d solar glass production line in Malaysia; two 1 kt/d solar glass production lines in Anhui Province, which are planned to go into operation in Q4 2016 and Q1 2017 respectively.

In December 2015, Flat Glass Group invested roughly RMB550 million in the construction of a PV glass manufacturing base in Vietnam, mainly offering services to Southeast Asian, Indian, European, South Korean and Japanese customers. The factory is designed to have an annual capacity of 27 million square meters.

In October 2015, China Glass Holdings Limited and Magnificent Vision Group co-invested RMB1.3 billion in building a solar PV glass production line (1 kt/d) in Yumen City.

In May 2016, the 650 t/d ultra-clear high-transmittance PV glass production line of CNBM (Hefei) New Energy Co., Ltd. was completed and put into production. This marked a full success of the biggest oxygen-fuel combustion ultra-clear high-transmittance PV glass production line construction in China. As the project starts to run formally, 24 million square meters of raw sheets and 18 million square meters of coated sheets will be produced each year.

The report highlights the following:
- Development environment, market size, etc. of global PV glass;
- Policy environment, market size, import & export, market price, etc. of Chinese PV glass industry;
- Overview, scale, competition pattern, etc. of major PV glass market segments (ultra-clear patterned glass, TCO glass, PV anti-reflective glass);
- Overview, market size, market structure, competition pattern, etc. of main upstream sectors (silicon dioxide, sodium carbonate, limestone, aluminum oxide) and downstream application (solar cell module) of PV glass;
- Operation, layout in China, revenue structure, PV glass business of 5 global and 18 Chinese PV glass companies.

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