

[In-Depth] Cover Glass & TCO Substrate for Solar Cell Technology and Market Forecast (2010~2015)

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Abstracts

The global crystalline solar cell glass market hit \$ 910 million in 2010 and the market is expected to show a slight growth to \$980 million in 2012, due to a steady decline in prices with the aftermath of a downturn of the PV market this year. As for the thin-film solar cell substrate market, more than 85% of sales are produced by the a-Si and the CdTe substrates, and the market is expected to grow into a \$1.04 billion business in 2011.

To win the cut-throat competition for high efficiency technology development, it is necessary to strengthen competitiveness. For this, efforts to improve properties of part materials used for modules as well as cells should be accompanied. There are cover glass products, of which the intensity of radiation is improved by enhancing the quantity of light through AR coating and forming patterns, being released. In the case of TCO glass used for thin-film solar cells, aggressive researches on TCO properties and optimization to enhance cell efficiency are underway.

It is shown that the glass industry has already balanced supply with demand due to decreasing demand for solar cells and steady production capacity expansion led by Chinese companies from 2011.

This report covers key theories, technologies and processes, which the solar cell glass is based on. In particular, in that the report contains technical analysis of glass by solar cell type - c-Si, a-Si, CdTe, CIGS, DSSC - and related issues, it will be a good guidance for researches in the solar cell glass industry. Above this, it deals with capacity and production of 24 global glass manufacturers, market share of each country and company, the current status of patent applications by glass type and forecast of market demand of each company.

Forecast of capacity & production of 24 solar cell glass manufacturers

Analysis of solar cell glass price & cost and supply-demand outlook

Technical Analysis by substrate and demand forecast-C-Si, CIGS, CdTe, a-Si, DSSC

Market forecast

World, Korea, China, and Japan.

Glass market share by country and company

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