

Wafer Cost Analysis for Solar Cell and Low-Cost Technology Trend

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Abstracts

New Low Cost Technology Trend for Wafer

The photovoltaic market that has rapidly grown until 2010 is slightly slowing down due to the FIT cut and global financial crisis. The module price annually decreases through an excessive investment in production line along with reduced demand. Wafer which is key component for crystalline solar cell seems to drop by more than 30% this year as well. Some have an optimistic view of photovoltaic industry for second half of this year but the PV market seems to continue just as first half of this year. The price of all raw materials including module is expected to steadily decrease. In this situation, new technology for high efficiency and cost competitiveness are required for companies. Especially, among manufacturing cost of wafer which is one of the photovoltaic value chains, polysilicon accounts 50~60%, meaning that vertically not integrated companies have considerable burden for production cost

This report comprehensively handles development trend of low cost wafer technology and contains the cost analysis depending on vertical integration as well as analysis of investment in single/multi crystalline production line.

Detailed 12 technologies relating to low-cost wafer manufacturing technology trend

(Mono like multi, Diamond wire saw and so on.)

Single-crystal Wafer cost analysis

Analysis of investment in single/multi crystal wafer manufacturing line

Wafer demand/supply market forecast (2010~2013)

Capacity Date of Wafer TOP 30 companies (2010~2013)

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