



## Suntech Power Holding: Next Generation Technology Reduces Solar Energy Cost

China's Suntech Power Holdings Co., Ltd. is one of the world's leading solar energy companies, as measured by volume of crystalline silicon photovoltaic (PV) modules produced. The company designs, develops, manufactures, and markets premium-quality, high-output, cost-effective and environmentally friendly solar products for electric power applications in the residential, commercial, industrial, and public utility sectors.

Suntech has grown quickly over the last five years: from US\$85 million in revenue in 2004 to \$1.9 billion in revenue in 2008. It is an acknowledged technology leader and industry cost leader.

Still, the financial crisis hit the entire solar industry hard: in an industry characterized by large, up-front capital expenditures and heavy working capital needs, the lack of global liquidity has meant that many firms had to put expansion plans on hold.



But with IFC's help, Suntech has been able to move forward, with aggressive plans to launch a new line of highly efficient solar modules, making use of its leading edge, proprietary crystalline silicon technology. Dubbed "Pluto," the technology increases average cell efficiency by 12.5 percent and reduces production costs. Ultimately, this will help make solar energy a more cost-competitive power alternative—part of IFC's overall strategy to help solar industry players achieve "grid parity," the point at which the cost of electricity from solar PV will be on par with conventional sources of power without subsidies.

Suntech's solar PV production sites are located in Wuxi, Jiangsu province, Luoyang, Henan province, and Shanghai. The company has other facilities and investments in Suzhou, Jiangsu province, and Xining, Qinghai province, and operates distribution facilities around the world. The company employs 9,000.

### IFC Role

- \$50 million in long term financing: strengthens the company's capital base, supports Suntech's transition to the high-efficiency Pluto technology and helps achieve grid parity solar solutions .
- Demonstration effect: other financial institutions and other energy firms realize the strong business potential in the alternative energy industry; supporting industry players as they expand in developing countries accelerates solar's potential for cost reduction and brings closer the achievement of grid parity.
- Strategic alliance: partnership will help identify additional solar opportunities in China, to help China become a climate change reduction leader.
- Guidance on adoption of world class social standards.

## Environmental Benefits:

- Contributes to global CO2 reduction: increased availability and affordability of alternative energy will reduce reliance on conventional sources of electricity, reduce greenhouse gas emissions and help mitigate the effects of climate change.
- Contributes to China's efforts to reduce greenhouse gas emissions as the second largest CO2 emitter in the world after the United States.
- Output is expected to reduce CO2 emissions by 7 million tons each year for a 25-year module life.
- Supports development of China's solar-power industry: Although China has been a small market for solar, given the low cost of coal-powered generation, the Chinese government has recently reinforced its support for the development of the solar industry as a key source of renewable energy in China.

## Development Impact

- Employment creation: 1,500 additional permanent jobs, 30 percent of which will go to women, who are underemployed in the local region.
- Economic growth for frontier region of China: Suntech is at the forefront of efforts to develop downstream solar PV projects within China, many of which are likely to be in China's western frontier provinces.
- Improved worker conditions: plans include adoption across all facilities of internationally recognized certifications in environmental, social, and safety management, thus promoting excellence in these areas in China's solar industry.



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