



Lowering the Cost of Solar Electricity



Thin Film Solutions for High Performance PV Projects



Company Overview

First Solar manufactures photovoltaic (PV) modules with an advanced thin film semiconductor process that greatly reduces raw material and manufacturing costs compared to traditional crystalline silicon PV modules. By enabling clean renewable electricity at lower costs, First Solar aims to provide the world with an economic alternative to conventional electricity, reducing related fossil fuel dependence, greenhouse gas emissions and peak time grid constraints. Our key competitive differentiators are:

Cost-per-Watt Advantage

Our proprietary thin film semiconductor technology allows us to achieve an average manufacturing cost per Watt that is significantly less than the per Watt manufacturing cost of producing crystalline silicon solar modules. We manufacture our solar modules on high-throughput production lines that complete all manufacturing steps, from semiconductor deposition to final assembly and testing, in an automated, continuous process to greatly reduce production costs.

Scalable Production Process

We use a systematic replication process to build new production lines with operating metrics that are comparable to the performance of our base plant. Employing "Continuous Improvement" methodologies and "Copy Smart" replication practices, First Solar has increased its module production capacity from 25MW in 2005 to more than 200MW in 2007. First Solar's process for replicating production lines has enabled the Company to rapidly expand its production capacity to meet the demand for its products.

Favorable System Performance

Under real-world conditions, including variation in the ambient temperature and intensity of sunlight, systems incorporating First Solar modules typically generate more kilowatt hours of electricity per kilowatt of rated power than systems incorporating crystalline silicon solar modules, increasing return on investment for the system.

First Solar is headquartered in Phoenix, Arizona, USA and has module manufacturing operations in the USA, Europe, and Asia. First Solar common stock trades on the NASDAQ National Market under the symbol FSLR.

Key Accomplishments

- Formed in 1999 and launched production of commercial products in 2002
- Achieved the lowest cost per manufactured watt in the PV industry at a production scale of only 100MW in 2006
- Entered into long term supply contracts with leading solar project developers for 2.8 Gigawatts of PV modules from 2006 through 2012
- Scaled module manufacturing capacity to more than 200MW in 2007
- Developed the first pre-funded module collection and recycling program in the PV industry



Environmental Responsibility

First Solar is committed to improving the global environment and the health and safety of our associates, customers and communities:

First Solar's Three-Point Environmental Policy

1. Convert mining byproducts and waste to clean, renewable energy
2. Produce, use and renew solar modules in a perpetual, environmentally safe life cycle
3. Reduce greenhouse gas emissions from fossil fuels by substituting solar energy

First Solar has integrated its environmental mission into every aspect of the product life cycle – from raw material sourcing through end-of-life collection and recycling. First Solar seeks to continuously improve our environmental health and safety management system and the environmental quality of our products, processes and services through comprehensive, company-wide programs.

Pre-Funded Collection & Recycling Program

- Anyone in possession of a First Solar module can participate in the program and request that Modules be collected for recycling at any time
- First Solar registers the site location of each Module installation for managing the collection and recycling program
- First Solar manages the logistics of collecting the Modules and provides the packaging and transportation of Modules to the recycling center
- Modules undergo treatment through schemes that comply with local regulations regarding health, safety, and waste management
- First Solar finances the cost of the program by pre-funding the expected future costs in a protected account
- Results of the program are audited for continuous improvement



Commercial Project Focus

First Solar PV modules are optimized for use in grid-connected commercial power plants ranging from 30 kilowatts to multi-megawatts and are sold to leading project developers and alternative energy power plant operators.

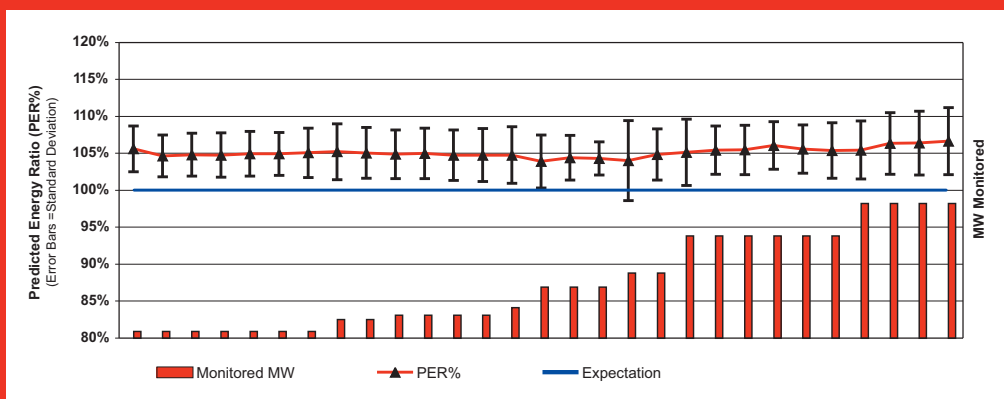
First Solar application engineers work closely with our customers to evaluate and select the optimal balance of system components for realizing power plant projects that achieve long term energy generation and reliability objectives.

First Solar monitors the performance of installed modules in a wide range of power plants using independent third party data collection service providers. Energy performance data is continually collected and reviewed to validate that system designs using First Solar modules are performing as predicted.



Monitored Commercial Product Installations

Annual Energy vs. Prediction





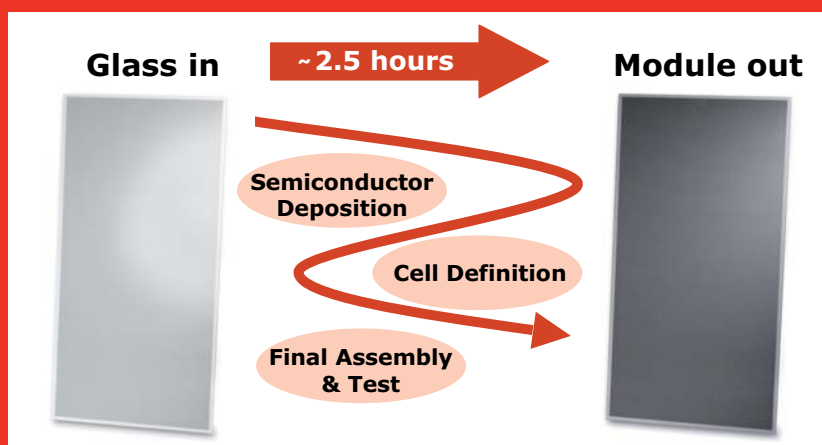
High Performance Products

First Solar PV modules are designed and manufactured using a proprietary thin film semiconductor technology. Modules are manufactured on high throughput, automated lines that integrate each production step, from semiconductor deposition to final assembly and test in one continuous process. This advanced manufacturing process transforms a piece of glass into a complete solar module in approximately 2.5 hours:



FS Series 2 PV Module Features

- Durable and recyclable packaging
- Low temperature coefficient and excellent low light response provide high energy performance
- Certified for reliability and safety according to IEC 61646 and SK II @ 1000V
- Manufacturing certified to ISO9001:2000 quality and ISO14001:2004 environmental standards
- 25 year power output warranty for 80% of nominal power subject to warranty terms & conditions
- Pre-financed collection & recycling program





Corporate Headquarter

Phoenix, Arizona, USA

Manufacturing

Perrysburg, Ohio, USA
Frankfurt (Oder), Germany
Kedah, Malaysia

European Sales &
Customer Support

Mainz, Germany
Madrid, Spain

Satellite Offices

Berlin, Germany (EU Government & Public Affairs)
Brussels, Belgium (EU Government & Public Affairs)
Amsterdam, Netherlands (Business Development)

