



Elevated Expectations for the U.S. Solar Industry

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Key Points:

- **As the U.S. solar market continues to mature and attract more investors, reliability and serviceability will become paramount to the success of producers across the entire solar value chain.**
- **An additional 46 GW of photovoltaic capacity is projected to be installed globally in 2014, growing 22 percent year-over-year.**
- **The rate of decline in prices for multi crystalline silicon modules has slowed significantly after declining 37 percent annually from January 2011 to January 2013.**
- **The industry started to see deterioration in module quality only in the last few years. This deterioration, driven entirely by market forces, will be corrected.**
- **Despite extreme price and margin pressure since 2011, top module firms have proven to be resilient and will likely continue to operate successfully for years to come.**
- **Strong domestic growth is dependent on competitive PV system prices. However, module prices in the U.S. are likely to rise through 2014, largely because of U.S. countervailing duties and anti-dumping measures on Chinese sourced modules.**
- **Innovation in the U.S. inverter market will drive the majority of non-module cost reductions over the next ten years.**
- **The industry's ability to scale manufacturing and installation while reducing the cost of capital will determine growth of the distributed sector, particularly for residential projects.**

Introduction

The U.S. solar industry is quickly evolving beyond its nascent beginning, as more risk-averse investors enter the market. Scrutiny of the long-term performance of solar assets by the investment community will impose a market driven discipline on product quality. The recent solar industry downturn forced module manufacturers to engage in a race to the bottom with respect to prices. However, module prices have stabilized since the beginning of 2013 and those module manufacturers that survived the downturn remain financially strong. Further down