

Key points in this report

- In 2006, the typical cost of solar power was \$0.25/kWh, or roughly \$3.60/watt installed
- This is the fully-loaded cost of manufacturing, performing R&D, selling, installing and operating a solar power system for a vertically integrated solar power supplier
- At a cost of \$0.25/kWh, roughly 5% to 10% of residential electricity demand in the OECD is addressable by solar power, equivalent to 150 to 300GW of solar power
- By 2010, the typical cost of solar power will likely decrease by at least 40% to \$0.15/kWh, or roughly \$2.50/watt installed
- Best practice manufacturing and installations will reduce the cost of solar to \$0.12/kWh by 2010, or roughly \$1.85/watt installed in "normal" sun locations and under \$0.10/kWh in sunnier locations
- With costs of \$0.10 to \$0.15/kWh by 2010, the cost of solar will be below the price of grid electricity for at least 50% of OECD residential demand, equivalent to around 1,500GW of solar power
- Taking into account both profits and subsidies, it appears that cost reductions will likely drive significant margin expansion over the next few years
- In addition, the low cost of solar is driving three emerging trends: vertical integration, solar-fueled power purchase agreements (PPAs), and new risks for traditional energy companies
- This report analyzes the cost of solar in 2006 and 2010, identifies three key trends, and examines the prospects of 13 potential winners:
 - BP Solar
 - Conergy
 - Ersol
 - Hemlock
 - Motech
 - Q-Cells
 - Renewable Energy Corporation (REC)
 - Sharp
 - SolarWorld
 - SunEdison
 - SunPower
 - Suntech
 - Trina