

Worldwide Solar Residential Panel Market Shares Strategies, and Forecasts 2008 to 2014

<https://marketpublishers.com/r/WB825E06804EN.html>

Date: August 2008

Pages: 571

Price: US\$ 3,300.00 (Single User License)

ID: WB825E06804EN

Abstracts

Adoption of solar energy has a simple market driving force. If people do not adopt solar energy, the planet will become unfit for human habitation. The fossil fuels are warming the planet at an increasing rate that makes life unsustainable if something does not change.

Global warming drives solar markets. Solar is perceived as the best, perhaps the only widespread solution to global warming. Every large enterprise has adopted a social responsibility strategy that makes a nod toward solving the issues of global warming and embraces renewable energy. Every person in the world is aware of the problems that global warming is bringing.

High growth is forecast for residential solar markets as solar moves to take on a measurable supply of world energy. As penetration from .3% of the world energy supply raises to over 15% in five years, residential uses of solar energy will represent a significant part of the growth. Residential solar energy represents a measure of energy independence for every household, used as hybrid systems independently of, but not completely in place of traditional grid electricity.

It is not economical to put solar generated electricity back on the grid, instead it will be used from batteries where the electricity is stored for later use. Solar systems will initially be used for lighting and charging hybrid and electric vehicles. Traditional grid electricity will only slowly be replaced. Grid hybrid electricity solutions will persist for a long time.

Demand for energy is accelerating as more of the world becomes developed. Developing countries are anticipated to double the worlds demand for energy in the next

thirty years. Energy creation is becoming a central environmental issue with air quality, water quality, and flooding because of global warming having implications for the entire world.

Solar energy is a clean, reusable and affordable solution that is increasingly being recognized as the leading alternative energy source for the 21st century. While hybrid solutions are anticipated to evolve with wind, geothermal, and nuclear solutions, evolving as well, solar looks to be a dominant technology. The solar panel size is a trade-off between the amount of money wanted to invest and the amount of electricity needed to produce. A typical US home uses 13,000kWh per year or 5kWp.

On average, the sun radiates 2.6 gigawatts (GW) of energy onto a square mile of the earth's surface, and the most suitable way to harvest that light depends on two factors: cost and the available real estate. It does not matter that thin film solar panels are not more than 10% efficient initially, the roof of the home is not doing anything else except sit there. The sides of the home, the back fence can be used to collect solar energy and that energy can be stored for later use in vehicles and lighting.

This market segmentation is anticipated to shift as the thin film solar panels become commercially viable. The thin film solar panels will be used initially in utility applications, but also in residential applications for fueling motor vehicles. The ability to store energy from solar panels makes them a viable alternative to gasoline. The lithium and lithium ion batteries are a very dense energy storage medium providing incentive for people to put in a modest amount of thin film battery banks recharged by solar panels.

As people do this, the silicon markets keep growing at a steady pace, due to the decrease in the costs for the silicon raw materials due to increased capacity for manufacturing the raw materials and increased demand for the silicon solar panels. The thin film solar panel technology has yet to mature. It is in this segment where the phenomenal growth occurs. Versatile thin film solar products are based on unique manufacturing processes. Sputtering is used to do thin film solutions for solar cell manufacture based on defining a repeatable process. Solar cell efficiencies are in the 9 to 10% range for sputtering implementations, but roof installations are not sensitive to size restrictions.

Thin film solar sputtering technology achieves physical vapor deposition which takes an ion and accelerates it. In this manner, the sputtering is used to knock out a target, depositing uniform films at high rates.

Residential solar markets at \$2.5 billion in 2007 are anticipated to reach \$39.3 billion by 2014. Growth is a result of using residential solar systems to power hybrid and all electric vehicles. Units raise from 74 million solar panels in 2007 to 25.6 billion units in 2014. Growth comes not only because solar power is the cheapest power source which it will be in many cases, but because it fulfills a variety of convenience needs, not the least of which is a way to attack global warming. Every large enterprise has adopted a green strategy in response to public demand for better energy solutions.

Contents

RESIDENTIAL SOLAR PANEL MARKET EXECUTIVE SUMMARY

Demand For Energy

Solar Conditions

Solar Energy Residential Market Forecasts

Solar Residential Market Shares

Worldwide Residential Solar Cell and Panel Shipment Forecasts

Issues Of Global Warming And Embracing Renewable Energy

Sharp Residential Solar Vision

Miasol

Flisom Thin-Film Solar Technology

PrimeStar Solar

Nanosolar Funding

Q-Cells Business Strategy

1. SOLAR RESIDENTIAL MARKET DESCRIPTION AND MARKET DYNAMICS

1.1 Photovoltaics

1.1.1 Solar Power Systems Convert Sunlight Into Electricity

1.1.2 On-Grid Solar Electric Systems

1.1.3 Off-Grid Residential Solar Electric Systems

1.1.4 Solar Power System

1.1.5 PV System Integration

1.1.6 Solar Electric Basics

1.2 Industry-Wide Shortage Of Polysilicon

1.2.1 Stand Alone PV Systems

1.2.2 Backup Power Solar / Wind / Thin Film Hybrid Systems

1.3 PV Cells

1.3.1 PV Modules

1.3.2 BIPV

1.4 Solar Thermal Energy Used For Heating Or Hot Water Production

1.5 Solar Energy Key Facts:

1.6 Solar Power Impacts

1.6.1 First Solar and the Environment

1.7 The Colton Electric Utility Carport With Schott Solar

1.8 Applications of PV Solar Electricity

1.8.1 On-Grid Applications

1.8.2 On-grid Residential Solar

2. RESIDENTIAL SOLAR MARKET SHARES AND MARKET FORECASTS

2.1 Demand For Energy

2.1.1 Solar Conditions

2.1.2 Benefits of Solar For Residential Markets

2.1.3 Solar Energy Adoption Is A Green Decision

2.1.4 Solar Energy Market Driving Forces

2.1.5 Impact of Financial Market Capital Infusion On Solar Initiatives

2.2 Solar Market Shares

2.2.1 Solar Residential Market Shares

2.2.2 Sharp Solar Panels

2.2.3 Kyocera

2.2.4 Sanyo

2.2.5 Q-Cells

2.2.6 Suntech

2.2.7 GE

2.2.8 General Electric Brilliance Pre-Packaged Residential Systems

2.2.9 GE Energy Roof-Integrated Solar Systems

2.2.10 SunPower Residential Solar Roof Tiles

2.2.11 Suntech Power

2.2.12 Schott Solar

2.3 Solar Residential Market Forecast Analysis

2.3.1 Worldwide Residential Solar Cell and Panel Shipments

2.3.1 Worldwide Large Residential Solar Cell and Panel Shipments

2.3.1 Worldwide Mid Size Residential Solar Cell and Panel Shipments

2.3.1 Worldwide Small Residential Solar Cell and Panel Shipments

2.3.2 Solar Energy Residential Market Forecasts

2.3.3 Industry-Wide Shortage Of Polysilicon

2.3.4 Shortage Of Crystalline Silicon

2.3.5 Polysilicon Prices Going Up In Near Term Then Going Down

2.3.6 Solartech Pricing

2.3.7 Crystalline Silicon Solar Cells, Crystalline Silicon Solar Modules, And Thin Film

Solar Modules

2.3.8 Miasol

2.3.9 First Solar Materials and Product Design

2.3.10 Other Companies

2.3.11 Crystalline Silicon Wafers Vs Thin Film Amorphous

- 2.4 Residential Solar Competitive Analysis
 - 2.4.1 Renewable Energy as Market Driving Force For Solar Power Adoption Worldwide
 - 2.4.2 Small Scale PV Power Systems In Developing Areas
- 2.5 Incremental Household Use of Solar Systems in Residential Markets
- 2.6 Sunshine Index
- 2.7 Residential Solar Tech Pricing
- 2.8 Residential Solar Regional Analysis
 - 2.8.1 Germany
 - 2.8.2 Spain
 - 2.8.3 US
 - 2.8.4 Japan
 - 2.8.5 SunTech Regional Revenues
 - 2.8.6 Yingli Green Regional Analysis
 - 2.8.7 First Solar
 - 2.8.8 Kyocera
 - 2.8.9 Solar Photovoltaic Industry Expands in Jiangxi
 - 2.8.10 Solartech Regional Revenue Analysis
 - 2.8.11 South Africa
 - 2.8.12 Schott

3. RESIDENTIAL SOLAR PRODUCTS

- 3.1 Sharp Solar Products
 - 3.1.1 Sharp Solar Systems:
 - 3.1.2 Sharp OnEnergy Solar System
 - 3.1.3 Sharp Multi-Purpose Module
 - 3.1.4 Sharp Residential System Module
 - 3.1.5 Sharp OnEnergy Solar System Prices
- 3.2 Q-Cells
 - 3.2.1 Q-Cells Key Position In The Solar Cell Photo-Voltaic Supply Chain
- 3.3 Kyocera
 - 3.3.1 Kyocera Solar Capabilities
 - 3.3.2 Kyocera Water Pumping
 - 3.3.3 Kyocera Lighting
 - 3.3.4 Kyocera Solar Stand Alone System
 - 3.3.5 Kyocera Solar Home Systems
 - 3.3.6 Kyocera Rural Development Vaccine Refrigeration
 - 3.3.7 Kyocera Vaccine Refrigeration and Clinics

- 3.3.8 Kyocera Solar Modules And Components
- 3.3.9 Kyocera d.Blue Solar Module
- 3.4 Suntech
 - 3.4.1 Suntech First Phase Polysilicon Supply Agreement With Nitol Solar, Suntech Power First Phase Agreement Asia Silicon Co., Ltd.
 - 3.4.2 Suntech MSK Solar Design Products
- 3.5 Sanyo
 - 3.5.1 Sanyo HIT (Heterojunction with Intrinsic Thin layer) Bifacial Solar Cells Proprietary Technology
 - 3.5.2 Sanyo HIT Double Solar Panels Structure
 - 3.5.3 Sanyo Silicon Wafers
 - 3.5.4 Sanyo Amorphous Solar Cells
 - 3.5.5 Sanyo Amorton Series
 - 3.5.6 Sanyo Amorton Cells
 - 3.5.7 Sanyo Amorton Film
 - 3.5.8 Sanyo Flexible Amorton
 - 3.5.9 Sanyo Amorphous Photosensors
 - 3.5.10 Sanyo Amorphous Products Amorton Cells
 - 3.5.11 Sanyo Amorton Film
 - 3.5.12 Sanyo Flexible Amorton
 - 3.5.13 Sanyo Amorphous Photosensors
- 3.6 First Solar Materials and Product Design
- 3.7 GE Solar
 - 3.7.1 GE Energy GEpv-185-Mc 200 Watt Photovoltaic Module For 600 Volt Applications
 - 3.7.2 GE Energy Roof-Integrated Solar Systems
 - 3.7.3 GE Solar Products And Service
 - 3.7.4 GE Energy and Rockefeller Center Christmas Tree
 - 3.7.5 General Electric Residential Solar Modules
 - 3.7.6 General Electric Brilliance Pre-Packaged Residential Systems
 - 3.7.7 General Electric Brilliance Wireless Solar Meter
- 3.8 SunPower Residential Panels
 - 3.8.1 SunPower Residential Solar Roof Tiles
 - 3.8.2 SunPower Performance Monitoring
- 3.9 BP Solar
 - 3.9.1 BP Solar Installation And Operation
- 3.10 Schott Solar Panels
 - 3.10.1 Schott SAPC-175 Solar 175 Watt Photovoltaic Module Panels
- 3.11 Miasolé

- 3.12 PrimeStar Solar
- 3.13 Nanosolar 1 GW CIGS PV Production Tool
- 3.14 Flisom
- 3.15 Fraunhofer ISE Screen-Printed Solar Cells Variety of Colors and Patterns
- 3.16 Dyesol
- 3.17 Hitachi
- 3.18 Signet Solar
 - 3.18.1 Signet Solar Thin Film PV Module Technology
 - 3.18.2 Signet Solar Amorphous and Micro-crystalline Silicon Modules
 - 3.18.3 Signet Solar Amorphous and Micro-crystalline Silicon Modules Use of Mainstream, Large Area Manufacturing

4. RESIDENTIAL SOLAR TECHNOLOGY

- 4.1 How Solar Cells Work
 - 4.1.1 90% Of Solar Cells Made From Silicon
 - 4.1.2 Solar Cells Convert Sunlight to Electricity
 - 4.1.3 Intensity Of The Photon Flow
- 4.2 Solar Technologies
 - 4.2.1 SunPower Technology
 - 4.2.2 Types of PV Technologies
 - 4.2.3 Crystalline Silicon
 - 4.2.4 Thin-Film PV Technology
 - 4.2.5 Thin film PV Modules Technology
 - 4.2.6 Amorphous and Thin Film Silicon
 - 4.2.7 Highly Efficient Thin-Film Solar Cells
 - 4.2.8 Developing Technologies: Electrochemical PV cells
- 4.3 Filsom Technology
 - 4.3.1 Dyesol DSC - Dye Solar Cell Technology
 - 4.3.2 First Solar CdTe Technology
 - 4.3.3 Copper Indium Diselenide
- 4.4 Amorphous Silicon
- 4.5 Regional Considerations
- 4.6 Solar Panel Standards
- 4.7 Batteries For Solar Energy Storage
 - 4.7.1 Thin film batteries (TFB)
 - 4.7.2 Flooded Lead Acid Batteries
 - 4.7.3 Absorbed Glass Mat Sealed Lead Acid (AGM)
 - 4.7.4 MK Gel Cell Batteries

- 4.7.5 MK Power-Tech Batteries
- 4.8 Solar Research and Development
 - 4.8.1 Barrier Coatings And Stability Of Thin Film Solar Cells
 - 4.8.2 High-Efficiency Amorphous Silicon And Nanocrystalline Silicon-Based Solar Cells And Modules
 - 4.8.3 High Throughput, Low Toxic Processing Of Very Thin, High Efficiency CIGSS Solar Cells

5 RESIDENTIAL SOLAR PANELS COMPANY PROFILES

5.1 Major Photovoltaics Companies

5.1.1 Top Five global Photovoltaics Producers In 2007

The top five global photovoltaics producers in 2007 accounted for more than half of world production.

These companies were:

- * Sharp Solar (Japan)
- * Q-Cells (Germany)
- * Kyocera (Japan)
- * Suntech (China)
- * Sanyo (Japan)

5.1.2 Photovoltaic Industry Associations

5.2 AES

5.3 Akuo Energy

5.4 BP Solar

5.4.1 BP Solar Integrated Energy Company

5.4.2 BP Business Strategy

5.4.3 BP Financials

5.4.4 BP Revenue

5.4.5 BP Customers and Testimonials

5.5 Colorado Instruments / SolarWorld

5.6 Concentrix

5.6.1 Concentrix Highly efficient Flatcon System

5.7 Cypress Semiconductor / Sunpower

5.7.1 Cypress Semiconductor / SunPower

5.8 Dyesol Limited

5.8.1 Dyesol Solar Cell (DSC) TechnologyPartnerships

5.9 Evergreen Solar

5.9.1 Evergreen Solar String Ribbon Technology

5.9.2 Evergreen Solar Contracts and Facilities

5.10 First Solar

- 5.10.1 First Solar 2008 Second Quarter Revenue
- 5.10.2 First Solar Revenue
- 5.10.3 First Solar 2007 Third Quarter Revenue
- 5.10.4 First Solar Advanced Thin Film Semiconductor Process
- 5.10.5 First Solar / AES
- 5.10.6 First Solar Acquisition of Turner Renewable Energy
- 5.10.7 First Solar Manufacturing Capacity
- 5.10.8 First Solar Financials

5.11 Flisom

- 5.11.1 Flisom CTI Technology Transfer for Low-Cost Manufacturing

5.12 GE

- 5.12.1 GE Participation In The Solar America Initiative
- 5.12.2 GE Energy

5.13 Global Solar Energy

5.14 Hitachi America Ltd.

5.15 Hoku Scientific

- 5.15.1 Hoku Scientific Customers
- 5.15.2 Suntech Purchases Shares of Hoku Scientific
- 5.15.3 Hoku Fuel Cells

5.16 Isofoton

- 5.16.1 Isofoton Revenue
- 5.16.2 Isofoton Strategies
- 5.16.3 Isofoton Partners
- 5.16.4 Isofoton Customers

5.17 Kyocera

- 5.17.1 Kyocera Revenue
- 5.17.2 Kyocera Segment Information
- 5.17.3 Kyocera Business Strategy

5.18 LDK Solar Co LTD

- 5.18.1 LDK Strategic Relationships

5.19 Mitsubishi

- 5.19.1 Mitsubishi Electric
- 5.19.2 Mitsubishi Electric Revenue
- 5.19.3 Mitsubishi Electric Business Strategy
- 5.19.4 Mitsubishi Electric Improving Performance Through Balanced Management
- 5.19.5 Mitsubishi Electric Promoting Business-Strengthening Strategies
- 5.19.6 Mitsubishi Electric Strengthening Management
- 5.19.7 Mitsubishi Electric Growth Strategies

- 5.20 Nanosolar
 - 5.20.1 Nano Solar Power Innovation
 - 5.20.2 Nanosolar Funding
- 5.21 PrimeStar Solar
 - 5.21.1 GE Makes Strategic Investment In PrimeStar Solar
- 5.22 Q-Cells AG
 - 5.22.1 Q-Cells AG Business and Sales Assessment
 - 5.22.2 Q-Cells Germany
 - 5.22.3 Q-Cells Revenue
 - 5.22.4 Q-Cells Business Strategy
 - 5.22.5 Q-Cells Partners
 - 5.22.6 Q-Cells Customers
- 5.23 Sanyo
 - 5.23.1 Sanyo Brand Vision
 - 5.23.2 Sanyo Revenue
 - 5.23.3 Sanyo Investors
- 5.24 SatCon
 - 5.24.1 SatCon Revenue
- 5.25 Schott Solar Builds US Manufacturing Plant
- 5.26 Sharp
 - 5.26.1 Sharp Solar Revenue
 - 5.26.2 Sharp Solar Cells Revenue
 - 5.26.3 Sharp Solar Partners
- 5.27 Signet Solar
 - 5.27.1 Signet Solar / Solar Farms / Solar Panels
 - 5.27.2 Signet Solar Commercial Installations
 - 5.27.3 Signet Solar Building Integrated Photovoltaics (BIPV)
 - 5.27.4 Signet Solar Remote Habitation
- 5.28 Siemens
 - 5.28.1 Siemens Revenue
 - 5.28.2 Siemens Business Platform Strategy
- 5.29 Solaire Direct
- 5.30 Solarfun Power Holdings Co, Ltd.
- 5.31 Solar Integrated
 - 5.31.1 Solar Integrated Building Integrated Photovoltaic (BIPV) Roofing Systems
 - 5.31.2 Solar Integrated Customers
- 5.32 SolarWorld AG
 - 5.32.1 SolarWorld AG Revenue
 - 5.32.2 SolarWorld AG Shell Acquisition

- 5.32.3 SolarWorld AG Business Strategy
- 5.33 Solartech
 - 5.33.1 Solartech Develops Thin Film Silicon PV Cell Technologies
 - 5.33.2 Solartech Solar Cell Efficiency
 - 5.33.3 Solartech Revenue
 - 5.33.4 Solartech Customers
- 5.34 Solon
- 5.35 Spectra Watt / Intel
- 5.36 SunPower
 - 5.36.1 Sunpower High-Efficiency Solar Cells And Multi-Megawatt Solar Power Systems
 - 5.36.2 SunPower Financials
 - 5.36.3 Cypress Semiconductor / SunPower
 - 5.36.4 SunPower Solar Utility-Scale Power
 - 5.36.5 SunPower 23.4 Percent Efficiency Prototype Solar Cell
 - 5.36.6 SunPower Revenue
 - 5.36.7 SunPower Partners
- 5.37 Suntech
 - 5.37.1 Suntech Acquisitions
 - 5.37.2 Suntech / Hoku Scientific
 - 5.37.3 Suntech / Suntech Power (Korea)
 - 5.37.4 Suntech / Nitol Solar
 - 5.37.5 SunTech Revenue
 - 5.37.6 Suntech Regional Revenue Analysis
- 5.38 Tenesol
- 5.39 Urbasolar
- 5.40 Yingli Green Energy
 - 5.40.1 Yingli Green Energy Revenue
 - 5.40.2 Yingli Business Strategy
 - 5.40.3 Customers

6. SOLAR COMPANIES

- 6.1 Lists of Solar Companies
- 6.2 Note On Lists

List Of Tables

LIST OF TABLES AND FIGURES

Table ES-1 Residential Solar Energy Market Driving Forces

Table ES-1 (Continued) Residential Solar Energy Market Driving Forces

Figure ES-2 Worldwide Residential Solar Cells and Panels Shipments Market Shares, Dollars, First Half 2008

Figure ES-3 Worldwide Total Residential Solar Cell and Panel Shipments, Market Forecasts, Dollars, 2008-2014

Figure ES-4 Worldwide Residential Crystalline Silicon Solar Cell Segment Market Forecasts, Dollars, 2008-2014

Figure ES-5 Worldwide Residential Thin Film Solar Cell Segment Market Forecasts, Dollars, 2008-2014

Table ES-6 Worldwide Residential Crystalline Silicon Solar Cell Segment Market Forecasts, Dollars, 2008-2014

Figure ES-7 Sharp Residential Solar Video Vision

Figure ES-8 Flisom Thin-Film Solar Technology

Table 1-1 Solar Power Systems On Grid Disadvantages

Table 1-2 Solar Electric Basic Technologies

Table 1-3 Stand Alone PV Systems Aspects

Table 1-4 BIPV Solar module advantages

Table 1-6 First Solar Modules

Figure 1-6 Energy Mix: German State vs. California Utility

Figure 1-7 California Colton Electric Utility Carport For Charging Cars

Table 1-8 California Colton Electric Utility Carport Technical Specifications

Table 1-9 Solar Employee Parking Technical Specifications

Figure 1-10 Riverside Public Utilities Operation Schott Solar Curved Beam Carport Design

Table 2-1 Benefits Of Solar For Residential Markets

Table 2-1 (Continued) Benefits Of Solar For Residential Markets

Table 2-2 Residential Solar Energy Market Driving Forces

Table 2-2 (Continued) Residential Solar Energy Market Driving Forces

Figure 2-3 Worldwide Solar Cells and Panels Market Shares, First Half 2008

Figure 2-4 Worldwide Solar Market Shares, 2007

Table 2-5 Worldwide Solar Cell and Panel Shipments, Market Shares, Dollars 2007 and First Half 2008

Figure 2-6 Worldwide Residential Solar Cells and Panels Shipments Market Shares, Dollars, First Half 2008

Figure 2-7 Worldwide Residential Solar Cells and Panels Shipments Market Shares, Dollars, 2007

Table 2-8 Worldwide Residential Solar Cell and Panel Market Shares, Shipments, 2007 and First Half 2008

Figure 2-9 Worldwide Total Residential Solar Cell and Panel Shipments, Market Forecasts, Dollars, 2008-2014

Figure 2-10 Worldwide Total Residential Solar Cell and Panel Shipments, Market Forecasts, Units, 2008-2014

Table 2-11 Worldwide Total Residential Solar Cell and Panel Shipments, Market Forecasts, Units and Dollars, 2008-2014

Table 2-12 Worldwide Total Residential Solar Cell and Panel Segment Shipments, 2008-2014

Figure 2-13 Worldwide Large Residential Solar Cell and Panel Shipments, 2008-2014

Figure 2-14 Worldwide Large Residential Solar Cell and Panel Shipments, Units, 2008-2014

Table 2-15 Worldwide Large Residential Solar Cell and Panel Shipments, Units and Dollars, 2008-2014

Figure 2-16 Worldwide Residential Mid Size Solar Panel Shipments, Market Forecasts, Dollars, 2008-2014

Figure 2-17 Worldwide Mid Size Residential Solar Panel Shipments, Market Forecasts, Units, 2008-2014

Table 2-18 Worldwide Mid Size Residential Solar Panel Shipments, Market Forecasts, Units and Dollars, 2008-2014

Figure 2-19 Worldwide Residential Small Size Solar Cell and Panel Shipments, Dollars, 2008-2014

Figure 2-20 Worldwide Residential Small Size Solar Cell and Panel Shipments, Units, 2008-2014

Table 2-21 Worldwide Residential Small Size Solar Cell and Panel Shipments, Units and Dollars, 2008-2014

Table 2-22 Solar Residential Market Growth Factors

Figure 2-23 Residential Crystalline Silicon vs. Thin Film Solar Cells

Figure 2-24 Worldwide Residential Crystalline Silicon Solar Cell Segment Market Forecasts, Dollars, 2008-2014

Figure 2-25 Worldwide Residential Thin Film Solar Cell Segment Market Forecasts, Dollars, 2008-2014

Figure 2-26 Worldwide Residential Crystalline Silicon Solar Cell Segment Market Forecasts, Dollars, 2008-2014

Figure 2-27 Sunshine Index, U.S.

Figure 2-28 Regional Solar Market Segments, 2007

Table 2-29 Regional Solar Market Segments, 2007

Table 3-1 Sharp NE-80EJEA Powerful Performance Sharp Reliability

Table 3-2 Sharp ND-62RU2 Solar Roof Module Features

Table 3-3 Sharp Residential 175 Watt System

Table 3-4 Sharp Residential 175 Watt System

Figure 3-5 Sharp 62 Watt Solar Panel

Table 3-6 Sharp OnEnergy Solar System Prices

Figure 3-7 Sharp Solar Panel

Figure 3-8 Sharp Solar ROI Calculation

Figure 3-9 Sharp Solar ROI Calculation

Figure 3-10 Sharp Solar ROI Payback Period Calculation

Table 3-11 Q-Cells Silicon-Based Photovoltaic Cell Supply Chain

Table 3-12 Q-Cells Product Portfolio Variety

Table 3-13 Q-Cells Products

Table 3-14 Q-Cells Q6LTT3 Solar Cell Anti-Reflective Finish On The Surface

Table 3-15 Q-Cells Q6LTT3 Multicrystalline Cell

Table 3-16 Q-Cell Q6LQ6LTT Multicrystalline Cell

Figure 3-17 Stand Alone Photo Voltaic Systems

Figure 3-18 Stand Alone Solar Systems

Figure 3-19 Koycera Solar Battery Back up System

Figure 3-20 Koycera Solar Electrical Back up System

Table 3-21 Kyocera Refrigeration

Table 3-22 Kyocera Small Wattage Photovoltaic Module Applications

Table 3-23 Kyocera Small Wattage Modules

Table 3-24 Basic Types Of Solar Panel Mounting Structures

Figure 3-25 Suntech Operations in PV Supply Chain

Table 3-26 Sanyo HIP-xxxDA3 Series Applications

Table 3-27 Sanyo Silicon Wafers To Maximize Power:

Table 3-28 Sanyo Product Power From Both Sides

Figure 3-29 HIT Double Solar Panels HIP-xxxDA3 Series

Figure 3-30 HIT Standard Solar Panels HIP-xxxBA3 Series

Table 3-31 Sanyo Amorphous Solar Cells Features:

Table 3-32 Sanyo Amorphous Products

Table 3-33 Sanyo Amorphous Photosensor Uses

Figure 3-34 Sanyo Amorphous Solar Cells

Table 3-35 Sanyo Amorton Series Features:

Table 3-36 Applications of Sanyo Amorphous Photosensors

Figure 3-37 First Solar Product Design Features

Table 3-38 First Solar Key Product Design Features

Table 3-39 GE Energy GEPVp-066-G
Table 3-40 GE Residential Solar Cell Benefits
Table 3-41 GEPV-085 85 WATT PHOTOVOLTAIC MODULE FEATURES
Table 3-42 GEPV-085 85 Watt Photovoltaic Module Benefits
Table 3-43 GEPVp-185-MC 200 WATT PHOTOVOLTAIC MODULE FEATURES
Table 3-44 GE Energy Roof-Integrated Solar Systems Features & Benefits
Table 3-45 GE Solar Energy Calculations Depend on Conditions
Figure 3-46 GE Energy Roof Integrated Solar Panels
Figure 3-47 GE Solar Modules
Table 3-48 GE PV-085 (All Countries) 85 Watt Photovoltaic Module
Table 3-49 GE PVp-066-G (United States Only)
Figure 3-50 GE Residential Brilliance Solar System
Figure 3-51 GE Brilliance Wireless Solar Meter Kit
Figure 3-52 SunPower Residential Panels
Table 3-53 SunPower 205 Solar Panel Benefits
Table 3-54 SunPower 210 Solar Panel Benefits
Figure 3-55 SunPower SunTiles
Table 3-56 SunTile Features and Benefits
Figure 3-57 BP ROI Calculation 7 kWatt Residential Solar System
Figure 3-58 BP ROI Calculation 4 kWatt Residential Solar System
Figure 3-59 BP ROI Calculation 1 kWatt Residential Solar System
Figure 3-60 BP Solar Field Mounted System
Figure 3-61 BP Solar Roof Mounted Systems
Table 3-62 Schott SAPC-175 Solar 175 Watt Photovoltaic Module Panel Features
Figure 3-63 Flisom Thin-Film Solar Technology
Figure 3-64 Filsom Absorbers Intrinsically Stable
Figure 3-65 Screen-Printed Solar Cells
Figure 4-1 SunPower Solar Panel
Table 4-2 Solar Photovoltaic Cell Types
Table 4-3 Solar CIS/CIGS Systems And Modules By Application
Table 4-4 Types of PV Technologies
Table 4-4 (Continued) Types of PV Technologies
Figure 4-5 Thin Film Solar Modules Cell Spectral Response
Table 4-6 Solar CIS/CIGS Systems And Modules By Application
Figure 4-7 Thin-Film Solar Technology
Figure 4-8 Green Dye Synthetic Chlorophyll
Figure 4-9 Basic Idea Of Cigs Solar Cell Manufacturing Using Roll-To-Roll Deposition Technology
Table 4-10 Kyocera Solar Power Applications

Figure 4-11 Regional Power Output Levels Per kw Of Generation Using GE Solar Electric Power Systems

Table 4-12 Solar Energy Generated as a Function of Installation Type

Figure 4-13 Alternative Siteing of GE Solar Panels

Figure 4-14 GE Solar Panel Pressure Clamp

Table 4-15 MK Power-Tech Battery Features:

Table 4-16 Stability Issues Related To Moisture Ingress

Table 5-1 Top Five Global Photovoltaics Producers In 2007

Table 5-2 Recent Solar Company IPOs

Table 5-3 Other Solar Companies

Table 5-3 (Continued) Other Solar Companies

Table 5-4 Selected Photovoltaic Industry Associations

Figure 5-5 BP Solar Country Positioning

Figure 5-6 BP Drilling Platform

Table 5-7 BP Revenue First Half 2008

Table 5-8 Selected BP Solar Customers and Testimonials

Figure 5-9 SolarWorld Educational Kits

Figure 5-10 Flisom Thin Film Solar Positioning

Table 5-11 GE Partners In The Solar America Initiative

Figure 5-12 Isofoton Solar Cell

Figure 5-13 Mitsubishi Electric Group Challenging Targets

Figure 5-14 Mitsubishi Electric Group Framework for Balanced Management

Figure 5-15 Q-Cells AG Business and Sales Assessment

Figure 5-16 Q-Cells Employees

Figure 5-17 Sanyo Solar Revenue

Figure 5-18 Sanyo Revenue by Geographical Segment

Figure 5-19 Sanyo Overseas Revenue by Geographical Segment

Figure 5-20 Sanyo Revenue by Geographical Segment

Table 5-21 Schott Solar Integrated PV Wafers

Figure 5-22 Schott Solar Locations

Figure 5-23 Sharp Photovoltaic Power Systems

Figure 5-24 Sharp Photovoltaic Power Systems Capabilities

Figure 5-25 Sharp Photovoltaic Sun Power

Figure 5-26 Sharp Photovoltaic Capacity Enhancement of Solar Cells

Figure 5-27 Sharp Photovoltaic Capacity Enhancement of Solar Cells

Figure 5-28 Sharp C/O₂ Reduction Effect of Solar Cells

Figure 5-29 Sharp C/O₂ Reduction Effect of Solar Cells

Figure 5-30 Sharp C/O₂ Reduction Effect of Solar Cells

Table 5-31 Sharp Solar Partners

Figure 5-32 SolarWorld AG Revenue

Figure 5-33 SolarWorld AG Sales by Region

Figure 5-34 SolarWorld AG Shareholder Structure

Table 5-35 Significant Factors That Directly Or Indirectly Affect Suntech Financial Performance

Table 6-1 Lists of Solar Companies

Table 6-2 Note On Lists

COMPANIES PROFILED

Sharp Solar

Schott

Q-Cells

Kyocera

BP Solar

First Solar

AES

Akuo Energy

Colorado Instruments / SolarWorld

Concentrix

Cypress Semiconductor / Sunpower

Dyesol Limited

Evergreen Solar

Flisom

GE

Global Solar Energy

Hitachi America Ltd.

Hoku Scientific

Isofoton

Kyocera

LDK Solar Co LTD

Mitsubishi

Nanosolar

Isofoton

Sanyo

SolarWorld

SunPower

Suntech

Yingli Green Energy

PrimeStar Solar
Q-Cells AG
Sanyo
SatCon
Signet Solar
Siemens
Solaire Direct
Solarfun Power Holdings Co, Ltd.
Solar Integrated
SolarWorld AG
Solartech
Solon
Spectra Watt / Intel
Tenesol
Urbasolar
Yingli Green Energy

I would like to order

Product name: Worldwide Solar Residential Panel Market Shares Strategies, and Forecasts 2008 to 2014

Product link: <https://marketpublishers.com/r/WB825E06804EN.html>

Price: US\$ 3,300.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/WB825E06804EN.html>