



# Global Concentrated Solar Power Markets and Strategies, 2007–2020

November 2007

## Study Highlights:

### Solar CSP Market Drivers

- Climate Issues
- Renewable Incentives
- Energy Security

### Regional Analysis

- North America
- Europe
- Asia Pacific
- Rest of World

### Technology Comparison & Competitive Analysis

- Parabolic trough
- Central Receiver Tower
- Dish Engine
- Solar Chimney
- Linear Fresnel
- Thermal Storage
- ISCC

### Solar CSP Cost Analysis

- Power Production Costs
- O&M Investment Costs
- Project Cost Trends

### Market Share Analysis

- Plant type and size
- By Region
- 2007-2020 Forecast

### Competitive Analysis

- Market Share
- Vertical Integration
- Developer / IPP Evolution
- Supply Chain Analysis

### Strategy Profiles

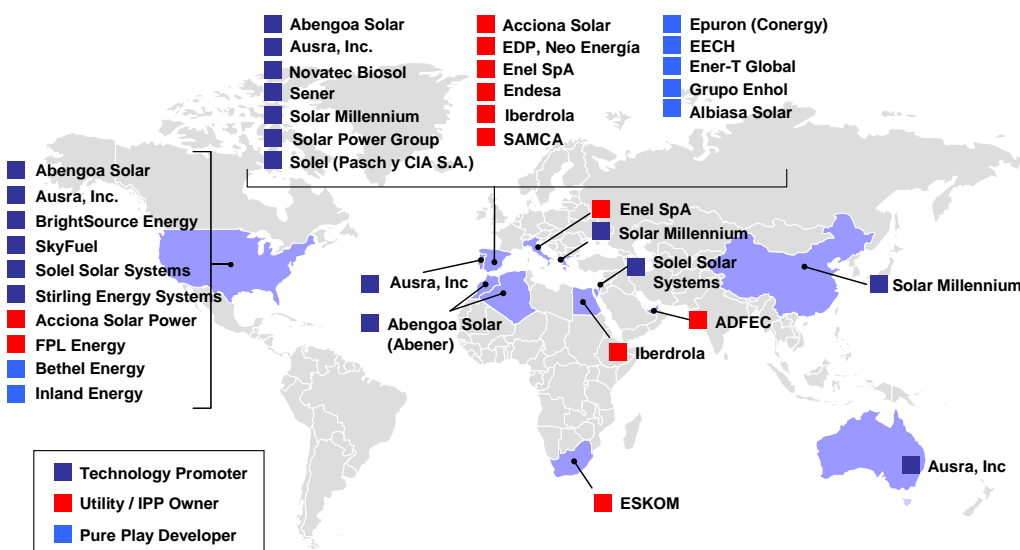
- Utilities
- CSP IPPs (Large and Emerging)
- CSP Developers
- Component Manufacturers
- EPC Providers

The recent announcements of two CSP projects coming online in Spain and the United States indicate that the tide is turning in favor of Concentrated Solar Power (CSP). Over 5,800 MW of Solar CSP projects are in planning stages worldwide, and the lion's share is expected to come online by 2012.

*Global Concentrated Solar Power Markets and Strategies 2007-2020* provides a comprehensive analysis of the global CSP markets, the strategies employed by the growing list of developers, and the barriers facing the next generation technology.

- **Commercial projects coming online in 2007 aim to prove CSP technology viability:** Parabolic trough and central receiver projects installed in 2007 represent the beginning of the 5,800 MW pipeline CSP projects planned to come on line by 2012. These two projects represent the rebirth of the industry since the original SEGs plants were constructed 20 years ago.
- **Regulatory hurdles in Spain and the United States present the greatest short term challenge:** Spain's €0.26 feed in tariff is currently limited to 500 MW, and the US Investment Tax Credit is up for renewal in 2008. These support mechanisms are fundamental to the industry's growth and are essential for the industry to scale.
- **CSP developers are forming differing strategies to facilitate their growth.** Developers are split among those employing develop and sell models led by Solar Millennium and those seeking vertical integration from technology to ownership such as Solel and Abengoa. At the same time, CSP ownership is entering into the portfolios of major renewable IPPs and utilities including Iberdrola, FPL, Acciona and Neo Energia.

**Exhibit 5-3: Solar CSP Industry's Global Focus**



Source: Emerging Energy Research

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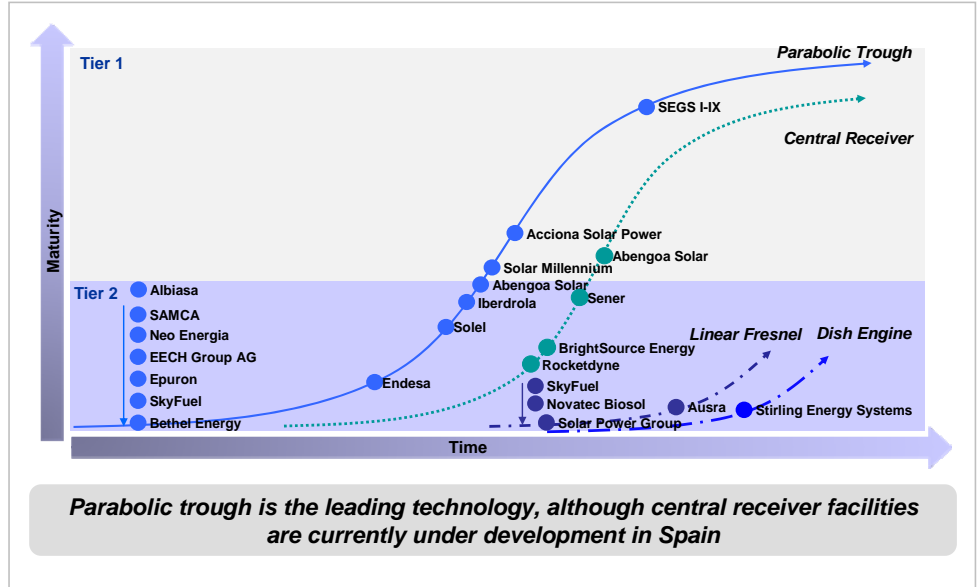
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Source: Emerging Energy Research

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EER's market studies are relied upon by a broad base of key stakeholders in the industry including technology manufacturers, component suppliers, financial companies, investment companies, utilities, IPPs and developers. EER's new market study covering Solar CSP Markets is comprised of the following sections:

- Section 1: Executive Summary
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- Section 3: Global Solar CSP Technology Costs & Trends
- Section 4: Global CSP Power Markets 2007-2020
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