Solid Oxide Fuel Cells: Technologies and Global Markets

Description: This report provides a unique analysis of the SOFC market. It analyzes components of the solid oxide fuel cell technology offering the promise of greatly reduced environmental impact and excellent performance, price, fuel flexibility and efficiency advantages.

The global market for solid oxide fuel cell (SOFC) was $303 million and $622 million in 2008 and 2012, respectively. The market is expected to reach nearly $1.2 billion by 2020 from $662 million in 2015, increasing at a compound annual growth rate (CAGR) of 12.3% from 2015 to 2020.

This report provides:
- An overview of the global markets for solid oxide fuel cells (SOFCs), a technology offering the promise of greatly reduced environmental impact and excellent performance, price, fuel flexibility, and efficiency advantages
- Analyses of global market trends, with data from 2008 and 2012, 2015, and projections of CAGRs through 2020
- Discussion of the current state, setbacks, innovations, and the future needs of the market
- Examination of the market by application and by product sizes; utility scale, medium scale and small scale
- Applications covered include:
  -- Combined heat and power (CHP)
  -- Remote power and auxiliary power units (APUs)
  -- Military
  -- Portable product power
  -- Exotic
- Analyses of the technology and recent commercial developments in the SOFC industry
- Profiles of major players in the industry

Scope of the report:

This report discusses the North American, European, Far Eastern and Rest-of-World market values. Target markets are based on optimistic, pessimistic and consensus alternatives, which are compared to the conventional power generation target and peak shifting opportunities. The current market is emerging with pre-commercial demos and subsidized pilot projects as well as fast-growing niche markets that are quickly becoming established specialty markets. Over the next five years these pilots will be expanding into commercial implementations. The 2020 market is also characterized in terms of optimistic, pessimistic and consensus scenarios.

SOFC applications are described and analyzed. The following applications are considered:
- Combined heat and power (CHP)
- Remote power and auxiliary power units (APUs)
- Military
- Portable product power
- Exotic

SOFC companies are listed and their detailed profiles are discussed in the Company Profiles chapter.

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- Chao Zhou Three-Circle (Group) Co. Ltd.
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- Fuelcell Energy Inc.
- General Electric Company
- George Westinghouse Research And Technology Park
- H2E Power Systems Inc.
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- Hexis Ltd.
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- ITN Energy Systems Inc.
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- Point Source Power Inc.
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- Redox Power Systems
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- Safcell
- Saint-Gobain
- Sandvik
- Sienergy Systems (Allied Minds)
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