

Smart Energy Opportunity Forecast 2010-2014

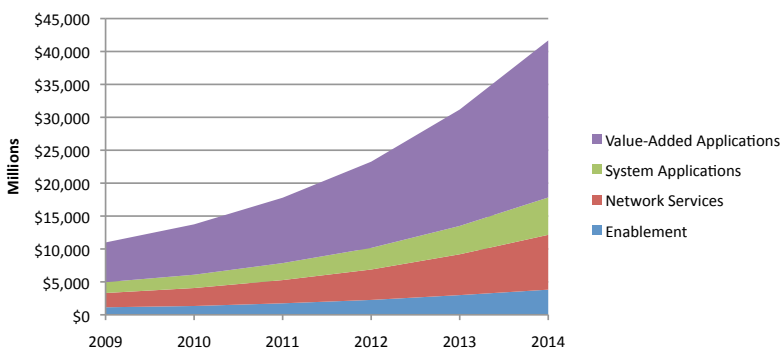
The Advent of Intelligent Systems

New technology, customer behaviors and competitive forces are driving change within the energy sector. Opportunities abound in this environment as new applications and services explode, energy information's role in the network expands and customers' desire for energy management solutions drive the need for open systems and interoperability. Although the smart energy sector has a bright future overall, winners and losers will emerge over time as technology, alliances, and customer requirements alter the competitive landscape. In such an environment, suppliers of technology and services for smart energy must be aware of the forces at work in this arena and clearly understand the impact of these forces on their business.

Re-Structuring of Energy Arena

The culmination of many macro forces are fundamentally setting the stage for change in the electricity supply chain; these include energy policies, power inefficiencies, volatile energy prices, security risks, environmental concerns, and the rise of the digital economy. There are several 'break-through' technologies that are combining with evolving policies and customer behaviors and forcing a radical restructuring of the energy arena. The impact that networks and information technology can have on consumers and other commercial and industrial users on the demand-side will be significant. Our research underscores the emergence of new service provider business models driven by growing consumer and business demand for energy intelligence.

Smart Energy Opportunity



A useful tool to employ in thinking about the future is scenario development. Looking at alternative futures provides a basis for market foresight and new thinking and initiates the process of preparing for uncertainty. Scenario development helps predict the impacts of evolving trends and forces with a view toward developing a sound competitive response.

Questions Addressed In Study:

Our analysis on Smart Energy is focused on understanding the growth opportunities within the emerging Smart Grid arena. The research addresses the following key questions:

- What key forces are impacting adoption of Smart Energy Systems?
- Which trends and forces are most likely to affect future market and competitive position in the Smart Grid?
- Which technologies, architectures and players will emerge as winners?
- What competitors or combinations are most likely to disrupt current offerings & players?
- What new business models are emerging based on the availability of energy intelligence and information?
- What is the size and growth rate of the Smart Energy opportunity?
- What managed services opportunities are developing?
- What issues are there in the market impacting adoption of Smart Systems?

Market Coverage:

Markets and applications we have addressed in our research include:

- Commercial
- Institutional
- Alternative Power Gen
- Managed Energy Services
- Industrial
- Residential
- T&D Solutions
- Energy Informatics

Technology Coverage:

The report provides an analysis and forecast that includes all intelligently networked energy & power devices, covering all major connectivity technologies, including:

- Network Technology
- Data Management
- Software Architecture
- Analytics & Applications

Aggressive Investment In Connected Solutions

The market opportunity for developing and servicing smart power device networking and monitoring solutions is still quite open and fragmented. Opportunities abound in the hardware, software, networking and services spaces. Our research indicates that 285+ million devices are presently available for networking in the power industry, representing several billion dollars of revenue opportunities for suppliers. And that's just today networks.

All these 'dreams' share one common feature: information networks and electricity. Electricity is everywhere and certainly one of the most pervasive forces in our environment. Information networks are also ubiquitous. Futurists have been describing worlds where these elements come together and integrate -- but to date, almost nothing of real significance has come of it.

We expect the rate of investment to be aggressive and occur in four key areas:

- Smart System Platform Technology To Integrate Systems and Applications
- Purpose-Built Device & Hardware Innovation To Support New User Experiences
- Business Process Integration
- Value-Added Application Services

The smart energy market opportunity is created by growing electricity capacity shortages, increasing electricity costs, underinvestment in infrastructure, reliability issues due to constraints on generation and T&D capacity and increasing concern over energy cost and carbon emissions associated with adding additional generation capacity to fulfill the growing demand for electricity.

Rigorous Analytic & Research Methodology

Harbor combines a comprehensive top-down and bottom-up approach to ensure the most accurate forecast possible. Device populations have been determined from government and industry statistics on output and installed base across the wide range of devices monitored. Networking penetration of these device populations has been assessed based on input received from device suppliers and industry participants. The results of these assessments have then been cross-checked against actual connection shipment data received from suppliers & device manufacturers. Ultimately, we integrate our forecast and findings into our analysis of business models, channels to market and customer buying behavior - both at the OEM stage of the value and delivery chain as well as in the context of end customer segments.

Contact Us for More Information

For more information, call us at 800.595.9368 (outside the U.S., 415.615.9400) or send email to info@harborresearch.com.

Report Structure:

Harbor's new Smart Energy report provides the most complete & comprehensive analysis of the evolving smart grid and energy intelligence & information opportunity.

Executive Summary

Chapter 1: Smart Energy Venue Overview
Smart Energy Segmentation Schema

Chapter 2: Trends, Forces & Uncertainties
Technology Trends & Forces
Supplier Trends & Forces
Adopter Trends & Forces
Socio-Economic Trends & Forces

Chapter 3: Smart Energy Market Forecast 2010 - 2014
Forecast Model
Device Shipments & Revenues
Market Potential
Venue Based Value-Added Services

Chapter 4: Business Models & Competitive Structure
Evolution Of Connected Business Models
Smart Business Models
Energy Arena Competitive Structure & Dynamics

Chapter 5 - Requirements For Success
Technology Challenges
Business Challenges & Inhibitors

Appendix A Forecast Charts & Tables
Appendix B: Supplier Profiles

About Harbor Research:

Harbor Research, Inc. has been providing strategic consulting and research services to leaders in communications, computing, control, equipment and content since 1983. Harbor's keen eye toward market results is manifest in all of our processes and tools, providing client with the perspective they need to make best-informed decisions. Our multifaceted approach, ranging from the research we publish to the fully customized consulting engagement, provides optimal value to our clients and has also allowed us to develop important advantages as a firm.