

## **Energy Management and Sustainable Plant Performance**

- U.S. electricity demand growing 1.5 3.0% annually
- U.S. electricity prices will rise "fairly dramatically" over the next 3 to 5 years as rate caps put in place during an earlier wave of utility mergers expire
- U.S. produces 20% of the world's greenhouse gases and the electric utilities produce 40 percent of that (8% of the world's greenhouse gases)





From rising energy prices to sustainability performance, many forces are behind the movement toward more effective and efficient energy management. Governments are now requiring companies to track and report on carbon emissions. In fact, heavy energy users must report annually if they emit more than 25,000 metric tons of CO2e from stationary combustion sources. With this focus, governments hope to reduce industrial energy intensity by 25% over 10 years. Certifications, such as the Superior Energy Performer and the Global Energy Management Standard ISO 50001, provide industrial facilities with a roadmap for achieving continual improvement in energy efficiency while maintaining competitiveness, as well as a globally accepted framework for managing energy, including all aspects of procurement and use.

It is not realistic to think that we can build enough coal-fired plants to keep up with surging U.S. electrical demand given the rising concern about climate change. It is a very daunting task to reduce CO2 while increasing generation capacity. This leads to an energy supply and demand dilemma. Many parts of the world are seeing their peak margin (reserve) disappear with a robust economy and increasing demand for more power and are focusing on the last 10% of generation used in a peak situation, which can generate 30% or more of carbon emissions.

So, what's the answer?

Energy efficiency, demand response and loadshifting are important components of the answer to this dilemma.

Effecitve energy management includes the reduction of total kilowatts of loadshape with permanent efficient technologies such as Premium Efficiency Motors, High Efficiency HVAC, and CFLs. Demand response can also help through the temporary reduction of peak energy usage for a defined duration; curtailment of "events" triggered by either reliability or high prices (e.g., load-control switch, thermostats, real-time alerts). Flattening the loadshape by using off-peak power in place of on-peak power can also impact sustainable energy management. A permanent shift to this behavior is often driven by combining appropriate technology and rates, including production planning cost and near real time monitoring of consumption.

## Combining the Strengths of CSC and RTS Solutions and Expertise to Deliver Energy Savings, Fast!

CSC and RTS are teaming to provide you with extensive experience in creating an energy and sustainability business advantage for your company. Our Energy Management Information System (EMIS) is an important element of a comprehensive energy management program. It offers relevant information to key individuals and departments that enable improved energy performance, including:

- Early detection of poor performance
- Support for decision making
- Effective energy reporting
- Identification and justification of energy projects
- Evidence of success
- Support for energy budgeting and management accounting
- Storage of data in a usable format
- Calculation of effective dynamic targets for energy use
- Comparison of actual consumption with these targets



BUSINESS SOLUTIONS TECHNOLOGY OUTSOURCING

## About CSC

The mission of CSC is to be a global leader in providing technology-enabled business solutions and services.

With the broadest range of capabilities, CSC offers clients the solutions they need to manage complexity, focus on core businesses, collaborate with partners and clients, and improve operations.

CSC makes a special point of understanding its clients and provides experts with real-world experience to work with them. CSC is vendor-independent, delivering solutions that best meet each client's unique requirements.

For more than 50 years, clients in industries and governments worldwide have trusted CSC with their business process and information systems outsourcing, systems integration and consulting needs.

The company trades on the New York Stock Exchange under the symbol "CSC."

## About RTS

RTS Consulting Inc. is an SAP Co-Innovation Partner for Energy Management and Finalist of the SAP Pinnacle Award 2011 for Sustainability.

Over 19 years of experience in the manufacturing and energy sector has fostered a successful organization of professionals assisting over 500 clients achieve Global Manufacturing Excellence.

The RTS Energy Management Information System (EMIS) provides a holistic energy solution deployable in only 12 weeks, generating immediate savings and <1 year ROI.

RTS' core competencies: Automation, Energy, MII Solutions and Consulting. www.rtsperfectplant.com



CSC

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Copyright © 2011 Computer Sciences Corporation. All rights reserved. Our Energy Management and Sustainable Plant Performance solutions include comprehensive energy, production and sustainability services leveraging a common platform.

Businesses running SAP Energy Management Powered by CSC and RTS can reduce energy costs by 10 to 20% through active monitoring and identification of planning and process efficiency changes to reduce rates and consumption.

Shop Floor Level Energy Dashboards Process Overview

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Contact us today to learn more about our Energy Management and Sustainable Plant Performance solutions at poweryourperformance@csc.com or 800.272.0081.