



Sustainable Production Fact Sheet

Making the Most of Economic Challenges and Opportunities

Advancing industry's overall sustainability through improved energy efficiency, environmental performance, and workplace and product safety is not just socially responsible. It's fiscally essential. Volatile energy costs, increased government scrutiny, regulatory pressures and consumer-driven reporting initiatives are causing manufacturers to value the role – and the business benefits – of sustainability throughout their operations.

"As a leading provider of industrial automation, power, control and information solutions, Rockwell Automation is helping manufacturers in a wide range of industries improve their sustainable production performance," said John Nesi, vice president, Market Development, Rockwell Automation. "Progressive manufacturers understand that implementing sustainability improvements to their processes now better prepares them to differentiate from their competition, meet and exceed regulatory requirements, and glean the rewards of maintaining a premium brand as the current economic situation improves."

Energy-Management Solutions

Manufacturing consumes more than one-third of the global energy used annually. Volatile prices and inconsistent supply wreak havoc on profits. It's one of the largest contributors to indirect costs, and companies are being required to demonstrate responsible energy use as part of their green and sustainability initiatives. As a result, industrial production operations are focusing on improving energy management as a key component for sustainable practices.

Rockwell Automation can help manufacturers and power generation companies better manage energy as part of a three-dimensional challenge: *less, more cost-effective* and *optimal*.

Consume *less* energy:

- By leveraging intelligent motor control, energy-efficient components, power and energy management solutions and advanced motion control products, such as servo motors and direct drive technology from Rockwell Automation, manufacturers can significantly reduce the amount of energy consumed by their processes.

Use *more cost-effective* energy:

- Monitoring, management and load-shedding solutions help manufacturers reduce overall peak energy costs. In addition, a recent development in the field of predictive enterprise manufacturing intelligence (EMI) is the economic energy optimization application from Rockwell Automation. Based on the Pavilion8® model-based software platform, the application consists of multiple submodels of production, utilities and emissions integrated with the client's financial system to present an economic optimum that meets a facility's predicted energy demand.

RSTechED 2010

Optimize energy usage throughout the production facility:

- Rockwell Automation helps manufacturers make the most of their energy resources through a holistic and patent-pending approach – or “greenprint” – to control- and information-driven plant-wide energy optimization, leading to lower production costs and optimal profits. The greenprint takes an “inside-out” approach to energy management. It describes how customers can use the plant-floor investments they have today, based on the Rockwell Automation Integrated Architecture™ platform, to establish a strong foundation for the industrial energy management opportunities of tomorrow.

Safety Solutions for Personnel, Processes and Products

A strong brand reputation is essential to the longevity of any company. Consumers are increasingly demanding that manufacturers practice social responsibility in making their products while some communities require proof of responsible performance in granting a “license to operate.” Accordingly, companies need to consider worker and product safety as an integral part of any sustainability program.

Worker and Machine Safety

Machine safety technologies promote sustainable production by emphasizing global standards, innovative technologies, trained personnel and ongoing risk assessment as best practices to support and maintain future production and to help provide a safe operating environment for employees.

- Rockwell Automation is the global leader in advanced safety solutions. Its entire line of safety products, assessments and services helps companies implement standard safety measures for safer and more productive, profitable plants.
- ICS Triplex solutions offer a range of industrial safety control products and systems to help manufacturers adhere to and even exceed industry safety standards, helping to increase uptime, improve worker safety and save resources by reducing the chance of process failure.

Product and Consumer Safety

A product recall can damage a company’s reputation as a brand and as a member of the local, national and global community. In addition, disposing of products that do not meet quality standards can be costly and generate large amounts of unnecessary waste. Product safety technologies help identify nonconforming products prior to release to the consumer, protecting both the company and the people they serve.

- Information software and solutions from Rockwell Automation features track-and-trace capabilities that can help minimize waste throughout the manufacturing process, support safer production practices and, if necessary, help execute rapid, efficient product recalls.

Environmental Solutions

With the ongoing development and implementation of government-, industry- and company-driven standards and report cards, such as the Global Reporting Initiative, ISO50001 standards and carbon-footprint scorecards requested by “power retailers,” it is quickly becoming vital that companies track and improve their own environmental impact.

- Rockwell Automation offers a full scope of project-management services that can help manufacturers build sustainability programs, including consulting, engineering and design, commissioning, startup and ongoing solution support after implementation.
- The real-time environmental management solution based on the Pavilion8 model-based software platform meets a wide range of predictive emissions, emissions-monitoring and active compliance-reporting requirements, as well as plant-wide optimization for increased first-pass yield, and reduced raw material and energy usage.

RSTechED 2010

- ProsCon modular solutions and distillation technology are used to separate and recover valuable chemical products from waste mixtures, helping companies reduce the cost of input materials and waste disposal.
- Software CEM® technology provides a more cost-effective emissions-monitoring solution than hardware-based alternatives. The Software CEM technology uses the powerful Pavilion8 model analytic engine and a patented sensor validation system to provide manufacturers with more accurate and reliable regulatory compliance information.
- FactoryTalk ProductionCentre management software integrates quality management and business analytics with paperless shop floor and repair execution. This integrated solution improves operational efficiencies while helping manufacturers work toward regulatory compliance and achieve higher levels of quality.

Alternative Energy Solutions

The economic and regulatory pressure on companies to expand their use of low-cost energy alternatives – while reducing their consumption of conventional energy sources – continues to increase.

- FactoryTalk ProductionCentre management software, coupled with the Integrated Architecture system, helps alternative-energy manufacturers reduce consumption of nonrenewable fuels, increase energy efficiency, reduce carbon emissions and reduce manufacturing energy costs.
- Time-to-market is critical in the solar and wind energy marketplace, and implementing new designs quickly is paramount. Rockwell Automation has a team of Global OEM Technical Consultants to help equipment builders accelerate development efforts; adopt technology; and lower the Total Cost To Design, Develop and DeliverSM a machine.
- Technology for the biofuels industry, including model predictive control and the Pavilion8 software platform, helps deliver optimization across the entire manufacturing process to maximize production and yields while minimizing energy cost per gallon.
- The extreme environment system from Rockwell Automation, including the Allen-Bradley® ControlLogix-XT™ controller, Allen-Bradley FLEX I/O-XT™ products and ProSoft Technology communication modules, require less auxiliary heating and cooling equipment in order to lower energy usage and carbon emissions. The products are well suited for alternative energy applications, including wind turbines.

For more information about the many ways Rockwell Automation is helping their customers become more sustainable, visit www.rockwellautomation.com/solutions/sustainability.

Media Contacts

Marcia Walker
Rockwell Automation
440.646.3729
mwalker@ra.rockwell.com

Sarah Riley
Padilla Speer Beardsley
612.455.1728
sriley@psbpr.com

About Rockwell Automation

Rockwell Automation, Inc. (NYSE: ROK), the world's largest company dedicated to industrial automation and information, makes its customers more productive and the world more sustainable. Headquartered in Milwaukee, Wis., Rockwell Automation employs about 19,000 people serving customers in more than 80 countries.

Allen-Bradley, ControlLogix-XT, FactoryTalk, FLEX I/O-XT, Integrated Architecture, Pavilion8, Rockwell Software, RSTechED, Software CEM and Total Cost To Design, Develop and Deliver are trademarks of Rockwell Automation, Inc.