Better Buildings®
U.S. DEPARTMENT OF ENERGY

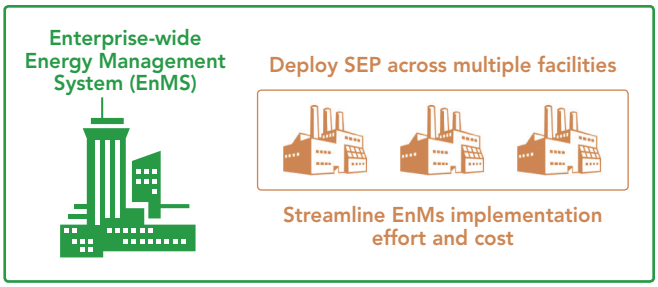
Fact Sheet

INDUSTRIAL SUPERIOR ENERGY PERFORMANCE ACCELERATOR ENTERPRISE-WIDE PARTNERS

The **Better Buildings Initiative** is a national leadership initiative calling on corporate chief executive officers, university presidents, utilities, state and local officials, and other leaders to make substantial commitments to improve the energy efficiency of their buildings and plants, save money, and increase competitiveness. The cornerstones are a commitment to a 20% or more savings target across the organizations' portfolios and a commitment to share strategies that work, substantiated by energy data across the portfolios. The U.S. Department of Energy (DOE) is expanding this initiative to engage leaders in a set of **Better Buildings Accelerators** designed to demonstrate specific innovative approaches, which upon successful demonstration will accelerate investment in energy efficiency.

The **Industrial Superior Energy Performance (SEP) Accelerator** is designed to demonstrate the cost savings by implementing SEP enterprise-wide, as well as to demonstrate strategic energy management through SEP as an effective ratepayer-funded energy efficiency program offering for industrial facilities. There are two engagement opportunities: Ratepayer-funded Program Partners are utilities and energy efficiency program administrators that agree to work towards deployment of SEP to manufacturers across their service territories. **Enterprise-wide** offers Partners an opportunity to implement International Organization for Standardization (ISO) 50001 and SEP enterprise-wide, such as across a corporation, business unit, or multiple plants to achieve greater energy cost savings.

SEP is a certification program that provides industrial facilities with a transparent, globally accepted system for verifying energy performance improvements and management practices. SEP enables facilities to achieve continual improvements in energy efficiency at an attractive return on investment. Results from previous DOE SEP demonstrations show that SEP certified facilities have improved their energy performance by 10%, on average, above business-as-usual in the first 18 months of SEP implementation with an average payback of 1.7 years.



Deploying SEP across an Enterprise

In collaboration with DOE, Partners in this Accelerator will demonstrate approaches for scaling SEP across three or more industrial facilities. The goal of this Accelerator is to help Enterprise-wide Partners transition from pursuing SEP certification at a single facility to adopting it at multiple facilities and ultimately across all or most facilities within the company to save even more energy.

Implementing SEP and ISO 50001 across several facilities creates opportunities for companies to benefit from economies of scale. This Accelerator improves integration of ISO 50001 energy management system elements with current company practices, enables best practice sharing across facilities, accelerates deployment of SEP tools and training throughout the company, increases coordination of implementation activities, and helps companies meet the energy saving goals.

Benefits from SEP Enterprise-wide Implementation

This Accelerator presents an opportunity for Partners to leverage SEP to meet their corporate energy goals. This Accelerator will provide a continual improvement pathway for Partners to:

- **Implement the enterprise-wide Energy Management System (EnMS)**

  Apply corporate or division level ISO 50001 conformant EnMS to facilities seeking SEP certification. The enterprise-wide implementation approach expands the number of SEP certified facilities over time by streamlining the certification process across similar plants thus reducing costs.

▸ Develop ISO 50001 energy management system expertise

Certified Practitioner in Energy Management Systems trainings help companies implement an internationally-recognized ISO 50001 EnMS and identify energy cost-saving opportunities. Companies invest in internal ISO 50001 EnMS expertise, which can be leveraged across the company's facilities.

▸ Access energy management tools and resources

Receive assistance with using DOE's Energy Performance Indicator (EnPI) tool to perform regression analysis and normalize energy data consistent with the SEP Measurement and Verification Protocol. The EnPI tool and other tools will help facilities collect and report data.

▸ Receive national recognition

Demonstrate your company's energy efficiency commitment and share third-party verified results.

Better Plants Partner Nissan

Industry: Automotive

EnMS guidance/standard: ISO 50001

Key driver for EnMS: Environmental stewardship and cost reduction

Improvement focus: Paint operations and central utilities plant

Location: Smyrna, Tennessee

Products: Passenger cars and SUVs

Cost to implement SEP: $331,000

Annual energy cost savings: $938,000

Payback period: ~4 months

Nissan improved energy savings at its vehicle assembly plant in Smyrna, TN by 7.2% with a 4-month payback implementing SEP.

Technical Assistance for Industrial SEP Accelerator

Partners participating in this Accelerator will receive DOE technical assistance. Expert training will be provided to implement SEP and ISO 50001 and achieve SEP certification. A cohort training approach is designed to reduce costs while building expert capacity within participating companies.

▸ Training

SEP training will involve three, multi-day, in-class trainings for up to seven facilities. The training will cover ISO 50001 Plan-Do-Check-Act elements, SEP standards, and the SEP measurement and verification protocol. Internal company EnMS experts will also receive Certified Practitioner EnMS training that helps with obtaining the professional credential. This will then allow these internal experts to provide coaching assistance to other facilities within the corporate implementation program.

▸ Coaching

Coaching will be provided to members of the company's energy management team, including corporate, internal energy management experts, and staff from the cohort of facilities. DOE will work with each company to design a customized coaching approach by considering their needs, organization structure, and enterprise-wide EnMS deployment strategy.

▸ Tools

Project planning tools, DOE's eGuide for ISO 50001, and the EnPI tool will be interwoven into the coaching and training.

Status of SEP Demonstration Projects in 2013

As of June 2013, 28 industrial plants representing 12 different sectors have completed SEP demonstration training. Fourteen plants achieved SEP certification and 25 additional plants are pursuing certification. Energy performance improvement data from the 14 SEP certified plants is provided in the table below. More detailed data collected from nine of the 14 SEP certified facilities has shown an average improvement in energy performance of 10% in the first 18 months of implementation with an average payback of 1.7 years.

SUPERIOR ENERGY PERFORMANCE TESTIMONIALS FROM INDUSTRY

SEP certified facilities achieve greater savings potential

The established targets required by SEP kept the team at 3M Canada motivated and dedicated to achieving those targets. Since ISO 50001 does not specify particular energy savings targets on its own, along with SEP we're able to truly demonstrate our level of achievement, which we're quite proud of.

— 3M Canada, Brockville, Ontario

SEP has helped justify expenditures to management. The measurement and verification requirement helps to identify real cost savings, allowing us to reinvest those savings into additional energy projects.

— Cooper Tire, Texarkana, AR

SEP creates higher confidence in energy efficiency investments

External verification and validation is critical. Certification adds to the confidence in calculations and savings.

— Nissan, Smyrna, TN

The verification was more important than the management standard because it provides a performance metric. SEP provides the ability to have proven performance metrics to quantify actual savings, giving both internal and external credibility to savings claims.

— Volvo Trucks, Dublin, VA

Third-party verification bolsters a plant's internal reputation and the company's public image

At first, we didn't appreciate the value of third party verification, but our facility has evolved to value third party verification as critical. Any facility can claim energy savings, but a third party verification proves the savings to be real.

— Schneider Electric, Smyrna, TN

Third-party certification removes any potential of "green washing" and provides credibility to savings.

— General Dynamics, Scranton, PA

SEP Certified Facilities Results*

Facility Name	% Energy Performance Improvement
Volvo Trucks, NA | Dublin, VA	25.8
Dow Chemical Company | Texas City, TX: Manufacturing facility	17.1
3M Canada Company | Brockville, Ontario, Canada	15.2
Cook Composites and Polymers | Houston, TX	14.9
General Dynamics | Scranton, PA	11.9
Allsteel | Muscatine, IA	10.2
Cooper Tire | Texarkana, AR	10.1
Olam Spices | Gilroy, CA	9.8
Owens Corning | Waxahachie, TX	9.6
Dow Chemical Company | Texas City, TX: Energy systems facility	8.1
Nissan, NA | Smyrna, TN	7.2
Freescale Semiconductor, Inc. | West Austin, TX	6.5
3M Company | Cordova, IL	6.2
Bridgestone Americas Tire | Wilson, NC	16.8

* See http://superiorenergyperformance.energy.gov/results.html

For More Information:

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