

Superior Energy Performance[®]

Certifying Increased Energy Productivity under ISO 50001

The Superior Energy Performance[®] (SEP[™]) program, administered by the U.S. Department of Energy (DOE), certifies facilities that implement an ISO 50001 compliant energy management system standard and achieve improved energy performance¹. In addition DOE's SEP program adds a verification component that ensures energy savings.

SEP builds on ISO 50001 and creates a roadmap that can guide facilities in the right approach for analyzing energy consumption, prioritizing improvements, and tracking progress with energy performance metrics.

By participating in SEP, facilities discover how to maintain ongoing energy improvements and new opportunities to achieve and validate energy performance. Organizations can use SEP to boost their competitiveness, even if they are not yet ready to pursue SEP or ISO 50001 certification.

A Proven Return on Investment

Nine manufacturing facilities implemented ISO 50001 and SEP to improve their energy performance by an average of 10% within the first 18 months—and achieved an average payback of less than two years.

¹ SEP is accredited by the American National Standards Institute (ANSI) and the ANSI-American Society of Quality (ANSI-ASQ) National Accreditation Board (ANAB).



Superior Energy Performance[®] encourages facilities of varied sizes and levels of experience to continually improve energy performance.

Photos from: NREL/17611, Dow Chemical/781, iStock/1764508

Initial SEP Manufacturing Facility Results and Benefits²

- Industrial facilities that earned SEP certification achieved energy performance improvements ranging from 6% to 25% over three years.
- Nine SEP facilities saved, on average, more than \$500,000 per year from operational improvements with little or no associated capital cost expenditures.
- SEP reinforced energy efficiency investments on all energy sources used at the facility and maintained those energy savings over time.
- Organizations with annual total energy costs of more than \$3 million were typically able to recoup costs for adopting the SEP framework in less than one year.
- Better Plants Partners are working to implement SEP as a pathway to achieve their corporate-wide energy reduction goals³

Achieving SEP Certification

SEP certification requires independent verification of two requirements:

- ISO 50001 conformance
- Energy performance improvement levels corresponding to ANSI/MSE 50021 standard for SEP

Certified facilities can earn silver, gold, or platinum designation according to the level of energy performance improvement they achieve. SEP provides a robust protocol for measurement and third-party verification, and also generates reliable data for company management and external stakeholder use.

Visit energy.gov/eere/amo/superior-energy-performance to learn more and begin the certification process.

² *Assessing the Costs and Benefits of the Superior Energy Performance Program*, 2013 ACEEE Summer Study on Energy Efficiency in Industry, Niagara Falls, NY:

energy.gov/eere/amo/downloads/assessing-costs-and-benefits-superior-energy-performance-program

³ Find more information on the Better Buildings, Better Plants Program at: energy.gov/eere/amo/better-plants

Support for Facilities

DOE has resources to support facilities in pursuing SEP, including:

- **DOE eGuide:** This toolkit provides facilities with a step-by-step method to implement an energy management program at any level of experience. The eGuide progresses from foundational energy management approaches, to an ISO 50001 energy management system, and ultimately advances to improved energy performance with SEP. The eGuide also familiarizes users with other DOE and ENERGY STAR tools and resources for achieving targeted energy saving opportunities.
- **DOE Energy Performance Indicator (EnPI) tool:** This tool helps a facility establish a baseline of its energy consumption and identify key variables that affect energy performance over time.
- **Certified Practitioners:** Trained and qualified professionals help facilities assess their top energy efficiency opportunities, implement ISO 50001, and meet requirements to achieve certification.
- **DOE Energy Resources Center:** The eCenter has an array of energy efficiency analysis tools, scorecards, and webinars on energy management and specific energy systems.

Find information and resources:

energy.gov/eere/amo/superior-energy-performance

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Superior Energy Performance Certified Facilities – April 2015

Platinum

- 3M Canada Company
Brockville, Ontario, Canada
- HARBEC Inc.
Ontario, NY
- Mack Trucks
Macungie, PA
- Schneider Electric
Clovis, CA
- Schneider Electric
Saanichton, British Columbia, Canada
- Schneider Electric
Seneca, SC
- Schneider Electric
Smyrna, TN
- Volvo Group Trucks
Hagerstown, MD
- Volvo Trucks North America
Dublin, VA

Silver

- 3M Company
Cordova, IL
- Bridgestone
Wilson, NC
- Curtiss-Wright
Cheswick, PA
- Land O' Lakes, Inc.
Carlisle, PA
- MedImmune
Gaithersburg, MD
- Nissan North America
Smyrna, TN

Gold

- Allsteel
Muscatine, IA
- CCP Composites US LLC
Houston, TX
- Coca-Cola Refreshments USA, Inc.
Dunedin, FL
- Cooper Tire
Texarkana, AR
- Cummins
Whitakers, NC
- General Dynamics
Scranton, PA
- Schneider Electric
Hopkins, SC
- Schneider Electric
Peru, IN

- Olam Spices
Gilroy, CA
- Schneider Electric
Cedar Rapids, IA
- Schneider Electric
Lexington, KY
- Schneider Electric
Lincoln, NE
- Schneider Electric
Rojo Gomez, Mexico

SEP Accelerator

DOE initiated the SEP Accelerator—designed to streamline and reduce the cost of implementing SEP and to engage new partners to promote SEP. DOE is pursuing three engagement opportunities:

Ratepayer-funded Program Partners

are utilities and program administrators that agree to work towards deployment of SEP to manufacturers and water & wastewater municipalities across their service territories.

Enterprise-wide Partners

are companies that are testing strategies to implement SEP across a multiple plants to achieve greater energy cost savings.

Water & Wastewater Partners

are municipalities that are testing SEP in this sector.

Partnership with Industry

SEP™ is sponsored by the DOE in partnership with the American National Standards Institute (ANSI), ANSI-ASQ National Accreditation Board (ANAB), and the U.S. Council for Energy-Efficient Manufacturing (U.S. CEEM). DOE partnered with U.S. CEEM in 2008 to develop Superior Energy Performance.

This cooperative partnership between DOE and U.S. industry leveraged the respective strengths of the public and private sectors, complemented by a network of standards-making bodies, national laboratories, universities, and technical experts.

U.S. DEPARTMENT OF
ENERGY

Energy Efficiency &
Renewable Energy

For more information, visit:

eere.energy.gov
manufacturing.energy.gov

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