



Certifying Increased Energy Productivity under ISO 50001

The Superior Energy Performance 50001 (SEP 50001) program, administered by the U.S. Department of Energy (DOE), certifies facilities that implement an ISO 50001 standard compliant energy management system (EnMS) and achieve improved energy performance.¹ In addition, DOE's SEP 50001 program adds a verification component that ensures energy savings.

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

Visit energy.gov/SEP50001 to learn more and begin the certification process.



Superior Energy Performance 50001™ encourages facilities of varied sizes and levels of experience to continually improve energy performance.

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Facility Results and Benefits²

- As of January 2022, 83 certified manufacturing facilities achieved an **average annual energy performance improvement ranging from 0.2% to 18.7%**, with the average facility improving by 4.1% their first year.
- SEP 50001 facilities **realize persistent annual energy efficiency gains >3%**.
- ISO 50001-based EnMS programs **deliver persistent and above-average energy savings** compared to non-ISO 50001 EnMS programs.
- On average, certified facilities **achieve more than 2.5 times the manufacturing energy efficiency improvement target** set by the IEA for achieving a 1.5 °C future.
- A properly embedded EnMS **establishes procedures and processes that lead to continuous identification, implementation, and maintenance of energy savings**.
- Better Plants Partners are working to implement **SEP 50001 as a pathway to achieve their corporate-wide energy reduction goals**.³

Return on Investment

SEP 50001 provides a robust protocol for measurement and third-party verification, and also generates reliable data for company management and external stakeholder use.

Facilities certified to ISO 50001, on average, achieve annual energy performance improvement rates of around 4.1% in the initial year of implementation and maintain rates of around 3.4% twelve years after implementation.²

Achieving Certification

SEP 50001 program certification requires independent verification of two requirements:

- ISO 50001 conformance
- Energy performance improvement

Certified facilities can use the SEP 50001 Scorecard to achieve higher levels of recognition: Silver, Gold, or Platinum. The Scorecard results are confirmed via signature by top management and review by a 50001 Certified Practitioner (CP) EnMS.

Support for Facilities

DOE has resources to support facilities in pursuing SEP 50001, including:

- **50001 Ready Navigator:** This free, comprehensive online guide, applicable to organizations and facilities with a mature EnMS or at an entry level, provides easy-to-follow steps for addressing key parts of the ISO 50001 standard. Each step provides relevant activities and timing; and forms, checklists, and templates are provided. Additionally, energy team members can work together within the tool to coordinate and streamline efforts.
- **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:** DOE has an array of energy efficiency analysis tools, scorecards, and webinars on energy management and specific energy systems.

Partnership with Industry

SEP 50001 is sponsored by the DOE in partnership with the American National Standards Institute (ANSI), ANSI National Accreditation Board (ANAB), and industrial, commercial and public sector partners that helped to develop this program.

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

Superior Energy Performance 50001 Certified Facilities – September 2024

Platinum

- **Des Moines Water Works**
Des Moines, IA
- **JW Marriott Hotel**
Washington, DC
- **Volvo Powertrain North America**
Hagerstown, MD

Gold

- **Nissan North America**
Smyrna, TN
- **U.S. Air Force Oklahoma City Air Logistics Complex**
Oklahoma City, OK

Silver

- **Nissan North America**
Canton, MS

Certified

- **AstraZeneca**
Gaithersburg, MD
- **Cummins Inc.**
Charleston, SC
- **Cummins Inc.**
Chihuahua, Mexico
- **Cummins Inc.**
Columbus, IN (3 facilities)
- **Cummins Inc.**
Jamestown, NY
- **Cummins Inc.**
Rocky Mount, NC
- **Cummins Inc.**
San Luis Potosí, Mexico (2 facilities)
- **Cummins Inc.**
Seymour, IN
- **Detroit Diesel Corporation**
Detroit, MI
- **Mack Trucks**
Macungie, PA
- **Trane Technologies**
Nuevo León, Mexico
- **Volvo Trucks North America**
Dublin, VA

Find information and resources:

www.energy.gov/SEP50001

Contact us:

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¹ SEP 50001 is accredited by ANSI National Accreditation Board (ANAB).

² Deeper and persistent energy savings and carbon dioxide reductions achieved through ISO 50001 in the manufacturing sector, Sustainable Energy Technologies and Assessments, Volume 57: <https://buildings.lbl.gov/publications/deeper-and-persistent-energy-savings>

³ Find more information on the Better Buildings, Better Plants Program at: <https://betterbuildingsolutioncenter.energy.gov/better-plants>

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