

Superior Energy Performance^{cm}

Superior Energy Performance is a certification program that provides industrial facilities and commercial buildings with a roadmap for achieving continual improvement in energy efficiency while maintaining competitiveness. To encourage broad participation by U.S. industry, Superior Energy Performance offers a tiered approach to demonstrating energy performance improvement.

A central element of Superior Energy Performance is implementation of the ISO 50001 energy management standard, with additional requirements to achieve and document energy performance improvements. The program provides a framework for fostering energy efficiency at the plant level and a methodology for measuring and validating energy efficiency/performance improvements.

The national, voluntary program will launch in 2011. Facilities that initially field-tested the program were the first to become certified in September 2010. A non-governmental organization will provide ANSI/ANAB-accredited certification to U.S. facilities. Superior Energy Performance will transition from a federally-supported development period to a fee-based program administered by a non-governmental, not-for-profit organization.

Program Elements

In support of Superior Energy Performance, several program elements are under development to help industrial facilities and commercial buildings identify energy efficiency opportunities, understand how to implement energy efficiency improvements, and apply a consistent organizational structure to effectively manage energy use.

- **Energy Management Standard:** Provide a framework for individual facilities or entire companies to manage energy, including all aspects of procurement and use. Facilities will use the international energy management system standard, ISO 50001, to qualify for Superior Energy Performance certification. The initial plants certified under Superior Energy Performance used the American standard, ANSI/MSE 2000:2008 energy management standard.
- **System Assessment Standards:** Provide guidance on conducting an energy efficiency assessment at a facility for a specific energy system type (initially pumps, compressed air systems, steam, and process heating). This portfolio of system assessment standards will expand to include additional system types.
- **Measurement and Verification Protocol:** Offer a best practice methodology to 1) verify the results and impact from energy efficiency projects, 2) specify parameters required to quantify the energy efficiency of a facility, and 3) track the change in energy performance at the facility. The M&V protocol for industry will be separate from the M&V protocol for commercial buildings.
- **ANSI-Accredited Certified Practitioners:** Provide assistance to applicants in assessing energy efficiency opportunities in various types of energy systems and conforming to the requirements of the ISO 50001 energy management system, plus additional Superior Energy Performance requirements. A two-part system is anticipated: 1) Individuals who will support facilities in assessing energy efficiency opportunities in energy management systems and in specific energy system types, and 2) Individuals

Strategic Goals

1. **Foster an organizational culture of continuous improvement in energy efficiency;**
2. **Develop a transparent system to validate energy performance improvements and management practices; and thus**
3. **Create a verified record of energy source fuel savings and carbon emission reductions with potential market value that could be widely recognized both nationally and internationally.**

who maintain independence during the verification process to validate performance for a facility seeking certification (SEP Performance Verifier and SEP Lead Auditor).

- **End-User Awareness Training:** Provide brief overviews of the program elements through end-user awareness training modules that can be given stand-alone, via the internet, or integrated with more comprehensive training.

Qualifying for Superior Energy Performance

Superior Energy Performance is designed to encourage participation among facilities of all sizes and levels of experience in managing energy. The program offers flexibility by offering two tiers: self-declared and ANSI/ANAB-certified. Facilities will select the tier depending on the degree of data validation desired by a facility.

All facilities must comply with the ISO 50001 energy management system standard and demonstrate an energy performance improvement.

The U.S. Council for Energy-Efficient Manufacturing is testing the program elements, strategy, scheme, and requirements. During this development period, facilities can participate through the demonstration projects being conducted in several states.

Demonstration Projects

To ensure that Superior Energy Performance offers value and flexibility for facilities of various sizes and experience in managing energy, the program is conducting field testing in several states. Diverse facilities are being recruited to provide a robust assessment of the proposed Superior Energy Performance program.

The goal of these demonstration projects is to verify that the processes, standards, and performance criteria under Superior Energy Performance 1) are practical and achievable; 2) provide benefit to participating facilities; and 3) reliably identify facilities that meet the proposed certification criteria.

Learn More

To learn more about Superior Energy Performance and the U.S. Council for Energy-Efficient Manufacturing, visit www.superiorenergyperformance.net.

U.S. Council for Energy-Efficient Manufacturing

Providing guidance and oversight throughout the development of Superior Energy Performance

The U.S. Council for Energy-Efficient Manufacturing seeks to position U.S. industry as a global leader in energy efficiency and greenhouse gas emissions reduction. This voluntary partnership brings together the respective strengths of industry, government, and other organizations and is led by a committee of representatives from the following organizations:

3M Company

Alcoa

Dow Chemical Company

Eastman Chemical

Ford Motor Company

HP

Huntsman Chemical

LyondellBasell

Owens Corning

PPG Industries

SSAB

Toyota

Weyerhaeuser

Alliance to Save Energy

American National Standards Institute (ANSI)

National Institute of Science & Technology (NIST), Manufacturing Extension Partnership

Texas Industries of the Future

U.S. Department of Energy's Industrial Technologies Program, *Save Energy Now*

U.S. Environmental Protection Agency's ENERGY STAR for Industry Program

Contact Information:

For questions or comments regarding the U.S. Council for Energy-Efficient Manufacturing and Superior Energy Performance, please send email inquiries to SEP@energetics.com.