

# Strategic Energy Management Resources: Information, Tools and Programs

Strategic Energy Management (SEM) is a continuous improvement process that drives deeper, lasting change in how manufacturers use energy. SEM practices focus on improving the organization's ability to manage and reduce their own energy use and costs on an ongoing basis. To do this, SEM emphasizes increasing organizational commitment, improved planning and implementation of energy saving projects and measuring energy performance improvements.



For more than 10 years, the community of SEM practitioners and programs in the U.S. and Canada have been creating and sharing tools and training resources to help energy intensive businesses adopt and practice SEM. These publicly available resources can provide the basis for a self-guided internal SEM program that best fits your company's operations, strategic objectives, and employee culture.

This factsheet provides a brief overview and references to the most relevant programs, tools and other free resources to support your organization's adoption and ongoing practice of SEM.

#### Resource: PECO's Ways to Save program

SEM Bonus Incentives help focus your energy management efforts by rewarding you for setting and achieving annual energy savings goals for two years. As detailed in the PECO SEM Bonus Incentives Participation Agreement, PECO Ways to Save will provide an additional bonus incentive payment, on top of our standard energy efficiency project incentives, each year that you achieve your annual goal.

To do so, you will be implementing energy efficiency projects in your facility and processes. PECO Ways to Save will work with you and your vendors to support and provide incentive funding for qualified energy efficiency projects. Throughout this two-year period, the PECO Ways to Save team will be reaching out to you regularly, at least quarterly, to discuss opportunities being considered and projects in process at your site. For assistance with project incentive applications, technical information or other program questions, please contact your PECO Ways to Save program representative at any time.

This factsheet provides information about the ENERGY STAR® Challenge for Industry (below), including links to the Participant Handbook and all information required to enroll and participate. As noted in the PECO SEM Bonus Incentives participation agreement, you must provide proof of registration in the Challenge

within 90 days to be eligible for the PECO SEM Bonus Incentives. The ENERGY STAR website and Participant Handbook have all the details, but please don't hesitate to contact PECO Ways to Save if you have questions or are seeking assistance. If requested, the energy efficiency experts at the PECO Ways to Save program can provide technical advice and assistance to support your enrollment or participation in the Challenge.

This factsheet also provides information about organizational energy management practices, tools and programs, such as the US DOE's 50001 Ready program. If your organization is considering SEM as a certifiable management system that supports continuous energy improvement in your operations, these programs and tools provide a proven framework. If you're wondering whether and how to go deeper, PECO Ways to Save can help you assess your current state of energy management practices and provide recommendations and referrals for the best next steps to take on your organization's energy management journey.

# Resource: ENERGY STAR Challenge for Industry

### Improving energy efficiency 10% at a time

The ENERGY STAR Challenge for Industry is a global call-to-action for industrial sites to reduce their energy intensity by 10 percent within 5 years. Any industrial site can participate, and those that achieve this goal will earn EPA recognition.



Thousands of manufacturing plants have taken the Challenge for Industry to drive deeper energy savings and increase the visibility of energy management efforts to employees, management, customers, and others. Over 600 plants have achieved Challenge for Industry goal, saving over \$440 million in energy costs.

To take the Challenge for Industry, a manufacturing plant must register an annual energy performance baseline on-line with ENERGY STAR. Participating facilities then track their annual energy performance to measure progress towards the Challenge for Industry goal but are not required to report annually to ENERGY STAR. If the goal is achieved, simply follow the instructions for applying for recognition.

For More Info go to: energystar.gov/industry challenge

# ENERGY STAR Challenge for Industry helpful tools and resources

SEE RESOURCES

For questions regarding participation in the Challenge, contact: **industrychallenge@energystar.gov** 

### Guidance for participating

- Challenge for Industry Overview (1 page)
- The ENERGY STAR Challenge for Industry Participant Handbook
- ENERGY STAR Challenge for Industry Registration Form (link is external)

#### Tools to track energy use and performance:

- ENERGY STAR Energy Tracking Tool and Quick Start Guide
- ENERGY STAR Energy Performance Indicators for plants
- Portfolio Manager
- ENERGY STAR Energy Tracking Plan Template
- Statement of Energy Improvement

#### Resources to help you achieve the Challenge:

- Energy Treasure Hunt resources
- Promotional Posters
- Industrial Energy Guides

# Resource: 50001 Ready program

Links and descriptions below are taken from the websites of the **US Department of Energy** (US DOE) and Lawrence Berkeley National Labs (LBNL) **50001 Ready Program Navigator**.

The ISO 50001 Energy Management System Standard defines an energy management system (EnMS) as a set of interrelated elements to establish an energy policy and objectives, and process and procedures to achieve those objectives. This is not to be confused with building technologies used to manage energy (e.g., building automation systems, energy management information systems, and virtual audit software).

Simply put, energy management is a culture for continual improvement of energy performance and efficiency that's integrated within an organization's everyday business practices. An EnMS positions your organization to achieve and sustain energy and cost savings through informed and systematic decision-making. Following EnMS implementation, many organizations have seen energy intensity reductions of greater than 20%.

The U.S. Department of Energy's (DOE's) 50001 Ready program is a self-guided approach for facilities to establish an energy management system and self-attest to the structure of ISO 50001, a voluntary global standard for energy management systems in industrial, commercial, and institutional facilities.

## The 50001 Ready program offers:

- A self-paced approach for any facility to implement an energy management system without certification.
- Guidance to identify and analyze facility-wide energy use and to develop action plans around energy performance improvements.
- DOE recognition for U.S. facilities that selfattested to completion of the 50001 Ready Navigator, without the need for external audits.



Step-by-step guidance is provided within each of the Navigator tasks. The 50001 Ready Navigator worksheets are optional resources for teams to use as they work through the Navigator tasks. These companion resources can be used as needed and on an individual task basis or they can be used collectively by functioning as a comprehensive 50001 Ready repository that we refer to as the Playbook. This 50001 Ready Navigator Playbook enables users to organize, save, and track completed documents on a local drive or network. Users can open, edit, and save forms related to Navigator tasks and track completed actions by checking boxes and recording their progress in the Playbook worksheets. Some activities embedded in the Playbook address several combined tasks and have been distilled to more simplified versions compared to the guidance embedded in the Navigator.

The U.S. Department of Energy (DOE) is currently developing additional resources to provide guidance for using 50001 Ready Navigator. If you have specific requests, suggestions, or questions, please message the 50001 Ready Navigator management team via the **50001 Ready Help Desk**.

### Resource: **NEEA's SEM Hub**

The Northwest Energy Efficiency Alliance (NEEA) was an early leader in piloting SEM in Industrial facilities, developing some of the key tools and approaches that are now standard practice. They supported bringing SEM to scale in the region by convening and developing a community of SEM practitioners, the Northwest SEM Collaborative. NEEA's SEM Hub is the online collection of both NEEA resources and the broader SEM community's work and resources. While many of the reports and studies on the SEM Hub are most applicable and useful for SEM program administrators, implementers and evaluators, the Hub also includes practical tools, training webinars and other resources developed by NEEA to help businesses adopt and practice SEM. Some of the most relevant resources are listed below, along with their description from NEEA's SEM Hub website: semhub.com

### **Employee Engagement Resources:**

Employee engagement is critical to SEM success and the achievement of long-term savings. This curated collection includes a variety of tools and resources for engaging and motivating an organization's team members in identifying operational enhancements and energy efficiency upgrades that result in continuous energy improvement.

#### **Employee Engagement**

### Industrial Energy Talk Cards:

These employee engagement Talk Cards were refreshed, updated, and improved in 2021 to make it easier than ever to stimulate energy efficiency conversation and learning among your staff. Outlining a variety of SEM tools, approaches and methods, the Energy Talk Cards can be printed or easily viewed on display boards, smart phones and tablets. These cards will help you increase participation and reinforce energy efficiency practices for key industrial systems in your facility with refreshed photos, graphics and updated content including dust collection/fans, compressed air dryers, and sample calculations.

#### Talk Cards

## **Energy Management** Assessment (EMA) Tool:

The Energy Management Assessment (EMA) Tool offers a strategic and confidential analysis of your organization's current energy management business practices and specific areas of opportunity. The EMA Assessment and other SEM Hub resources can then help you develop or improve your Strategic Energy Management practices for your organization.

#### Taking this assessment will help you:

- Review your current energy practices
- Identify priority actions for improvement
- Implement an energy management program
- Compare your practices against your peers
- EMA Tool

#### Webinars and Online Courses:

The SEM Hub provides a customizable learning platform with training courses to give you the tools and know-how to identify and implement energy saving opportunities now and to maintain savings in the future.

#### Online Courses















