

A Growing Presence in Utility SEM Programs

Leidos incorporates 50001 principles into their existing SEM program's architecture

More and more utilities and efficiency program administrators are engaging their large industrial and commercial customers in strategic energy management (SEM) programs as a way to achieve and sustain energy savings. Through these SEM programs, participants learn how to set up energy management systems and standardized practices to identify and prioritize energy-saving opportunities, implement projects, and track performance.

The U.S. Department of Energy (DOE) developed the 50001 Ready program to help organizations implement ISO 50001-compliant energy management systems. Across the country, SEM program administrators have started using the 50001 Ready Navigator online tool to simplify and standardize the implementation of energy management systems at their customers' facilities. The tool introduces their customers to the concepts of continual energy management and provides them with helpful tools, resources, and an option to receive national recognition.

Leidos' SEM Approach

Leidos has implemented SEM programs for a variety of utilities since 2004 and operates SEM programs for Wisconsin Focus on Energy®, PG&E, Ameren Illinois, and Detroit Edison. To date, Leidos, along with its partner Energy Performance Services, has helped five facilities achieve ISO 50001 certification, another five to achieve 50001 Ready recognition, with four additional facilities working towards 50001 Ready recognition.

Introducing customers to the 50001 Ready Navigator tool early in the SEM engagement helps them to better understand the components of a standardized energy management system. It also helps customers to develop a systematic approach to build the operational and management structures needed to drive continual improvement in energy savings. Organizations are able to see their organization's progress in the Navigator's dashboard as they use the built-in online resources to work through the tasks in each of the four sections.

Between 2015 and 2018, 31 facilities participated in the Leidos-administered Wisconsin Focus on Energy SEM



The Leidos SEM-50001 Ready team (left to right): Nate Altfeather, John Nicol, Alex Dodd, Dustin Schneider, and Mark Stover. Not pictured, Tim Dantoin.
Photo credit: Leidos

The U.S. Department of Energy's 50001 Ready program recognizes U.S. facilities and organizations that practice ISO 50001-based energy management. The program is a self-paced, no-cost way for organizations to build a culture of structured and continual energy improvement that leads to deeper and more sustained savings. No external audits or certifications are required.

DOE's award-winning [50001 Ready Navigator tool](#) provides free, online guidance to any organization that wants to implement an energy management system aligning to the global best practices of the ISO 50001 energy management standard.

program with a net annual savings of 21,733,252 kWh and 3,952,675 therms. Nearly half of these participants voluntarily decided to pursue either ISO 50001 certification or 50001 ready recognition, indicating a strong correlation between SEM incentive programs and success in 50001 energy management systems.

"Companies that use other ISO standards like 9001 or 14001 already have many of the processes in place that ISO 50001 will require. 50001 Ready helps walk companies through the tasks necessary to integrate energy management with their overall business management system."

- Mark Stover, Program Operations Manager, Leidos

A SEM Advantage

50001 Ready supports SEM offerings in three key ways:

- ▶ Helps facilities of any type and across all levels of experience to identify their energy management gaps.
- ▶ Provides technical tools and resources.
- ▶ Stimulates employee engagement.

Resources for sustained energy savings

50001 Ready is a great option for companies striving to create a world class energy management system. It reduces the time, complexity, and cost of a third-party audit, while preserving all the benefits of having a continual improvement program for energy management in place, along with providing the opportunity for public recognition.

By helping customers apply continual improvement principles to their energy management efforts, Leidos aims to change the way customers understand and address their energy use – now and for the long term. A systematic, management-driven approach to energy savings is critical to a 50001-based energy management system. No longer dependent on any one individual, an organization's energy management efforts are sustained and continually improved by the requirements of the overall management system.

Leidos SEM coaches note that their customers experience a ripple effect of benefits from managing their energy better. Not only are they able to realize operational cost savings, but are often able to do so by making low cost changes to existing processes. Sharing what works at one company with other companies in non-competing industries is part of the strategy to sustain energy savings in Wisconsin. Leidos is now piloting a "peer network" concept to help individuals across companies learn to sustain and continue energy improvements.

Essential employee engagement

Employee engagement is a good indicator of an organization's potential to deploy a robust energy management system. Organizations already engaging staff in addressing safety, health, and product quality understand the importance of tapping into the deep knowledge base of their employees. Expanding

engagement to energy-savings opportunities is the next logical step towards operational excellence.

Tasks in the 50001 Ready Navigator aim to help employees become aware of energy use and competent in finding better ways to manage their energy resources. Applying the Plan-Do-Check-Act (PDCA) process used by other ISO standards such as 9001 and 14001, provides a ready tool to allow employees to meet quality, delivery, safety and environmental requirements while continually improving results of their energy savings efforts.

One way that Leidos' customers have put this idea to work is by incorporating the topic of energy into their existing performance status meetings. Energy performance tracking is added to existing measures for quality and environmental management, making for a compelling and complete set of operational metrics. Employees then see more clearly how all the company's resources are part of an integrated system of performance management.

Next Steps

In addition to helping customers attest to 50001 Ready and attain ISO 50001 certifications, Leidos' team of experts are preparing for future market needs. Five members of the Leidos team have earned the 50001 CP EnMS (50001 Certified Practitioner of Energy Management Systems). This professional credential acknowledges the specialized knowledge and expertise attained from the Institute for Energy Management Professionals.

Leidos SEM coaches observe that U.S.-based organizations adopting ISO 50001 or 50001 Ready are still predominately those on the cutting edge of their industries and that widespread certifications and recognition are still a future condition. As with adoption of the ISO 9001 standard, Leidos SEM coaches anticipate 50001-based energy management systems will become more commonplace as OEM and customer requirements spur adoption of systematic energy management for cost and resiliency.

"Our bottom line is that we need to produce energy savings for the program and SEM with 50001 Ready is a great way to get at those savings without costly capital improvements. This energy management approach delivers great benefits to our customers—particularly those that have already captured the easiest energy savings."

- Tim Dantoin, Engineering Manager, Leidos