LMV Automotive Systems (Liberty, MO)

WHY 50001 READY?

The U.S. Department of Energy's 50001 Ready program is a self-paced, no-cost way for organizations to build a culture of structured energy improvement that leads to deeper and sustained energy and cost savings. Recognition is available for facilities and organizations that self-attest to the implementation of an ISO 50001-based energy management system without external audits or certifications.

Overview

LMV Automotive Systems, a division of global automotive supplier Magna International, is located in Liberty, Missouri and manufactures underbody metal welded assemblies for two North America-based OEMs. With a labor force 600 workers strong, LMV employs robotic welding in about 95% of its services, with each robot supervised by an operator throughout the process. The company's sister divisions in Iowa perform their stampings.

LMV Automotive Systems maintains ISO 14001 certification, reflecting a site-wide commitment to international standards. As part of Magna's objective to reach emission-neutral status by 2050, the company is focused on meeting 2030 performance milestones across its direct and indirect operations. These targets are verified by the Science Based Targets initiative (SBTi). To achieve this, Magna's energy management playbook requires every division to form dedicated energy teams and appoint internal champions to lead energy and resource optimization.

Solutions

Staff at LMV Automotive Systems learned about 50001 Ready via the DOE Help Desk. Interested in expanding its knowledge around ways to reduce energy, supply chain requirements, and utility costs, LMV chose to pursue 50001 Ready recognition to further develop its existing system for tracking energy improvement. The Liberty site joined a **50001 Ready training cohort** to help achieve this goal.

LMV had an energy team in place prior to the company's engagement with 50001 Ready. The crossfunctional team was comprised of various department leaders and specialists, including decision-makers and responsible action-takers. Together, with the energy team lead assuming the bulk of the labor, it took them 10 hours per month over the course of nine months to implement 50001 Ready as part of their EnMS.

LMV Automotive Systems, a division of Magna. *Photo credit: Magna International.*

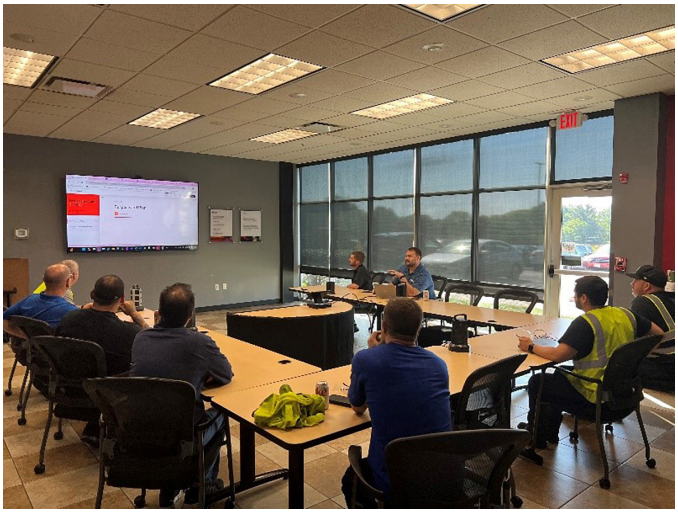
"50001 Ready provides a holistic perspective on energy management. It is all-encompassing and approaches energy management in a way that is easy to communicate."

— Nick Mahoney, Energy and Sustainability Champion
LMV Automotive Systems

Some of the projects that LMV is working through in order to reach their goal include painting LMV's black roof a reflective white to lower cooling costs, replacing lights with energy-efficient alternatives, upgrading compressors to a two-stage variable speed option, and establishing an HVAC building management system. Regular audits have been introduced into employees' routines to ensure the company's EnMS is wellmaintained, and in time, the energy team intends to help integrate 50001 Ready into other Magna divisions that may extend interest.

Key Takeaways: Implementing a 50001 Ready Energy Management System

- **Continuous improvement:** LMV's culture of continuous improvement, as well as an intrinsic interest in energy management, helped to secure executive buy-in. Support from upper management was integral to the success of the energy team's efforts to implement 50001 Ready.
- **Outside expertise:** LMV enlisted an external energy management consultant (through their involvement in the cohort program) to assist with implementing their EnMS. Coupling internal knowledge with outside expertise helped to better inform the projects and processes that were being developed in the company's pursuit of 50001 Ready recognition.
- **Tools for success:** LMV's energy team found the 50001 Ready Navigator tool to be invaluable in helping the company achieve 50001 Ready status. The Navigator's Task 10 provided a systematic way of ranking the team's energy savings ideas, Task 11 helped them define metrics by which to measure improvement, and Task 20 outlined how best to leverage the data garnered through metering strategies.
- **Corrective actions:** The Navigator tool also assisted the LMV energy team in further enhancing the company's already robust corrective action process. Using the Navigator's Task 24 as a blueprint, whenever the company's EnMS deviated from expected outcomes, the team was able to take quick and effective action to remedy any issues detected with equipment or processes.
- **A cohesive team:** Regular meetings made it possible for the energy team to sync up their efforts. Gathering to ask each other questions, lend support, and participate in trainings fortified the team's approach to implementing a 50001 Readyinformed EnMS.



Sustainability, Energy, Environmental (SEE) team meeting.
Photo credit: Magna International.

"Joining a 50001 Ready cohort gave us access to a think tank of other industry experts across various sectors to rely upon if needed."

— Nick Mahoney, Energy and Sustainability Champion
LMV Automotive Systems

Other Benefits

In addition to energy and cost savings, 50001 Ready provided LMV with a framework for structuring communication around energy initiatives, which is a boon to their parent company's long-term efficiency and emissions reduction goals. In implementing 50001 Ready, LMV's energy team was also able to strengthen the metering use case at the division, which will help inform future metering projects. Furthermore, networking within their 50001 Ready cohort allowed the energy team to foster connections that will continue to strengthen their own energy management efforts.

Updated 2026.02.11