Polaris Inc. – 50001 Ready

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 GHG 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

Polaris Inc., headquartered in Medina, Minnesota, manufactures a diverse range of powersport vehicles, such as snowmobiles, motorcycles, boats and all-terrain vehicles (ATVs). Polaris' presence spans from Roseau, Minnesota, to Monterrey, Mexico, all the way to Bangalore, India. Their customers include recreational, commercial, and military clientele from around the globe. Company values support environmental protection as demonstrated by adopting sustainable manufacturing practices.

Leadership at Polaris sees 50001 Ready as a vital instrument for achieving their 2035 goal of 50% absolute greenhouse gas (GHG) emissions reduction. Along with the company's renewable electricity target, its reduced energy consumption will also have an important role in meeting their emissions reduction goal. With an incremental goal of 2% energy reduction annually through 2035, energy team members are leveraging their 50001 Ready energy management system implementation to render site operations and processes more efficient.

"We wanted to have a consistent methodology at our manufacturing sites – common processes, language, and metrics. Every site is doing something slightly different, but unifying things through 50001 Ready has helped to streamline operations."

– DeWayne Howell, Senior Manager of Environmental Stewardship & Sustainability, Polaris Inc.

Polaris Wyoming, MN Energy Management Team (left to right): Corey Cremers, John Martin, Joey Cutts, Tom Eineichner, Blaine Gudbjartsson. Not pictured: Angus Morison, Sam Gibbs. *Courtesy of Polaris Inc.*

Solutions

By implementing a 50001 Ready-based energy management system, the Huntsville plant saved at least 2.6 million kWh in the first 12 months, largely through simple operational changes. In that same year, the facility achieved total energy savings of nearly 3.56 million kWh, as well as cost savings of over $863,000, including utility rebates.

In support of its 2035 GHG emissions reduction goal, Polaris requires its manufacturing sites to achieve the 50001 Ready designation. The effort began with the Huntsville, Alabama site, a 950,000-square-foot plant that participated in EnergyRight Solutions, a strategic energy management (SEM) initiative administered by

the Tennessee Valley Authority (TVA) and Athens Utilities. Huntsville staff learned of 50001 Ready through a TVA consultant from the Strategic Energy Group (SEG) and earned the 50001 Ready designation in 2019.

Following this success, in 2022, eight Polaris sites participated in a 50001 Ready cohort offered through the DOE Industrial Efficiency and Decarbonization Office (IEDO), which Polaris staff found to be invaluable. Staff found the coaching calls and monthly meetings led by Vermont Energy Investment Corporation (VEIC) to particularly bolster their efforts. The cohort program also afforded staff the opportunity to compare energy management solutions and follow through on action items.

Polaris now has seven facilities that have earned 50001 Ready recognition: Huntsville (AL), Indian Motorcycles at Spirit Lake (IA), Osceola (WI), Roseau (MN), Vermillion (SD), Wyoming Research and Development Center (MN), and WSI Monticello (MN). In January 2023, Vermillion earned 50001 Ready status for the first time, an accomplishment underpinned by a 21% reduction in greenhouse gas emissions at the facility. Huntsville re-attested their status the month after.

Not only are several of Polaris Industries' sites recognized under 50001 Ready, but the company has established 50001 Ready as a corporate requirement for all its facilities as a means of attaining Polaris' 2035 goals, which are tied to greenhouse gas reduction and renewable energy.

Key Takeaways: Implementing a 50001 Ready Energy Management System

- **Strengthen lean manufacturing with energy management:** Energy efficiency ties directly into a lean manufacturing focus, especially as energy is one of Polaris' greatest expenditures. Polaris had established a value improvement process for lean manufacturing, using a computerized system to monitor improvement areas in productivity, safety, and environment. The energy team added an Energy Reduction category, embedding energy efficiency into process objectives.

Polaris Monticello Energy Management Team.
Courtesy of Polaris Inc.

- **Pinpointing problems:** Of the 50001 Ready Navigator tasks, the ones pertaining to data compilation and identification of significant energy users were most helpful to site staff. While it was challenging to gather all the needed information, having that data simplified and justified future metering requests and future project funding.
- **Quantifying success:** 50001 Ready provided the framework and tools necessary to see, numerically, how great of an impact the energy teams' decisions were having at their respective sites. Equipped with demonstrable facts and figures, the energy teams were able to more effectively communicate both achievements and future goals to corporate management and to on-site staff.
- **Creating structured processes:** A recurring theme in staff remarks regarding the benefits of the 50001 Ready program was process repeatability. It is easier to orient new employees within a structured system comprised of established methods and standardized processes.

- **Prioritizing energy efficient upgrades:** The Polaris facilities team has a history of proactively searching for better processes and equipment along with additional energy efficiency improvement opportunities. Their commitment to focusing on energy savings during the procurement process resulted in revised protocols to ensure that energy efficiency would always be a priority.
- **Cross-facility communication:** Polaris staff connected across their facilities to share energy performance improvement strategies. Drawing on collective experiences and information helped pave the way for a more robust energy management system at each facility.

"With 50001 Ready, we can now compare across systems and, where there are commonalities, implement similar projects that have been successful at one facility."

– DeWayne Howell, Senior Manager of Environmental Stewardship & Sustainability, Polaris Inc

Other Benefits

Engagement with 50001 Ready has induced a cultural shift. Employee awareness regarding energy use has increased, and conversations around waste reduction and optimization of heating needs are emerging and strengthening the connection between employees and Polaris' energy management system.

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