

Case Study

Company Name: Garlock

Business Type:

High-performance fluid sealing manufacturer

Location:

Palmyra, NY

SEM is a framework for aligning energy efficiency with business practices and opportunities.

Instead of tackling energysaving projects one by one, as they come up, SEM empowers companies to assess, understand, and build continuous energy improvement into their business model—and reap the substantial rewards.

NYSERDA is currently offering training and tools as part of an SEM program to help industrial and wastewater facilities across the state save more energy, more affordably, year after year.

Overview

Fifteen years ago, Andy Geoghan began working at Garlock, a multinational manufacturer of high-performance fluid sealing in Palmyra. As an electrical engineer Andy hadn't had much exposure to mechanical systems such as steam, compressed air, and chilled water, but after connecting with NYSERDA it didn't take Andy long to start noticing some opportunities for saving energy around the plant, particularly in the powerhouse area. He spearheaded the replacement of an inefficient boiler and immediately reduced natural gas use by 30%. Management took notice. Energy efficiency was proving to be a great way to reduce overhead and improve profitability, with no negative impact on production or quality.

NYSERDA program aims to integrate energy into industrial operations

When NYSERDA approached Andy about taking part in its Strategic Energy Management (SEM) program to reduce overall energy use at industrial facilities, he was skeptical of whether the time investment was worth the reward. After all, he had already made significant energy reductions in both natural gas and electrical usage. But because he'd worked with NYSERDA on a boiler project, a chiller project, a lighting project, a compressed air project, and a site energy opportunity review project and seen great results, he agreed to give SEM a try.

As part of the program, Garlock gained access to powerful SEM tools:

- One-on-one coaching with SEM experts in industrial technology and employee engagement
- An onsite "treasure hunt" that brought together representatives from various departments to uncover hidden energy-saving opportunities
- Energy modeling to learn where and how energy was being overused throughout Garlock's facility to help prioritize and evaluate projects

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—Andy Geoghan, Engineer, Garlock







Results that speak for themselves

For Andy, the most important way the SEM program is improving Garlock's energy management capabilities is through the structure it provides. The company can now identify and assess a range of project opportunities, prioritize them in sync with business goals, and then tackle improvements in a more measured, strategic way. And the process certainly hasn't slowed them down.

In just the first six months of the pilot, Garlock has:

- Retrofitted lake water pumps with variable frequency drives.
- Installed a SCADA utility monitoring system to track the efficiency and performance of the main utilities across the campus.
- Upgraded controls on a large steam press to automatically shut it down when not in use.
- Surveyed its steam traps, uncovering 27 bad traps out of 480. Repairs are complete and a sustainable inspection & repair program is in place.

Garlock has also gained tools and resources to help employees understand and engage with the impact of energy on the company's bottom line. Andy credits the modeling tools, in particular, with increased staff awareness and interaction.

"A lot of people were blown away by the modeling and predicting tools," he says. "For other people, the map is more important. The significant takeaway is that we are looking at energy differently and finding new perspectives to connect with more people. Now people are finally understanding the importance of energy and feeling empowered to help control costs."

Not only is Garlock management pleased with the results, its parent company is now considering launching similar programs at facilities across North America.

Andy is a supporter of NYSERDA's SEM program, and he urges other companies to take part. "It doesn't matter how much you think you know, or how long you've been working in energy—you're going to learn something."

The NYSERDA Strategic Energy Management Program

Through the Strategic Energy Management Program, NYSERDA funds training that guides companies and their employees through the process of establishing and implementing an SEM system. The program helps companies apply the principles of continuous improvement to energy management, to create a long-term comprehensive approach that fosters substantial long-term savings.



Discover how to bring energy costs, and profitability, under control with NYSERDA.

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