

CASE STUDY

Grays Harbor Paper: Committed to Sustainability



Participation in Pilot helps save energy and keeps company competitive

When Grays Harbor Paper in Hoquiam, Wash., decided to participate in NEEA's ISO 50001/SEP-based Demonstration Pilot in October 2008, they knew exactly what they were committing their paper company to. Like many industrial companies, they sought ISO 9001 (quality standard) certification in 2005 because their customers demanded it. And like many companies, Grays Harbor Paper found that operating in an organized, logical way improved many factors in addition to quality, such as throughput, reduced product loss, and improved raw materials utilization.

When they were offered the chance to participate in the Pilot, Grays Harbor Paper executives saw it as an opportunity to build off the benefits and accomplishments they found with ISO 9001, and as complementary to their broader sustainability platform. Executives saw participating in the pilot as another unique way to keep their company viable and stay competitive in an increasingly complicated and difficult economy for paper manufacturing companies.

Grays Harbor Paper also joined the pilot with past energy management experience. From 2006-2008, the mill participated in NEEA's Continuous Energy Improvement (CEI) program.



During its participation, Grays Harbor Paper was introduced to methods and tools industrial facilities need to begin to integrate energy management into their operations. ISO was a logical next step in Grays Harbor Paper's path to managing energy through a robust and consistent management system approach.

»» Challenges...overcome

Even though their past experiences provided Grays Harbor Paper a solid foundation to implement ISO and SEP, they still ran into challenges. Extensive metering was useful, but also complicated staff decisions about what should truly be designated as key performance indicators as they assessed the energy efficiency of their mill. The complexity of Grays Harbor Paper's onsite electricity generation and usage sometimes made it difficult for staff to track the energy used to make their product.

Taking time to determine the best way to use their metered data and working through staff changes did not throw Grays Harbor Paper off track. They set out to keep their company positioned as industry leaders and participation in the pilot solidified their drive to continue expanding their sustainability platform. Looking at their energy use in a regular, organized way helped

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NW Energy Management Demo Pilot

MW Savings during Pilot	MMBTU's of Natural Gas Savings during Pilot
2374	1,400,000



The four companies participating in the Demonstration Project collectively documented 17,000 kWh and 2,500 MMBTU's in energy savings.*

*These savings are self-reported and have not been validated by an independent third party.

»» In 2009 alone, Grays Harbor Paper saved 3,774,000 kWh.

them nail down what parts of their processes were their biggest energy users, and where efficiencies already existed.

»» Documentation is key

Even with the fairly extensive metering of subsystems, Grays Harbor Paper discovered that metering alone is not enough. They found that having a structured and documented way of evaluating their data was essential to understanding and minimizing their usage. They also discovered that clear processes, approvals, and responsibilities are critical to proper implementation of savings projects. In 2009 alone, Grays Harbor Paper saved 3,774,000 kWh.

For 2012, Grays Harbor Paper had planned to simultaneously pursue SEP, ISO 50001, and ISO 14001 (environmental) certification and were well positioned for success with these programs. They had hoped to lead the paper industry by example into a more sustainable future. Unfortunately, like many other successful businesses, Grays Harbor Paper fell victim to the extended economic downturn, and closed their doors in May of 2011. Despite the closure, the staff involved in the ISO efforts remains convinced that certification helped Grays Harbor Paper remain profitable for many years. In fact, several of the employees most involved in the pilot now make a living helping other companies manage energy use. ■

About NEEA's pilot program

The Northwest Energy Efficiency Alliance's (NEEA) Northwest Strategic Energy Management (SEM) Demonstration Pilot of the International Standardization Organization's (ISO) 50001 energy management standard, and the U.S. Department of Energy's (DOE) Superior Energy Performance (SEP) program is part of its commitment to transform the market for strategic energy management in the Northwest. NEEA, with the help of utility partners, conducted the pilot from October 2008-2010 with five participating companies from throughout the region. NEEA provided strategy and technology support, utility coordination efforts, and included NEEA field advisors to work with participating companies to embed energy management into industrial business plans — from leadership to operational levels — to support long-term energy savings.



»» Pilot Benefits

- Implementation of energy-saving efforts at each of the participant companies
- Persistent and reliable energy savings
- Statistically validated energy savings

»» Pilot Challenges

- Started at the height of the recession
- Many companies were not in a financial or staff resources position to participate
- All companies experienced major business changes during the pilot timeframe
- Many utilities and company "facilities maintenance" groups were not familiar with ISO-style management systems

»» Best Practices for Energy Reduction

- Executive, public commitment to the U.S. DOE's *Save Energy Now LEADER* program
- Goal of 5% energy intensity reduction over the past 3 years, plus 25% more future energy intensity reduction over 10 years
- Data tracking and analysis
- Describing and documenting processes
- Energy training
- Auditing and corrective action
- Management reviews

»» THE JURY IS IN

Industrial facilities choosing to implement strategic energy management have persistent and reliable energy savings, bolster the bottom line, and position themselves for sustained success in the increasingly competitive global marketplace.

