

The Business Council and NYSERDA Webinar Series:

Energy 101

Starting Your Energy Journey

Sophie Cardona NYSERDA

Greg Baker VEIC



**The
Business
Council**



NYSERDA

December 19, 2019

What is Energy Management?

A long-term approach to optimizing energy use by integrating energy strategies into business practices. Businesses across New York are increasing profitability, creating a competitive advantage, and achieving greater resiliency through energy management

Why is Energy Management Important Now?

Today's energy landscape is fundamentally transforming the way we do business:

- > Innovations in clean energy technology
- > Rising stakeholder expectations for sustainable business practices
- > Decreasing renewable energy prices
- > Federal and state regulatory changes

Benefits of Energy Management

- > Boost your bottom line with reduced energy costs, freeing up capital to use elsewhere
- > Minimize risk by mitigating energy price volatility, equipment breakdowns, and outages
- > Create a competitive advantage and differentiate yourself in the market as a sustainability leader to customers, employees, investors, and other key stakeholders
- > Reduce your carbon footprint and contribute to a clean and healthier community
- > Improve workforce retention and talent acquisition in a competitive recruiting market

Take the First Step – Build an Energy Strategy

There are six steps to follow when you are looking to start or improve your energy strategy:

1. Make a Corporate Commitment to Energy
2. Understand Your Energy Use and Establish Goals
3. Identify Energy Saving Opportunities
4. Review Financial Incentives and Programs
5. Engage Employees
6. Continuously Monitor Performance and Reassess Strategy

Making a Corporate Commitment to Energy

The foundation of your strategy starts with an executive-level commitment to make energy an integral part of your mission and operations. Components of an energy strategy include:

- > Energy Policy – articulate your energy management vision and governance approach to employees, investors, customers, and other key stakeholders
- > Energy Leader – identify a senior-level employee to serve as an energy leader or champion
- > Cross-Functional Team – form a team to develop and monitor your energy strategy

Understanding Your Energy Use & Establishing Goals

By understanding your energy performance, you can set achievable energy-saving goals. Steps include:

- > Collecting and analyzing current and historical energy data to form a baseline of your business's energy use
- > Identifying a system to track your energy performance—this can range from simple spreadsheets to advanced monitoring systems
- > Setting baselines of your energy performance (how much energy you use on average over a specific time period)
- > Benchmarking and comparing your performance to that of similar organizations, your own past performance, or national, recognized standards
- > Establishing short- and long-term energy-saving goals—goals should be clear, measurable, and realistic

Identifying Energy-Saving Opportunities

**Determine opportunities and solutions to help you meet each goal.
Opportunities can include:**

- > Sourcing and choosing clean energy to power your business
- > Upgrading equipment and systems (e.g. replacing inefficient lighting systems)
- > Capitalizing on emerging technologies, like real time energy management

Each opportunity should have an associated timeline, key milestones, and expected outcomes

Reviewing Financial Incentives and Programs

There are numerous programs and financial incentives to help you start saving energy and money. This includes:

- > Guidance for energy use and management—energy audits, benchmarking, retro-commissioning, and more
- > Support for installing and using renewable energy—clean heating and cooling, solar, combined heat and power, energy storage, and more
- > Financial incentives for equipment and system upgrades—heating and cooling equipment, lighting and controls, industrial equipment, smart building systems, and more
- > Support for developing energy-efficient buildings and spaces—new construction incentives and technical assistance
- > Assistance with staffing and training your workforce on energy-efficient operations

Visit [nyserda.ny.gov/putenergytowork](https://www.nyserda.ny.gov/putenergytowork) for a full list of incentives

Engaging Your Employees

Energy strategies are more successful if the entire organization is fully committed. This commitment involves:

- > Communicating and raising employee awareness of your energy performance goals
- > Investing in and offering trainings on energy management best practices
- > Establishing feedback mechanisms for employees to submit feedback, share ideas on energy management, and flag potential energy-saving opportunities
- > Rewarding employees who identify or contribute to energy saving opportunities

Continuously Monitoring Your Performance

Evaluating your energy performance is a continuous process.

Steps include:

- > Measuring and reporting results – use a tracking system to measure how you are performing against your goals
- > Adjusting your goals and plan – identify what energy-saving opportunities are working well and any adjustments that need to be made to achieve success
- > Communicating your success – recognize your achievements both internally and externally to drive motivation and engagement
- > Disclosing your sustainability performance information – sharing your energy data with customers and investors, using platforms like the Global Reporting Initiative or the Carbon Disclosure Project

Potters Industries – Glass Manufacturer

Bringing energy and profitability under control

Potters worked with NYSERDA to incorporate energy management into its business operations, resulting in:

- > Improved profit margins
- > Compressed air reduced by 15% by repairing leaks and lowering supply pressure
- > Creation of an energy-conscious workforce

Strategic Energy Management

What is Strategic Energy Management (SEM)

- > Is a **systematic approach** to energy savings – one with standard operating and maintenance (O&M) procedures, **continual monitoring** of energy use; and processes to identify, evaluate, and approve energy efficiency measures
- > Looks to embed the management of energy use at your facility **alongside** other cost reduction goals

What is Strategic Energy Management (SEM)

- > SEM focuses on **business practice change** at all levels of the organization, affecting culture change to **reduce** energy waste and to **improve** energy intensity, efficiency, and productivity
- > SEM is based from the principles of **Continuous Improvement** such as Lean and Six Sigma (Continuous Energy Improvement)

SEM Program Structure

A series of NYSERDA-funded 'learn-by-doing' Energy Coach driven trainings

- > Consists of ten (10) training sessions, led by the Energy Coach, over twelve (12) months
- > A combination of in-person and web-based events
- > Focused on behavioral and operational changes to equip and enable plant management and staff to reduce energy intensity over time

Outcomes

- > Companies learn to identify areas for improvement and drive managerial and corporate behavioral changes with respect to energy
- > Companies develop the mechanisms to track and evaluate energy optimization efforts alongside other business investment opportunities

SEM Program Tools

Participating facilities will develop tools for continuous SEM integration, including:

1. **Energy management assessment** specific to their facility
2. Establish an Energy Policy
3. Long term energy savings goals
4. **Energy map** or model for their plant or process
5. List of identified energy savings opportunities and implementation plan
6. Plan for employee engagement
7. **Energy Performance model** – a method for systematic measurement and reporting of energy performance

Benefits to You

1. Reduced energy cost (\$ per unit) and increased profitability
2. Realization of sustained cost-effective energy savings
3. Creation of new business value
4. Advantage over competitors
5. Creation of a culture of energy management
6. Identification of operational-related issues
7. Associated Improvements in Operations

Executive Sponsor Commitment

1. **Communicate** the goals and vision of energy management central to your mission and competitiveness
2. Devote **labor resources** to fulfilling the roles of energy champion and energy team members
3. Provide **continual** reinforcement of value to the energy team
4. Ensure energy champion maintains **available time** commitment
5. Devote resources to **recognize** employee contributions

Resources

**Keep up-to-date
on NYSERDA
programs, offerings,
and information**

nyserderda.ny.gov/subscribe

Contacts:

Sophie Cardona, NYSERDA

(212) 971-5342 x3590

Sophie.Cardona@nyserderda.ny.gov

Greg Baker, VEIC

gbaker@veic.org

Follow NYSERDA



Want to Learn More?



Visit nyserda.ny.gov/putenergytowork



NEW YORK
STATE OF
OPPORTUNITY

NYSERDA

Upcoming Webinars

- > Thursday, January 16: Cost Benefit Analysis of Energy Investments – How to Sell the Value Proposition
- > Thursday, February 20: NYS Energy Policy Update
- > Thursday, March 19: Energy Workforce Development Funding
- > Thursday, April 16: Energy Supply Chain Management