

# On-site Energy Manager Pilot Program Road Map



## Byrne Dairy — Syracuse, NY

### Project Background

CHA Consulting, Inc. was contracted by Byrne Dairy for a full-time On-site Energy Manager position at multiple locations over a 16-month period. Initially performed at their Ice Cream Center and Fresh Dairy plants, the energy management activities were then transitioned to focusing on the Byrne's Ice Cream Center, Byrne Hollow Farm, and Syracuse Cold Storage locations for the last 12 months after the Fresh Dairy plant was sold. CHA provided a team of two engineers (one lead Energy Manager and one Energy Engineer) to perform the duties of the energy manager.

In an overall effort to maintain and improve site operational and energy efficiency, general responsibilities of the energy manager were associated with providing technical assistance, training, identifying opportunities, promoting continuous improvement, implementation of energy management strategies and projects (including incentives), and verifying the results. The site energy reduction goal was to achieve a 5% reduction in energy consumed.

### Lessons Learned

The following are lessons learned from the program and should be shared with anyone taking on the role of On-site Energy Manager in the future.

#### Start with Simple, Easy, or Existing Projects

Your first energy project is going to set the tone for your experience as an Energy Manager by leaving a lasting impression on the rest of the organization. Consider beginning with a project that has a moderate impact of energy, requires minimal capital expense, based on proven technology, and can be executed within a short period of time. Similarly, the initial projects can be pulled from a pending project related to maintenance, production, process, etc. where an energy component can be determined. These projects have a high probability of success (especially if already approved) and will demonstrate the potential for energy savings across the plant. The first successful project should be recognized and celebrated within the organization, preferably with pictures and measured data to support the case study.

### Sharing Information Between Plants

For manufacturers with multiple locations, it is important to discuss best practices, operational improvements, and project successes between plants. If different locations have similar equipment or procedures, improvements at one location can potentially be applied at the other locations. When management is trending towards approving a certain type of project, each location should attempt to complete similar projects if applicable. At Byrne Dairy, this could be seen through their lighting conversion projects across multiple locations.

### Engage Everyone At All Levels of the Company

Engaging and leveraging the existing knowledge is essential towards the short- and long-term success of energy management. Instead of conceptualizing projects exclusively with the engineering group and management, the other groups at the company should be considered for input. Those that interact with the plant on a daily basis will be insight on equipment operation and what improvements may have the best success.

The regular team meetings should include a cross-section of all stakeholders (plant maintenance, plant operations, facilities, health and safety, purchasing, etc.) to be an active part of the energy team. Having insight from each area and/or department offers a more comprehensive view of how energy efficiency is approached across the enterprise.

### Task Delegation

Energy Managers rely on the help and support of the entire organization, and it's important the action items and due dates are clearly defined for the energy team. Sending out action item lists after meetings, and copying Management is a helpful reminder on the tasks requiring attention. Management is more likely to prioritize their staff if they are aware of the actions needed. Regular meetings and check-ins will reinforce deadlines and inspire staff to finish their tasks in a timely manner. The importance of task delegation and communication was put at the forefront during the COVID-19 pandemic during the energy management contract.



**NYSERDA**

## Walk-through Audits & Inspections

Making it a habit of performing walk through audits on a regular basis (say one building or section of the park per week) will help identify new opportunities as well as ensure that savings continue to be achieved on energy conservation measures already implemented.

## Incentive Programs

Stay up-to-date and leverage incentive and rebate programs whenever possible. Several applications were submitted over the on-site assignment to National Grid on various projects. An On-site Energy Manager should always seek to take advantage of the available NYSERDA, local utility, and economic development and federal programs; which can often make or break the payback requirement on a project.

## Recommendations

The following recommendations should be considered across all of Byrne Dairy's locations, or any site, looking to continue improving energy performance:

1. Hire or train an energy manager to focus on Energy Management on a part-time basis. This person would be responsible for overseeing continuous improvement in energy performance across all facilities, and implementation of energy projects. He or she would be involved with all major energy-related decisions, facilitating collaboration with the necessary parties, and could provide Project Management support.

At a minimum, the person should have the following skills and experience:

- Experience with facilities and process systems.
  - Previous Energy experience (or willingness to take trainings and certifications).
  - Strong analytical skills.
  - Strong interpersonal, and communication skills.
2. Maintain contact with NYSERDA and National Grid regarding their program offerings.
  3. Continue with frequent energy team meetings and walk-through audits. Maintain energy project lists. Keep all employees engaged in energy management.
  4. Ensure the compressed air system and steam traps are audited and repaired periodically (a one-to-two year frequency). Purchase an ultrasonic meter for internal use in audits.
  5. System level and plant level KPIs should be reviewed on a monthly basis. Note trends with seasonality and make an effort to understand discrepancies. KPIs can be used to track performance going forward and identify possible issues when irregularities are discovered.
  6. Improve data trending capabilities of major energy consuming systems, including ammonia compressors and compressed air.
  7. Maintain communication between each company location to discuss best practices and projects.

## Learn more.

For more information and to apply, visit [nyserderda.ny.gov/OsEM](https://nyserderda.ny.gov/OsEM)

If you have questions or need support, reach out to [OnSiteEnergyManager@nyserderda.ny.gov](mailto:OnSiteEnergyManager@nyserderda.ny.gov)

