



Maximize energy efficiency with On-site Energy Manager

Case Study

Company Name:
General Electric
Research Center

Industry:
Light Industrial

Location:
Niskayuna, New York

Annual Electric Savings:
10,944,825 kWh

Annual Fossil Fuel Savings:
129,500 MMBtu

Overview

GE Global Research Center is a highly diversified light-industrial research lab that performs research and development operations for GE core businesses as well as outside contracts. Operations include aviation, clean room, healthcare, additive manufacturing, advanced materials, non-destructive testing, and digital intelligence sector research.

The campus expanded over the years—building ages range from nine to 74 years old. Each building has specialized laboratory spaces with energy usage and system loading being highly variable throughout the day and process dependent.

With support from the New York State Energy Research and Development Authority's (NYSERDA) On-site Energy Manager (OsEM) Program, the Niskayuna Research Center engaged an OsEM on a full-time basis for two years to develop and implement a facility-wide energy efficiency plan.

On-site Energy Manager

Selecting the right OsEM is key for successfully identifying opportunities to maximize relevant cost-saving energy efficiency measures and identifying available incentive rebates. The OsEM worked closely with project stakeholders to create a small, effective energy team to implement system optimization and energy conservation measures.

The team—consisting of the OsEM, engineers, project managers, maintenance staff, and building managers—worked together to quickly identify energy efficiency projects and continually track progress toward goals. More importantly, the team proficiently executed complex energy reduction and optimization projects that fit within limited budgets and staffing constraints. Projects included HVAC system optimization and re-balancing, reduction of underutilized lab equipment and exhaust systems, and energy-efficient equipment upgrades.



Results

Improvements developed by the team were central to the energy efficiency gains. Project implementation resulted in reducing energy use by 10,944,825 kWh and fossil fuels by 129,500 MMBtu annually.

Due to the success of the OsEM program, on-site energy conservation and optimizing projects are engrained in the planning of near- and long-term projects. From lighting upgrades to air handler controls, the facilities team is committed to continuous improvement.

The NYSERDA On-site Energy Manager Program

Through the On-site Energy Manager (OsEM) Pilot Program, NYSERDA cost-shares up to 75% of the cost to hire an OsEM. OsEMs work with companies to develop and implement successful energy and productivity projects. Projects may include operation and maintenance improvements, behavioral changes, energy efficiency upgrades, process improvements, throughput and scrap reduction improvements, and cost management.

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

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