



NYSERDA

# Creating a healthier environment with On-site Energy Management

## Case Study

Company Name:  
**Albany Medical Center**

Industry:  
**Health Care**

Location:  
**Albany, NY**

Number of Sites:  
**17**

Total Square Feet:  
**2,000,000**

Annual Electric Savings:  
**8,500,000 kWh**

Annual Cost Savings:  
**\$640,000**

## Overview

Albany Medical Center is Upstate New York's only academic health sciences and level 1 trauma center. The 766-bed hospital offers the widest range of medical and surgical services in the region. The on-site Medical College includes a biomedical research enterprise and the region's largest physician's practice with more than 450 doctors. In addition, Albany Medical Center partners with several businesses throughout the community to further improve the region's health and quality of life.

The main campus totals approximately 2,000,000 square feet with a range of facilities, including clinical laboratories, 37 operating rooms, exam rooms, and classrooms. With such a diverse portfolio of buildings and tremendous growth, Albany Medical Center participated in NYSERDA's On-site Energy Manager (OsEM) program to take advantage of available resources for efficiently managing the facility's energy use.

## Rolling Out the Plan

The goal was to reduce energy usage across the campus by 2% annually. The first strategy was developing an energy management plan, which was distributed to facilities supervisors and building foreman for feedback on energy efficiency improvements. The plan was well received and staff was enthusiastic about making efficiency improvements. Many of the foremen rotate assignments and provided suggestions for their buildings as well as buildings they previously supervised. Albany Medical Center opted for a full-time OsEM employee serving, with plans to continue the position after the engagement ends.

	Target (kWh)	Installed (Acquired) Progress (kWh)	Identified (Pipeline) Progress (kWh)	% Installed Progress Against Target	% Identified Progress Against Target	Summer On Peak Demand Savings Identified (kW)	Summer On Peak Demand Savings Installed (kW)
Main Site Annual Electric Energy Savings	1,265,900	3,573,228	6,039,759	282%	477%	764	419
Off Site Annual Electric Energy Savings	1,732,980	2,065,755	2,451,799	119	141%	360	293



## Results

The OsEM began by focusing on the two largest utility accounts, the main site and South Clinical Campus. Once projects were selected and funded for those sites, construction began and the OsEM expanded the program to 15 off-site locations. **Total identified energy savings is 3.6% of the baseline usage.** A template was created for payback analysis for each project, which was presented to the Center's CFO and COO for approval. By utilizing utility rebates, many projects had paybacks of less than one year and funding was quickly approved.

Projects at the main site included new, high-efficiency chillers, adding variable speed drives to pumps, and modification of operating sequences. The existing chiller plant was modified to a variable primary loop. In addition, lighting upgrades in some areas and installing new fixtures in others was implemented across all buildings. The OsEM met with employees to explain the lighting control system, demonstrate lighting levels, and implementing schedules.

To reduce utility expenses, the main account enrolled in a community solar project, where the medical center will be the anchor tenant. With no up-front costs, the delivery portion of the electric bill will be reduced by approximately 13%.

## The Future

Seeing the value of having a dedicated OsEM, administration plans to continue with the position—the savings achieved covers the salary of the position. Albany Medical Center is affiliated with three other hospitals, providing the largest locally governed health system in the region. The plan moving forward is to have the OsEM work with these facilities, providing guidance on energy management, performing benchmarking, and implementing best practices. Expanding the community solar program to off-site accounts is also in process.

## 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 improve profitability with NYSERDA.**

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