Mount Sinai Hospital facilitates energy efficiency with On-site Energy Manager

Case Study

Company Name: Mount Sinai Hospital
Number of Sites: 6 Buildings
Total Sq Ft: 2.1 Million
Annual Electric Savings: 8,300,000 kWh
Annual Fossil Fuel Savings: 125,000 MMBtu
Annual Cost Savings: $1,524,000
Industry: Healthcare
Location: New York City

Overview

The Mount Sinai Hospital campus consists of six buildings, totaling more than 2,100,000 sq. ft. Several of the hospital buildings were constructed in the 1920s and completely renovated in 2008. All buildings are served by a central heating and cooling plant that distributes steam and chilled water to dozens of air handling units, hot water heating and reheat systems, and numerous process cooling loads. However, due to system upgrades and repairs to handle additional loads, the hospital’s energy consumption and carbon footprint increased.

As a member of the NYC Carbon Challenge, hospital administration needed to implement a plan to reduce energy use and carbon emissions.

Initiating the Plan

The New York State Energy Research and Development Authority (NYSERDA) On-site Energy Manager (OsEM) Program seeks to demonstrate the value of an OsEM in commercial, industrial, and multifamily facilities to become standardized and self-sustaining.

Through a cost-share with NYSERDA, Mount Sinai hired a fulltime energy manager for a two-year engagement. In addition, the hospital was eligible to apply for custom incentives from Con Edison through its Commercial and Industrial Program. The On-site Energy Manager supported the incentive applications with data collection and technical analysis through an energy audit.
Over the two-year engagement period, Mount Sinai Hospital reduced energy consumption by 10% and CO₂ emissions by 8,652 Metric Tons compared to the hospital’s baseline year of 2017–18.