

MAXIMUM ENERGY SAVINGS AT EDISON PROPERTIES WITH LOGICAL BUILDINGS' SMARTKIT AI™

➤ BACKGROUND

Edison Properties, owner of self-storage company Manhattan Mini Storage, was facing high energy costs primarily due to spiking electricity consumption on hot days and a network of inaccessible, manual thermostats that made it impossible to modulate temperature setpoints. With New York State's ambitious energy efficiency goals, incentives that support innovation at the grid edge are flourishing in the state. As a result, companies like Edison Properties have exciting new options for reducing energy costs that rely on real-time technology platforms that produce coordinated big-data analytics and perform energy systems optimization.

➤ SOLUTION

In partnership with Logical Buildings (formerly Energy Technology Savings or ETS), a smart building software and solutions company, Edison Properties was able to participate in both the New York State Energy Research and Development Authority's Real-Time Energy Management Program and Con Edison's Demand Management Incentive Program in order to reap significant savings from the implementation of an advanced HVAC monitoring and control system at Edison Properties' largest facility. Logical Buildings' SmartKit AI software platform supplies the intelligence that integrates data from the facility's electricity-consuming equipment with external signals from the electric grid, such as demand response and other time-of-use price indicators, curbing energy consumption at the most valuable times. During a record heatwave in July 2018, SmartKit AI received stress signals from both the New York State grid operator and Con Edison and responded by reducing the facility's electricity consumption by 40%, generating demand response revenue for Edison Properties. Edison Properties is now expanding SmartKit AI from one to six sites in NYC, with the goal of creating a virtual power plant in one of the most electrically-constrained grids in the country.

PROJECT DETAILS

- **Project:** 350,000 sq. ft. storage and office facility
- **Partners:** NYSEDA, Con Edison
- **Sector:** Commercial
- **Location:** New York City
- **Services:** Big data creation and analytics, continuous energy systems transparency and optimization

CHALLENGES

- Managing electricity demand charges around peak energy use periods
- Access to qualified energy managers that can mine data for energy efficiency insights
- Scalability of energy efficiency systems
- Meeting sustainability goals

OUTCOMES

- Electricity consumption reduced by close to 10% and expenditures reduced by 25%, amounting to a payback period of less than one year after rebates
- Installation of advanced HVAC monitoring and control system for real-time analysis and modulation of overall electricity consumption
- Savings seamlessly extended to portfolio locations



“Logical Buildings’ smart building software and solutions played a critical role in achieving our significant energy and operating cost reductions. With the company’s intuitive software platform and team of experts, Edison Properties was able to navigate energy efficiency incentives that not only benefit us but also help New York to be a leader in sustainability.” –Greg Maser at Edison Properties.