

Case Study

Company Name: Jack Resnick & Sons

Square Footage: 563,391 Sq. Ft.

Energy Savings Results: 480,000 kWh, \$98,000 annually

Sector: Commercial

Location:

New York City

"Real-time data through the userfriendly interface was the biggest benefit."

-Resnick's Chief Engineer

Background

For three generations, Jack Resnick & Sons has built its reputation on providing first-class accommodations for residential and commercial tenants. With more than 5 million square feet of building space throughout New York City, the company's new construction and renovation projects are revitalizing and redefining urban landscapes while focusing on implementing clean energy. Energy efficiency is an integral part of the company's culture as well as its commitment to sustainability.

Planning the Strategy

Smart metering to identify energy cost saving opportunities for improved building operations was the logical place to start. Resnick & Sons partnered with R3 Energy, a strategic energy management firm specializing in energy efficiency technologies and management to provide energy cost-saving solutions for a variety of building types.

R3 Energy presented Resnick with a full real-time energy management system (RTEM) solution for the 563,391-square-foot building. EcoGenesis SmartGrid technology is a universal software infrastructure designed to integrate several systems, devices, and field controllers into one web-based software platform. This system links to a Building Management System (BMS) or can function individually, connecting to third-party equipment such as chillers, boilers, and lighting control panels. The data collected resides on a cloud-based server and provides optimum setpoints, schedules, and operation instructions.

Moving into Action

R3 Energy monitored daily building operations to deliver actionable recommendations and output optimum setpoints to help building engineers develop best management practices. EcoGenesis includes highly detailed alarms to detect loss of connectivity with the BMS or equipment in need of repair. Notifications are sent via email to building engineers and managers when system conditions fall outside defined parameters to quickly identify and correct faults. Without the system, these issues could go undetected for months, resulting in energy loss and possibly causing long-term damage to building equipment. Additionally, charts and dashboards are provided to reflect building performance and identify additional cost-saving opportunities.



R3 Energy
monitored daily
building operations
to deliver actionable
recommendations
and output optimum
setpoints to help
building engineers
develop best
management
practices.

The estimated energy savings is 480,000 KWh, resulting in an annual energy cost savings of \$98,000. However, savings will likely be greater because the system's ability to immediately detect equipment malfunction alleviates energy loss and costly emergency repair service or replacement.

Designing the Future

Since the implementation of EcoGenesis, the tenant data results tracked to date show that tenants were not adversely affected during both cooling season days and demand response events when applying measures to reduce overall electric demand.

R3 held regular monthly meetings to provide ongoing training, discuss additional energy cost saving opportunities, and review progress so that building managers can continue to maximize the system's benefits. The success of this project inspires Resnick & Sons to continue investing in smart metering along with clean energy measures such as lighting retrofits, upgraded building management systems, and green roofs across its extensive building portfolio.

Through the New York Energy Research and Development Authority's RTEM program, Resnick & Sons were eligible to receive more than \$7,000 in incentives.

The NYSERDA Real Time Energy Management Program

Through the Real Time Energy Management Program, NYSERDA offers up to a 30% cost-share incentive to support RTEM projects that serve customers in multifamily, commercial, and industrial sectors. The program helps evaluate and qualify vendors, ensuring high-quality RTEM projects that create a smarter building or facility with lower operating and utility costs, and greater appeal, comfort, and marketability.



Discover how to transform the way you manage and consume energy with NYSERDA.

Visit nyserda.ny.gov/RTEM