Daylight Savings Company Sheds Light on Energy Efficiency

Case Study

FlexTech Consultant: Daylight Savings Company

Location: New York, NY

Sector: Commercial Office

Building Square Footage: 360,000

Annual Cost Savings: **\$179,716**

Annual Electricity Savings: 143,241 kWh

Annual Gas Savings: 4,536 MMBtu



Background

Daylight Savings' client was looking to reduce their energy consumption and comply with New York City's Local Law 87. As a progressive client, they are dedicated to improving the energy performance of their building stock in an ever-growing competitive market. Daylight Savings was determined to identify substantial energy saving opportunities and knew NYSERDA's FlexTech program was the perfect pathway to assist the client with their goals. FlexTech covers half the cost of completing an energy study, and as an experienced FlexTech Consultant, Daylight Savings completed a FlexTech application with minimal client effort.

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Daylight Savings' FlexTech energy study uncovered opportunities that could reduce their client's utility expenses by 12% and save them \$179,716 each year.

Developing the Plan

The client's building must comply with NYC's Local Law 87, which requires an ASHRAE level 2 energy audit and the retro-commissioning of major equipment. Retro-commissioning is a systematic process for investigating, analyzing, and optimizing the performance of targeted building systems through improving operation and maintenance.

Daylight Savings' efforts began with a comprehensive plan that identified specific equipment and systems to be audited and tested. Protocols were defined for conducting appropriate functional performance tests (FPTs), which confirmed whether these systems operate as intended.

Energy Savings Summary

Measure Description	Electric Savings (kWh)	Gas Savings (MMBtu)	Annual Cost Savings
Lighting Controls	2,727	-	\$181
High Efficiency LED Lighting	19,728	-	\$3,440
Equipment Controls	115,384	-	\$28,219
Efficient HVAC & Motors	-	4,563	\$147,118
Seal Ductwork	5,403	-	\$756
Total	143,242	4,563	\$179,716

The Daylight Savings Company has been providing high-quality energy efficiency services thoroughly vetted by established institutions since **1991.** The company's longevity and multiyear contracts with NYSERDA are a testament to its long-term approach, professionalism, and competency.



NYSERDA-Approved FlexTech Consultant



Turning the Plan to Action

A comprehensive assessment of existing conditions at the facility, including an analysis of utility billing history and audit of all relevant equipment and systems, was completed to understand how the building is performing and using energy.

Daylight Savings continued to complete an ASHRAE level 2 energy audit, inventoried all building energy consuming systems, and developed an engineering model to evaluate and determine opportunities to reduce energy consumption.

Major energy consuming systems were retro-commissioned and FPTs were performed to identify system and process deficiencies. Any deficiencies identified were recorded on a master list and provided to the client. The Daylight Savings team addressed all deficiencies and ensured the facility began operating as efficiently as intended.

Lighting Up Results

Through the retro-commissioning process, Daylight Savings made 36 low-cost operational improvements to the energy consuming systems and as a direct result of the energy study, numerous opportunities for the client to save energy were identified, such as:

- Installing gas-fired condensing boilers and converting the entire system to hydronic
- Upgrading lighting to LED
- Implementing lighting controls
- Upgrading the Building Management System by installing air-side economizer controls, chilled water reset controls, variable speed drives to control pump motors, and static pressure reset controls

NYSERDA Flexible Technical Assistance Program

Completing an energy study of a building can help identify and evaluate opportunities to reduce energy costs and incorporate clean energy into a company's capital planning. Through the Flextech Program, NYSERDA shares the cost to produce an objective, site-specific, and targeted study on how best to implement clean energy and/or energy efficiency technologies. A NYSERDAapproved FlexTech Consultant will work with businesses to complete the energy study and provide expert, objective and customized technical services to inform clean energy management and investment decisions.

Discover how to reduce energy costs and incorporate clean energy with NYSERDA.

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