



Maximum Incentives for Maximum Savings

Case Study

Company Name:
Annal Management Co. Ltd.

Total Square Footage:
275,446 Sq. Ft. (6 sites)

Total Project Cost:
\$453,000

Energy Savings Results:
34,930 therms
\$41,575 in annual cost savings

Sector:
Multifamily

Location:
New York, NY

Services:
Installation of heating plant upgrades, installation of sensors and meters, integration of cloudbased building management software, data-driven energy efficiency recommendations

Background

Annal Management Co Ltd. is a property management company with a portfolio of multifamily residential properties primarily located in the Bronx. In 2018, Annal decided to upgrade the existing heating plants in six of its apartment buildings to improve the efficiency of its portfolio, reduce energy costs, and switch to a cleaner heating fuel.

Capturing Incentives to Increase Savings

Annal connected with Dual Fuel, an integrated service provider of cost savings and energy-efficient solutions offering clients a range of services. Its cloud-based energy management software, Inferstack, identifies energy waste and operational inefficiencies in real time and develops unique Key Performance Indicators based on client goals for both equipment performance and tenant comfort. Inferstack integrates with existing building controls to track and analyze energy consumption and plant performance, measure energy savings, and alert on efficiency drift and equipment failure.

Annal's initial concerns were the significant upfront installation costs and lack of experience with real time energy management (RTEM) systems. The recommended energy efficiency improvements qualified for a range of State and utility incentive programs, including the Gas Conversion Incentive Program, Con Edison Multifamily Energy Efficiency Program, and the Con Edison One Pipe Stream Retrofit Program. Dual Fuel also offered support to the building staff on using Inferstack to improve building operations.



“The biggest benefits we experienced were the savings and the ability to monitor the boiler to detect any issues. Having all that data also helps us bridge the gap between what the super or tenants are saying and what is actually happening in the building”

— Aida Spitzer
Owner, Annal Management



Efficient Hardware, Smart Software

Dual Fuel worked to install heating equipment upgrades and improve the building management system. Upgrades to existing heating plants included oil to gas conversions across all six buildings, installation of high-efficiency steam boilers, and steam distribution system upgrades. These upgrades were coupled with additional hardware installations to enable the integration Inferstack. For example, Dual Fuel installed wireless apartment sensors to calculate aggregate indoor temperature and control the boiler in real time based on indoor air temperature. Other system sensors were installed to monitor stack, coil, condensate return, and inside boiler water temperatures, as well as track oil, gas, and water consumption.

The data from these sensors and meters is collected in 15-minute intervals throughout the day and can be accessed remotely through Inferstack. This provided Annal a dynamic and continuous understanding of its buildings’ heating operations and energy consumption. The sensor data also allows Dual Fuel to prepare bi-annual service reports for Annal to analyze detailed energy usage patterns and refine or develop new optimization strategies. Automated alerts notify both Annal and mechanical service departments, providing advanced warnings of potential equipment malfunctioning and enabling quicker repair time.

These upgrades reduced energy consumption in each of Annal’s buildings by at least 20%. Annal accessed a total of \$153,180 in NYSERDA incentives and \$211,696 in Con Ed incentives for the upgrades. Combined, the benefits delivered by the Dual Fuel system upgrades helped Annal save approximately 34,930 therms and \$41,575 in costs.

Benefits Beyond Energy Savings

Through Inferstack, Dual Fuel also helped Annal improve building operations, productivity, and tenant comfort. The necessity for on-site visits for inspections and monitoring has been significantly reduced with sensors that feed information directly into the digital control system. The ability to control and adjust comfort setpoints for multiple buildings from a single remote device reduced the total time Annal’s workforce needs to respond to tenant inquiries or complaints, which increased the company’s overall productivity and time management. With sensors relaying accurate temperature measurements throughout its buildings, Annal can resolve heat and hot water complaints with an objective assessment tool, leading to significant improvements in overall tenant comfort and satisfaction.

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