GEATAIN ENGINEERING

CASE STUDY - 1941 3rd Avenue



BACKGROUND

1941 3rd Avenue, at the Franklin Plaza Apartments, is a 20-story, 145,008 square foot co-op residential building located in Manhattan, New York. Constructed in 1961, the building houses 117 residential units. The boiler room in 2081 2nd Avenue contains four low-pressure gas-fired steam boilers which provide steam for space heating and DHW for the building. These boilers are controlled by a Multi-MOD Platinum Heat-Timer. The building has two exhaust fans on the roof for ventilation that connect to exhaust grilles in hallways and bathrooms. The boiler room has an exhaust fan and louvers, and the elevator room has a gravity ventilator.

HOW GEATAIN ENGINEERING HELPED

- Analyzed previous operation and maintenance records to uncover latent equipment deficiencies.
- Identified financial constraints to ensure energy efficiency measures were implemented to meet client budgets.
- Heating percentage and electric percentage analysis revealed core property equipment challenges.

BENEFITS

- BMS drastically simplifies operational routines and tracks energy consumption in real time.
- Uncovered obscure funding opportunities to decrease burden of equipment improvements.



CHALLENGES

- Lack of insulation around piping.
- Apartment equipment consumes energy even when in sleep mode.
- Poor temperature control from existing radiators.

SOLUTIONS

- DHW Temperature
- Window AC Replacement
- Delamping
- TRV
- Night Setback
- Plug Outlet Controls
- Heat Pumps
- Smart Strips
- Pipe Insulation

FIVE YEAR SAVINGS

\$405,245

For more information, email tjm@geatain.com