

High Performance Retrofit Track FirstService Residential

participant profile

FirstService Residential, North America's largest manager of residential properties, has long been a leader in sustainability. Over a decade ago, FirstService created the energy advisory subsidiary, FS Energy, to enhance performance and efficiency across their properties. In 2013, FirstService Residential was the first multifamily firm to sign up for the NYC Carbon Challenge and is now the largest, with 14 million sq ft. committed to reducing emissions 30% by 2030. The firm is now partnering with the NYC Retrofit Accelerator's High Performance Retrofit Track (HPRT) to develop holistic energy efficiency capital plans that will cut energy use 40-60%, reduce costs, and improve comfort at three pilot properties.

FirstService Residential selected three co-ops, located in Manhattan and Queens, to participate in the HPRT. Property managers, co-op board members, and HPRT Efficiency Advisors are working together to develop comprehensive capital plans that will meet the unique needs of each property. Currently, the HPRT is helping both Queens co-ops navigate immediate, emergency equipment replacement needs (steam plant end-of-life and corroded return pipes in one case; chiller

plant failure and leaking condensate lines in the other). The first property will repair and redesign steam pipes and install a new boiler, sensors, controls, and thermostatic radiator valves to improve heating system balance and give residents greater control over room temperature. The second property will decommission their chiller plant and convert to an efficient, low-temperature hydronic system for heating and cooling.

The Midtown residence, not facing any urgent issues, is working with the HPRT to plan proactively for future capital needs in a way that will save energy, improve comfort, and limit disruption to tenants. They are currently evaluating the feasibility of replacing their district steam system with packaged terminal heat pumps or a variable refrigerant flow system. FirstService Residential is particularly interested in piloting energy recovery ventilation technology to see how it might be scaled across their portfolio.

FirstService Residential hopes that their HPRT projects will demonstrate the value added by strategic, holistic capital planning for energy efficient upgrades – no matter what circumstances or conditions a building may be facing.

“There may not be a one-size-fits-all solution, but it's never too early or too late to plan for the needs of your building.”
– Kelly Dougherty, Director of Energy Management

fast facts

no. participating building(s)
3 buildings

building location(s)

- Forest Hills, Queens
- Woodside, Queens
- Midtown, Manhattan

building type(s)
multifamily, post-war

building size(s)
105,300 to 315,000 SF

base building systems

- **heating:** steam and hydronic
- **cooling:** room A/C

planned upgrades:
short-term (1-3 years out)

- **heating/cooling:** steam system optimization plus new boiler
- **ventilation:** clean, seal & balance existing; install dedicated outdoor air system w/ energy recovery ventilation
- **lighting:** LEDs and controls

planned upgrades:
long-term (4+ years out)

- **heating/cooling:** steam displacement w/ packaged terminal heat pumps or variable refrigerant flow
- **DHW:** condensing boiler or heat pump
- **envelope:** window replacement

Get in touch with the NYC Retrofit Accelerator Today!

The NYC Retrofit Accelerator's team of Efficiency Advisors offers free, personalized advisory services to help streamline the process of making energy efficiency improvements to your building. The Retrofit Accelerator's High Performance Retrofit Track (HPRT) can help you design and implement a long-term capital plan to reduce your building's energy use by 40-60% within 15 years.

