

January 2015

green
A publication of Sokol Media, Inc.

matters

Green Building + Innovative Design



FirstService Residential

Boosting Efficiency while Shrinking Impact

FirstService Residential

Boosting Efficiency while Shrinking Impact

As the leading residential property management company in North America, FirstService Residential provides professional, full-service association management services to 6,500 properties. In New York City, the company manages more than 500 condominiums, cooperatives and rental buildings comprising 78,000 apartments that are home to more than 200,000 people.

New York City's residential buildings are the largest single source of citywide pollution, producing 34% of greenhouse gases. In addition to these environmental costs, energy costs can comprise up to a third of a multifamily property's budget – its largest controllable expense.

To help mitigate these effects, FirstService Residential established FS Energy, an energy management and advisory subsidiary that guides clients on ways to reduce energy costs, consumption, and emissions that will result in the highest efficiency gains. Since 2010, FS Energy has helped FirstService Residential clients save more than \$23 million in energy costs while reducing the carbon footprint of the New York portfolio by nearly 16%. FS Energy's customized efficiency solution recommendations have ranged from oil to gas conversions and cogeneration installations to mechanical control systems and lighting upgrades.

FirstService Residential was recognized for its achievements by being named "Environmental Stewardship Team of the Year" in 2014 by the New York Association of Realty Managers (NYARM). The company also achieved the 75% level in NYC Clean Heat's Property Manager Recognition Program by switching the majority of its properties from dangerous, heavy fuels to cleaner alternatives.

"We have proven to our clients that implementing well-

designed energy management strategies is not only environmentally beneficial, but can add value and be profitable as well," says Dan Wurtzel, president of FirstService Residential New York.

FirstService Residential was the first management company to join the Mayor's Carbon Challenge, committing to reduce emissions from its portfolio of properties by 30% in 10 years. Nearly 80 FirstService Residential buildings – covering more than 17 million square feet – have joined the challenge by pledging to reduce emissions by at least 15% over the next 10 years.

After many of its properties sustained significant damage and extended power outages following severe weather events, FS Energy began exploring ways to better protect FirstService Residential buildings against future storms. Its efforts were recognized when three of its projects were named finalists in RISE:NYC – a \$30 million competition created by the New York City Economic Development Corporation to reward innovative resiliency measures. Through the competition, FS Energy showcased enhanced energy infrastructure capabilities that provide emergency power in the event of grid failure.

Here are examples of how some FirstService Residential clients are benefitting from FS Energy's expertise and innovative solutions.



THE STRAND CONDOMINIUM

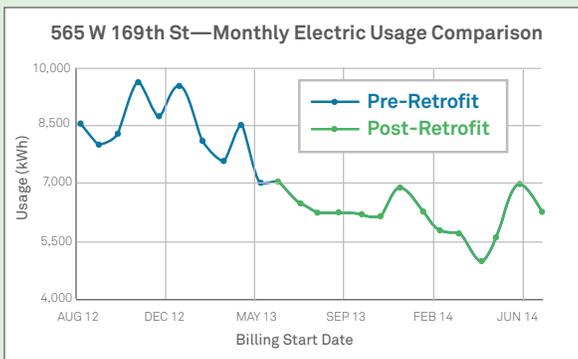
Project Type:	Oil to gas conversion and controls upgrade
Total Project Cost:	\$276,000
Incentive:	\$207,569
Annual Savings:	\$173,851
Simple Payback:	1.59 years
CO2 Reduction:	21%

This 311-unit condominium installed two new dual fuel burners and a new boiler control system in conjunction with a conversion from oil to natural gas. Coupled with wireless apartment sensors, the energy management system monitors air and water temperature to ensure equal heat distribution throughout the building.

The property is also installing a 100kW natural gas fueled cogeneration unit to provide backup power during grid outages and to also provide a portion of the electrical and thermal loads for heating and domestic hot water production. A NYSERDA incentive of \$433,000 resulted in no upfront costs to the building.

WOODROW COURT OWNERS CORP.

Project Type:	Hallway lighting upgrade
Total Project Cost:	\$5,687
Incentive:	\$4,018
Annual Savings:	\$5,322
Simple Payback:	1.07 years
CO2 Reduction:	4%
Electricity Usage Decrease:	25,758 kWh



This 60-unit cooperative demonstrated that even small projects can achieve substantial results. Woodrow Court recouped the cost of a hallway lighting upgrade project in just one year by replacing existing pendant fixtures with LED Energy Star lamps and integrating ultrasonic occupancy sensors.





PARK CITY ESTATES, REGO PARK, NY

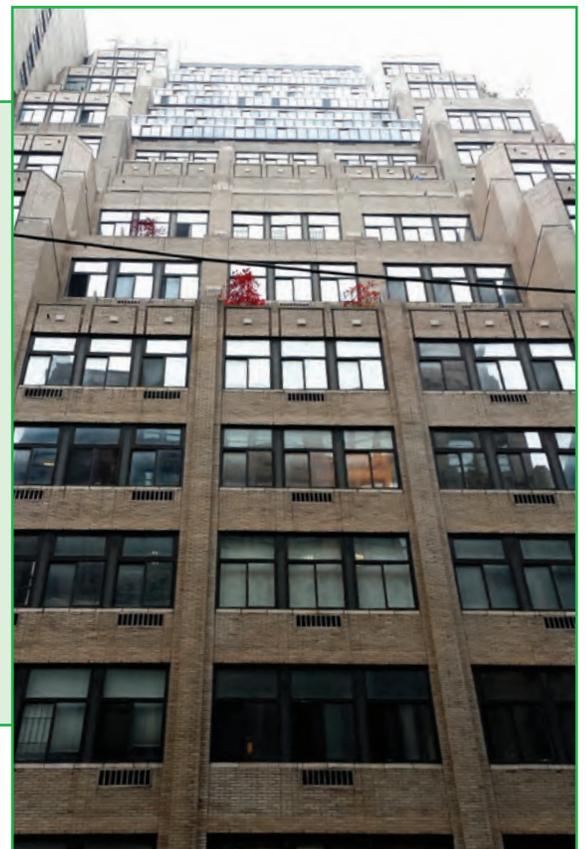
Project Type: Electrical sub-metering and LED lighting upgrade
Total Project Cost: \$792,235
Incentive: \$385,156
Annual Savings: \$392,253
Simple Payback: 2.02 years
CO2 Reduction: 8.5%
Electricity Usage Decrease: 1,529,100 kWh

This 1,049 unit complex installed sub-meters in each apartment to enable residents to pay only for the electricity they consume. The development's five buildings had been master metered, meaning all residents paid the same amount whether or not they were conservative with their use. Park City Estates also performed an extensive LED upgrade by retrofitting lighting in the basement, garage, corridors, stairwells, and outside. A NYSEERDA incentive cut total projects costs by almost 50%.

TURTLE BAY TOWERS

Project Type: Oil to gas and controls upgrade
Total Project Cost: \$504,000
Incentive: \$39,000
Annual Savings: \$199,585
Simple Payback: 2.53 years
CO2 Reduction: 24%

This 338 unit cooperative converted from oil to gas after burning 160,000 gallons of No. 6 oil at a cost of nearly \$500,000 annually. Additionally, the building replaced one of its boilers, relined the chimney, and upgraded the control system – all financed through an unsecured, low interest energy loan.





Classes held in the FirstService Residential Learning Center help educate staff on keeping equipment operating at maximum efficiency

EDUCATION & TRAINING

FS Energy has found that improving operation and maintenance (O&M) practices are proven measures to reduce energy use, add value, and increase efficiency. Along these lines, the company regularly hosts O&M seminars in the FirstService Residential Learning Center to educate building maintenance personnel on ways to keep operating systems and equipment performing at maximum efficiency. Sessions have covered such key topics as Lighting Essentials, Cooling Tower & Boiler Essentials, Best Practices for Heat-Timer Control Systems and more.

Three years ago, FirstService Residential hosted its first annual Sustainability Expo & Symposium to provide board

members, building personnel and property managers with information and solutions for increasing sustainability and efficiency in their properties. The event, which has continued to grow bigger and more successful each year, is held in conjunction with Earth Day to emphasize the company's commitment to environmental stewardship.

Each year, the event features a distinguished panel of green-minded industry experts who educate board members on topics such as incentives available to entice buildings to reduce emissions and how buildings can benefit from compliance with Local Law 87. Additional sessions for building personnel feature a supplier expo and seminar series on topics includ-

ing combined heat and power (CHP), water management, roofing systems, efficient lighting, pest extermination, tankless water heaters, solar and wind solutions and more.

"Our overall goal in hosting these events is to illustrate how efficiency measures can deliver savings to a property," says Wurtzel, "while reducing its environmental impact, increasing property values and improving the comfort of residents."

THE VALUE OF MEASUREMENT

FS Energy's innovative and analytical approach to energy improvement starts with taking baseline measurements, and the core of its success is a proprietary benchmarking database containing com-

THE THIRD ANNUAL FIRSTSERVICE RESIDENTIAL SUSTAINABILITY EXPO & SYMPOSIUM

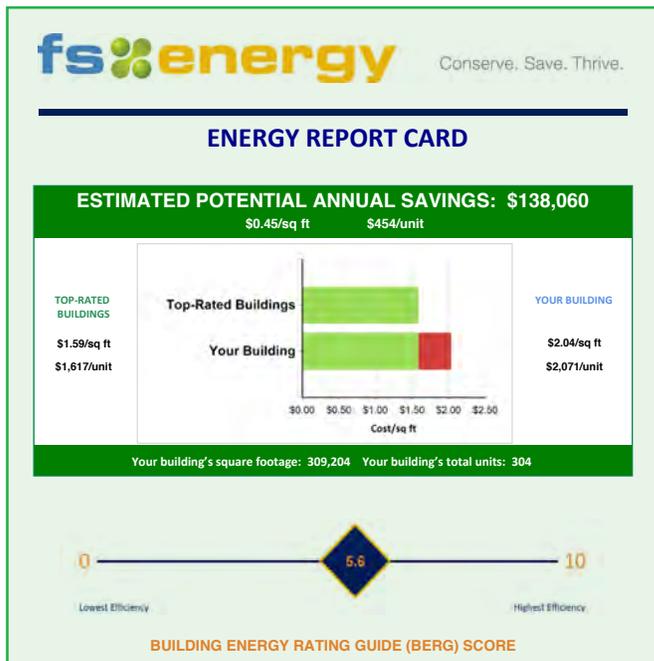
An exclusive event for FirstService Residential board members featuring a panel of green-minded experts discussing

How Your Property Can Decrease Costs by Capitalizing on Energy Efficiency Measures

Thursday, May 15, 2014
5:30 – 8:30pm
622 3rd Avenue, 14th Fl.
New York City




FirstService Residential's Annual Sustainability Expo & Symposium provides information and solutions for increasing efficiency in multi-family properties



prehensive historical data for nearly 1,000 buildings. Developed several years ahead of New York City's Local Law 84 – which now requires annual benchmarking of energy and water use for buildings over 50,000 square feet – the database enables FS Energy to apply state-of-the-art data analysis to evaluate a property's consumption compared to similar buildings.

These advanced analytics form the basis of the company's Energy Report Cards, which are issued annually to clients and feature a Building Energy Rating Guide (BERG) score. "The BERG eliminates guesswork and arms our clients with measured data and a roadmap so they can implement the right energy management strategies for their buildings," Wurtzel explains.

"As the city's largest management company, we have a tremendous opportunity to significantly reduce energy costs while improving building efficiency," he adds. "But more importantly, we have pledged to help our clients successfully reduce emissions because we assume the social responsibility to protect our environment – all part of our commitment to add value, enhance lifestyles and make a difference, every day, for every New York City resident, board member and building we serve."