IT'S JUST SMART BUSINESS

STREETCAR LOFTS CONDOMINIUM REDUCES ENERGY COSTS BY AN ESTIMATED $46,000 ANNUALLY WITH ENERGY-EFFICIENT EXHAUST FANS

STREETCAR LOFTS PROJECT-AT-A-GLANCE

Equipment installed

- 32 bath exhaust rooftop fans
- 27 dryer exhaust rooftop fans

Financial analysis

- $45,827 estimated annual energy cost savings
- $131,000 project cost
- $62,225 in Energy Trust cash incentives

Estimated annual savings

- 627,771 kilowatt hours
- 298 tons carbon dioxide

The 59 rooftop exhaust fans of Streetcar Lofts, a midrise condominium building in Portland, were working overtime to ventilate the 127,000-square-foot complex. Residents of the electrically heated and cooled building reported drafty conditions and high energy costs. Continuous negative pressurization issues prompted Multi-Services, Inc., a Portland-based homeowners association and management company for Streetcar Lofts, to investigate the building's mechanical systems.

Energy Trust of Oregon completed a technical analysis study of the building and determined that the existing ventilation system was changing the air in the building at almost three times the rate required by building code, resulting in 11,300 cubic feet of excess air being drawn into the building every minute. Over-ventilation is a common issue in large multifamily buildings and frequently leads to higher energy use because excess outside air is heated or cooled as it's drawn into the building.

Energy experts also discovered that existing exhaust fans were inadequate. Lint and other particulates had built up in the ducts and exhaust fan blades, straining the fan motors, reducing airflow and creating a safety hazard for tenants.

> "Upgrading to energy-efficient variable-speed exhaust fans with pressure sensors and speed controls will reduce utility bills an estimated $45,827. Plus, Energy Trust gave $62,225 in cash incentives to help offset the energy-efficient upgrade expenditure."

Jeremy Scheetz, community manager
Multi-Services, Inc.

Energy Trust of Oregon

To address the air particulate matter and reduce build-up in ducts, Multi-Services, Inc., selected replacement bath and dryer exhaust fans. They also added new pressure controls to the dryer shafts to monitor when a dryer turns on, increasing fan speed when necessary. The new rooftop exhaust fans are variable-speed, energy-efficient models equipped with speed and constant pressure controls, helping to reduce energy costs and increase tenant safety.

As a result of the technical analysis provided by Energy Trust, Multi-Services, Inc., decided to upgrade the exhaust fans at the 139-unit building and rebalance the existing ductwork to maintain the appropriate air changing rate and boost energy efficiency. "They had recommendations to help us out with everything we needed," said Jeremy Scheetz, community manager, Multi-Services, Inc.

PROJECT BENEFITS

- Improved tenant safety
- Decreased operating costs
- Stabilized homeowner association dues for tenants
- Properly regulated exhaust airflow

Get more from your energy.
To learn more, visit **www.energytrust.org/multifamily** or call **1.877.510.2130**.

Energy Trust of Oregon 421 SW Oak St., Suite 300, Portland, OR 97204 1.866.368.7878 503.546.6862 *fax* **energytrust.org**