



# Saving Energy, Water, and Money in the Mile-High City

## EZ Retrofit Identified Improvements that Lower Utility Bills

Built in 1971, Sunset Park Apartments is a 13-story, 238-unit housing property for seniors located in downtown Denver, Colorado. Most of the building's mechanical systems dated to the original construction, until the property manager worked with Stewards of Affordable Housing for the Future (SAHF) to make upgrades that have reduced energy use, improved tenant comfort, and cut operating costs.

### Partnering for Energy and Water Efficiency

Sunset Park is managed by Volunteers of America (VOA) and financed through the Low-Income Housing Tax Credit program, the largest federal program for the production and preservation of affordable housing. Sunset Park was identified as a good candidate for energy upgrades based on its age and the presence of local non-profit Energy Outreach Colorado (EOC). EOC implements energy efficiency programs that assist affordable multifamily properties in the state for the utility company Xcel Energy. EOC acts as the point of contact for all utility programs and coordinates with pre-qualified contractors to install the retrofits that property owners select.

In November 2014, VOA worked with SAHF to evaluate Sunset Park's upgrade opportunities using EZ Retrofit. EZ Retrofit is a free Excel-based benchmarking and audit tool that allows property owners and managers to identify cost-effective energy and water efficiency improvements. SAHF developed EZ Retrofit through a grant from the U.S. Department of Housing and Urban Development, in collaboration with affordable housing owners and managers, ICF International, and Bright Power.



“EZ Retrofit not only provides valuable recommendations, but also offers fast results at no cost, with little disruption to the property. Plus, it's a great tool for comparing cost and energy savings quoted by contractors. We've already identified other properties where EZ Retrofit will be helpful in identifying opportunities for savings.”

Dennis Hidalgo  
Energy & Sustainability Manager  
Volunteers of America



## The Path to Savings

The VOA-SAHF team input detailed data on the building's characteristics and systems into EZ Retrofit. EZ Retrofit assessed the energy and water savings potential for the property, based on a comparison with similar buildings. EZ Retrofit calculations of site energy use intensity and water use intensity indicated Sunset Park had significant retrofit needs, particularly the heating and hot water systems. Both systems were being served by two inefficient (65–75%) gas-fired Kewanee hot water heating boilers that had been installed when the building opened in 1971.

EZ Retrofit evaluated systems in 10 categories and recommended upgrades. The tool also provided estimates of consumption, installation costs, payback periods, and expected useful life for each of the recommended improvements. “We worked with SAHF and EOC to review the EZ Retrofit results and identify

incentives to support the retrofits,” says Dennis Hidalgo, Energy & Sustainability Manager at VOA. “Based on our priorities for the property, VOA chose to move forward with retrofits to the boilers, refrigerators, and lighting.”

## Upgrade Benefits

The new energy-efficient refrigerators are expected to reduce utility bills and improve quality of life for Sunset Park residents. The new high-efficiency boilers will require less maintenance, minimizing service interruptions and lowering operating costs. In common areas, all exterior T12 fluorescent fixtures and T8 lamps were replaced with energy-saving LEDs. Dimmable LEDs were installed in stairwells, further enhancing the building's aesthetic. Savings from the boiler and lighting improvements will also allow investments in other energy and water efficiency measures that can benefit both the property owner and tenants.

### Sunset Park Improvements: 20% Energy Reduction, 22% Cost Savings

#### **ENERGY STAR® Refrigerators**

Quantity: 128

Projected annual cost savings: \$4,912

Projected annual kWh savings: 51,712

#### **LEDs (common area and exterior)**

Quantity: 586

Projected annual cost savings: \$12,905

Projected annual kWh savings: 135,837

#### **85% Energy-Efficient Boilers**

Quantity: 2

Projected annual cost savings: \$9,725

Projected annual kWh savings: 7,394

Projected annual therms savings: 19,181

### EZ Retrofit Assesses 10 Systems

- HVAC
- Water heaters
- Clothes washers
- Kitchen appliances
- Lighting
- Motors and controls
- Air sealing
- Duct sealing
- Water fixtures
- Water conservation

## Start Saving Today

Learn more about EZ Retrofit and how energy and water efficiency upgrades can enhance tenant comfort and improve your bottom line.

Visit [www.sahfnet.org/ezretrofit.html](http://www.sahfnet.org/ezretrofit.html) or email [EZRetrofit@sahfnet.org](mailto:EZRetrofit@sahfnet.org).



**Stewards of Affordable Housing for the Future (SAHF)** developed EZ Retrofit under a grant from the U.S. Department of Housing and Urban Development and in collaboration with affordable housing owners and managers and housing industry partners. Launched in 2003, SAHF is a network of 11 not-for-profit members who acquire, preserve, and are committed to long-term affordability of multifamily rental properties for low-income families, seniors, and disabled individuals. SAHF members own and operate housing in 49 states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands, providing homes to more than 115,000 low-income households.