

ENERGY STAR Success Story: TIAA-CREF Multifamily Housing

TIAA-CREF is one of the largest institutional real estate investors in the nation, with investments in approximately 12,000 multifamily units, 45 million square feet of Class A office space, more than 20 million square feet of retail properties, and significant investments in other real estate asset types. Since partnering with the Environmental Protection Agency's (EPA) ENERGY STAR program in 2002, TIAA-CREF has made energy efficiency a top priority in its Global Real Estate portfolio, and is a multiple-year ENERGY STAR Partner of the Year and Sustained Excellence award winner—the first financial services organization to receive this distinction.

An Organizational Commitment to Energy Management

The ENERGY STAR approach to strategic energy management has been a cornerstone of TIAA-CREF's sustainability efforts. Its investor-owned office portfolio has been highly successful in reducing energy consumption and greenhouse gas emissions through strategic energy management, with more than 25 million square feet of ENERGY STAR labeled properties.

Building on these efforts, TIAA-CREF expanded the initiative to the multifamily portfolio in 2007 pioneering "green" operations in the multifamily housing market. "The green building movement was gaining momentum, and we wanted to position our portfolio ahead of the curve," said Scott Anderson, Director of Asset Management. The organization made a commitment to reduce operating costs by managing its residential communities with an eye toward greater energy efficiency. From 2007 through 2009, TIAA-CREF reduced its communities' common area energy consumption by 9.1%—leading to energy cost savings of about \$500,000 each year.

Best Practices Implementation

In 2008 TIAA-CREF implemented a set of strategic energy management initiatives consistently across the portfolio of more than 40 multifamily properties. Some of the strategies implemented include:

- Replacing incandescent lighting with ENERGY STAR qualified CFLs
- Purchasing only ENERGY STAR qualified appliances and equipment for replacements
- Installing 7-day programmable thermostats in common areas and amenity areas
- Reducing pool and hot tub temperatures
- Training staff to operate model and vacant units more efficiently

Benchmarking Community Energy Use with ENERGY STAR

The 2009 launch of the multifamily housing space type enhancement to Portfolio Manager, EPA's online energy management and tracking tool, was crucial in moving TIAA-CREF's initiative forward. Traditionally, the multifamily housing industry has tracked utility expenditures, but not energy *consumption*; because the multifamily sector has not typically considered energy a controllable operating expense and there has been little incentive to monitor energy performance. As this paradigm began to shift, EPA enhanced Portfolio Manager to provide a means for benchmarking multifamily energy performance.

Immediately after the Portfolio Manager multifamily features were released, TIAA-CREF instructed all third-party property managers in the use of the tool and required that they collaborate with TIAA-CREF to benchmark their communities' past and current energy performance in order to quantify the results of the energy management program.

Using Portfolio Manager has greatly benefited TIAA-CREF. First, it helped identify which energy efficiency measures were most effective. For example, when swimming pool temperatures were reduced from 81°F to 78°F in early October 2008 at one Arizona community, Portfolio Manager allowed visibility

into the resulting natural gas savings: \$14,000 over the next four months. The community has since reduced energy consumption in common areas by 28%, totaling more than \$40,000 annually. As another example, adjusting temperature settings and proactively managing energy used in vacant units contributed to a Chicago-area high-rise's 13% energy reduction over less than a year. In addition to cost savings of more than \$50,000 annually, the community prevented greenhouse gas emissions equivalent to those of 130 cars.

A further benefit arose from the addition of new reporting. With TIAA-CREF able to clearly see energy use patterns, property management teams have an even greater incentive to find ways to operate more energy-efficient communities. Top-performing properties receive recognition from TIAA-CREF in front of their peers, providing added motivation. Energy and environmental considerations are now on each property manager's mind when making purchases, training staff, and managing daily operations.

Employee and Resident Communications

TIAA-CREF is extending its energy and environmental commitment to residents. In support of the *Change the World, Start with ENERGY STAR* campaign, TIAA-CREF installed approximately 138,000 ENERGY STAR qualified CFLs in residents' apartment homes free of charge, while providing educational materials about energy-efficient lighting options and available ENERGY STAR resources. The resulting energy savings over the CFLs' lives will total 65 million kilowatt-hours, equivalent to taking more than 9,200 cars off the road. Residents will also see the results on their electric bills, with cumulative savings of \$7 million.

TIAA-CREF is also integrating energy efficiency into its leasing efforts. The benefits of ENERGY STAR appliances, programmable thermostats, and compact fluorescent lamps are explained to the leasing staff (many of whom live in the TIAA-CREF communities that they manage); staff members are then equipped to promote these features to prospective residents and describe how they can translate to utility bill savings. TIAA-CREF expects its energy management program to enhance resident attraction, retention, and satisfaction while adding to the bottom line.

Continuous Improvement

The understanding that energy is the largest controllable operating expense in their multifamily communities is extremely important for TIAA-CREF, especially in a real estate market where any achievable increase to net operating income is crucial. Further, the savings will allow TIAA-CREF to invest in more capital-intensive energy efficiency upgrades such as HVAC replacements, parking garage lighting retrofits, and apartment unit upgrades, further reducing costs for TIAA-CREF *and* its residents. The organization will continue to lead the energy efficiency and environmental movement in the multifamily market, appealing to the current generation of renters who expect their apartments to be "green" and energy efficient.

Anderson credits ENERGY STAR tools and resources with facilitating TIAA-CREF's success in its multifamily housing portfolio. "Benchmarking has allowed us to monitor our progress, quantify our successes, and show real results, which is critical to our role as a fiduciary," he said. "We have a commitment to our clients to demonstrate returns on our investments." But the business case is not the *only* reason TIAA-CREF is proud of the initiative. Said Anderson, "Our motto is 'Financial Services for the Greater Good[®].' Through energy management, we are reducing our carbon footprint while providing healthier, more sustainable homes to our residents. It's the right thing to do."