

# Updating a 40-Year-Old Skyscraper for Peak Energy Efficiency Performance with PECO Ways to Save

A swath of energy efficiency upgrades helped building owners achieve modern-day peak performance, with return on investment.

When its construction was completed in 1983, the Jefferson Center office tower in Center City, Philadelphia, was considered top of its class in comfort. In energy efficiency, not so much.

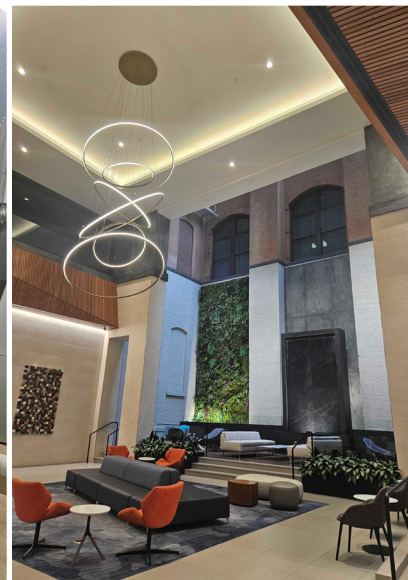
“Energy management didn’t exist then,” says Operations Manager Bob Iodice, an engineer and Certified Energy Manager for Kennedy Wilson Property Services, which oversees the Jefferson Center.

**kWh Savings:**  
172,700 kWh

**PECO Incentive:**  
\$16,090

**Estimated Annual Energy Cost Savings:**  
\$18,995\*

\*Based on a blended rate of \$0.11/kWh



As a priority for the Jefferson Center today, the property management firm has been investing in the energy efficiency of the high-rise, checking off several boxes in the process. Tenants had their own sustainability goals, not to mention a need for modern comforts. Operational savings were also a key focus. Girard Estate Leasehold, the owner of the Jefferson Center, funds Girard College, a school for children from underserved communities with revenue generated by the Jefferson Center—so any additional savings from energy efficiency upgrades can directly benefit the community.

## Finding Ways to Save on Energy Upgrades

By teaming up with PECO Ways to Save, the building's owners significantly improved the building's energy efficiency rating (all the way to an 87 out of 100) through three distinct projects:

1. LED Lighting Upgrades
2. Modernized HVAC Controls
3. Heat Pump Water Heaters

These projects helped the owner save money on energy costs and reduce their carbon footprint. PECO Ways to Save incentives helped the upgrades get approved, and the projects have delivered a positive financial return on investment.

### 1. LED Lighting Upgrades.

Modern LED bulbs use at least 75% less energy—and last 25 times longer—than the Jefferson Center's previous fluorescent lighting.<sup>1</sup> Combined with lighting control systems on almost every floor, LED overhead lights and exit signs significantly reduced energy use. They also lessened maintenance pressures, freeing up staff to work on other building projects. And in conference rooms, LEDs made a real change in comfort. "Older lights would heat the space," Iodice says. "Upgrading those to LEDs changed people's experience of working in the building."

### 2. Modernized HVAC Controls.

The building's previous HVAC system used local thermostats, adjusted individually by tenants. The pneumatic dampers controlling the building's airflow were difficult to automate. Modernized dampers and a unified HVAC control system "allows us to have much more granular control of the HVAC system throughout the entire building," Iodice says. That achieved comfort for tenants and improved energy efficiency.

### 3. Heat Pumps.

The building's domestic hot water systems were old and inefficient. By converting from steam to heat pump water heaters, owners saved enough on gas and electricity to pay for the project in less than 24 months. They've also made tenants happier. "Before, you had to run the tap a while before getting hot water," Iodice says. "The new system delivers hot water almost instantaneously."

## Looking Toward the Future

The resounding success of energy efficiency upgrades has convinced the building's owner—and its top-notch team of facility maintenance experts—to continue their investment. Next, they hope to replace the building's original boilers for even greater savings.

They're also staying ahead of compliance. Proactive energy efficiency improvements have given the building an ENERGY STAR® rating of 87 out of 100; future upgrades could boost that score to a 92. Though it's been around for more than four decades, the building now achieves compliance as a certified High Performance Building with Philadelphia's Building Energy Performance Program. "We're ahead of the curve by years," says Iodice.

## How Anyone Can Achieve Energy Savings

Kennedy Wilson's three-pronged approach shows how smaller, incremental changes to energy efficiency can add up. Finding allies is important, too. "Find others that care about energy efficiency, and share your successes with them," Iodice says. "It's an easy way to find inspiration for your next project."

▶ **When you're ready, remember that PECO Ways to Save wants to partner with you to boost incentives and lower your energy costs.**

Visit [peco.com/business](https://peco.com/business) to discover energy-saving opportunities for your business today.

<sup>1</sup>"LED Lighting." Department of Energy, [energy.gov/energysaver/led-lighting](https://energy.gov/energysaver/led-lighting). Accessed 27 September 2024.