



## HVAC and Lighting Improvements Generate Major Energy Savings

Initially, EMCOR Facilities Services (EFS) was selected to conduct preventive maintenance (PM) and capital services at over 900 retail banking locations across the Citizens portfolio.

As our team began to assess the portfolio's HVAC equipment, we evolved the relationship to include an extensive planned equipment replacement program and additional lighting retrofits, designed to impact the long-term efficiency and sustainability of Citizens' locations.

At over 300 locations, we replaced mechanical equipment and installed new building automation systems (BAS), and at 80 locations, we upgraded lighting to help Citizens realize significant cost savings, while reducing their carbon footprint.

### HVAC IMPROVEMENTS

In 2016, EFS began to identify and track each piece of mechanical equipment across the portfolio through an asset management program. This data informed capital planning for future system replacements, helping prioritize upgrades according to age, condition, and business need.

Together, EFS and Citizens developed a plan to replace outdated equipment with higher efficiency models and install cutting-edge BAS. EFS then worked with its sister EMCOR companies across the nation to self-perform all of the upgrades, which are ongoing.

In addition to promoting energy efficiency, the program helps to minimize the risk of equipment failure and increase system longevity, which in turn reduces necessary maintenance and repair costs.

#### Across the Portfolio, we:

- Compiled a complete asset list for all mechanical equipment
- Detailed capital improvement recommendations and replacement/retrofit plans
- Provided regularly scheduled PMs, and reactive maintenance services
- Guaranteed emergency response time, within two hours

#### Across 312 locations, we:

- Replaced 800 HVAC units accounting for 2,600 tons of equipment capacity

### LIGHTING IMPROVEMENTS

In addition to auditing mechanical equipment, EFS also analyzed lighting and usage at select bank locations. Since 2018, thousands of lighting fixtures have been retrofitted with energy efficient LEDs, and multiple locations now have lighting integrated with their BAS for more advanced scheduling and control.



### HVAC PROJECT



**\$12.5M**  
invested by the customer

**45%**

reduction in HVAC service requests



**\$325k**

in repair and maintenance savings

### LIGHTING PROJECT

Across **80 sites**, we replaced:



**11,000**  
fixtures

**\$2.3M**

invested by the customer

**\$420k**

obtained in utility incentives

### ENERGY SAVINGS (HVAC & LIGHTING)

**\$900,000** annually in ongoing savings

**\$4.1M** cumulative since the program's inception

### CARBON OFFSET

Eliminated the equivalent of an estimated

**20,000**  
metric tons of CO<sub>2</sub>

This amounts to the same as:



Emissions from burning **22,128,184** pounds of coal

OR



Emissions from the yearly electricity use of **3,891** homes

OR



Carbon sequestered by **23,669** acres of forest

source: www.epa.gov/energy/greenhouse-gas-equivalencies-calculator