

## CASE STUDY | CHARLOTTE . NORTH CAROLINA

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With 15 floors and more than 400,000 square feet, staff in the city of Charlotte, North Carolina (pop. 751,087) knew the Charlotte-Mecklenburg Government Center building was a good candidate for the U.S. Environmental Protection Agency's (EPA) ENERGY STAR® certification program.<sup>1</sup>

Charlotte's Engineering Property Management Department began collecting energy data on City facilities and initiated an energy management program in 1997. In 2003, the department started implementing energy management projects at the Government Center building. Over the past ten years, Government Center has enjoyed a nearly 30 percent reduction in energy use.

With the assistance of dedicated maintenance staff, energy savings have been achieved through actions like retro-commissioning, evaluation of heating and air conditioning systems, lighting retrofits, the addition of lighting sensors, and the installation of variable frequency drives on pumps and fans. City of Charlotte employees with offices in the Government Center building are also encouraged to make certain behavioral changes. To communicate successes, a quarterly newsletter is distributed that provides updates on energy savings in the building and engages staff by conveying how their actions can impact energy use.

The Government Center functions as a main government plaza; and becoming ENERGY STAR certified provided an opportunity to lead by example and to "get the word out about what we're

doing energy-wise," said Laurie Sickles, Charlotte's energy and sustainability coordinator.

To become an ENERGY STAR certified building, energy use and other data is entered in EPA's ENERGY STAR measurement and tracking

tool, Portfolio Manager. If the building achieves a score of 75 or better (on a scale of 1-100), it may qualify for the ENERGY STAR.

Buildings in this category are in the top 25 percent for energy efficiency in the nation

compared to similar buildings. From here, the verification process is completed, and an application is submitted.<sup>2</sup>

Charlotte's Government Center received ENERGY STAR certification in 2009, 2010, and most recently in 2012, when the building scored an impressive 93 points. Staff have considered applying for ENERGY STAR certification for other City-operated buildings, as the Government Center is one of several buildings operated by the City of Charlotte, which oversees around 120 facilities encompassing roughly 4 million square feet of facility space.



*ENERGY STAR certified  
Government Center Building in  
Charlotte, NC*

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<sup>1</sup> <http://quickfacts.census.gov/qfd/states/37/3712000.html>

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<sup>2</sup> [http://www.energystar.gov/index.cfm?c=business.bus\\_bldgs](http://www.energystar.gov/index.cfm?c=business.bus_bldgs)

“Staff and city council are both extremely proud of the certification and awards that the Government Center has received over the years; not only from an energy efficiency and environmental point of view, but the cost savings that we’ve been able to realize,” shared Rob Phocas, Charlotte’s energy and sustainability manager.

In addition to using ENERGY STAR certification as a means to encourage further energy savings and to communicate those successes to the public, there was another unanticipated outcome of certification. It allowed the city to participate in the local collaborative partnership Envision Charlotte, which aims to create “the most environmentally sustainable urban core in the nation.” One of the requirements for participating in Envision Charlotte was to have a building entered in the Portfolio Manager database. Through its participation in Envision Charlotte, the city has enjoyed additional notoriety for the energy successes in the Government Center building.

“We’re not the type to brag,” explains David Miller, who is the city’s energy manager, “but if others don’t know what you’re doing, they think you aren’t doing anything to reduce energy.”

ENERGY STAR has provided the means to share the good news and the considerable energy savings that have been achieved in the Government Center building. No bragging required.



Learn more about Charlotte’s mission to promote clean energy and a healthy environment at [www.power2charlotte.com](http://www.power2charlotte.com)

