City of Murfreesboro

Murfreesboro, Tennessee



Savings Information

- Over \$11 million in energy and operational savings over a 15year period
- Overall energy savings of nearly 30 percent

Project Size

Over \$8.5 million

Environmental Benefits

- Enhanced livability and workability for citizens in Murfreesboro
- Standardized building technologies
- Improved efficiencies and operations to maintain and manage buildings



As the fifth largest city in Tennessee, the City of Murfreesboro was seeking ways to improve and modernize infrastructure. Murfreesboro's primary goals were to improve livability and workability for community members, standardize building technologies to simplify operations and reduce maintenance costs, and reduce energy waste. Despite having a strategic plan and a list of projects, it was difficult for the city council to prioritize which projects to pursue first. Energy Systems Group provided the necessary consultative approach to help the City of Murfreesboro develop a plan to prioritize and accomplish actionable projects, successfully moving the city's vision into reality.

Strategies & Solutions

Teaming with ESG, the City of Murfreesboro was able to build a solid plan that prioritized projects that could be implemented quickly and generate more than \$11 million in energy and operational savings over the 15-year period. Working as a team, city facility managers and operators, along with ESG engineers, surveyed buildings and strategized the best approach to meeting the city's goals. Together, they focused on 27 buildings including the St. Clair Senior Center, the City Hall complex, Patterson Community Park Complex, the Fire Administration buildings, and the Sports Complex.

By implementing numerous upgrades, such as LED lighting, HVAC system conversions, chiller and boiler replacements, systems controller installations, window replacements, water conservation measures, faucet aerators, and pool enhancements, the city was able to obtain energy savings of nearly 30 percent. The City of Murfreesboro was also able to upgrade security systems at the senior center and enhance select building interiors. The city's teaming with ESG has been so successful that the city requested a second phase of projects to further enhance and upgrade city infrastructure.

Key Installed Technologies

- LED Lighting
- City-wide Digital Control System
- Pool Systems
- Water Conservation Devices
- HVAC Systems
- Window and Door Replacements
- Boilers





Energy Systems Group (ESG) is a leading energy services provider that specializes in energy efficiency, sustainability, and infrastructure improvement solutions in the government, education, healthcare, commercial, and industrial sectors. ESG offers a full range of sustainable infrastructure solutions including waste-to-energy, distributed generation, and renewable energy.