



Project Highlight

Memphis Light, Gas and Water and the City of Memphis, TN

AMERESCO 

LED Smart Streetlighting Project Advances City's Safety and Sustainability Goals

Technology Type:

LED Streetlighting, Controls & Network | Operations
& Maintenance | Energy Efficiency

Fixtures Upgraded to LED

77,000+

Annual Energy Savings

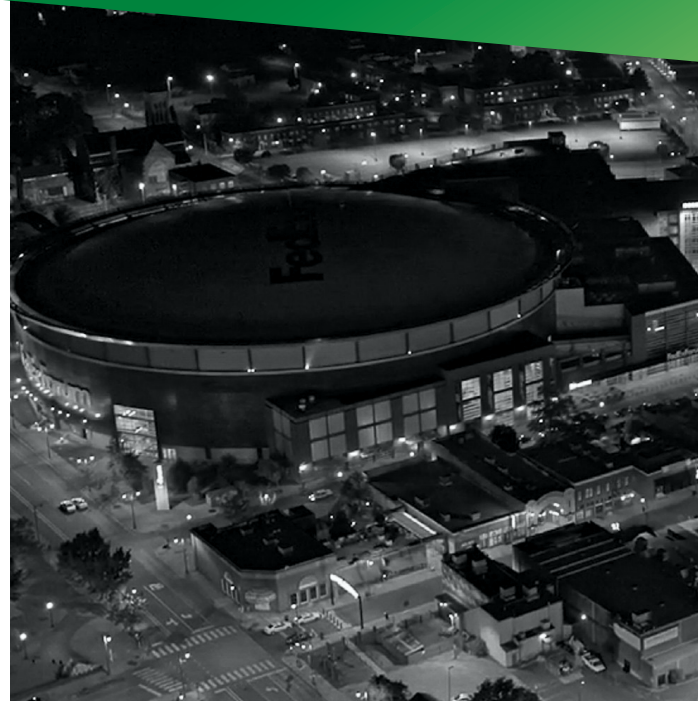
~55%

Annual Greenhouse Gas Reduction

26,000+ Metric Tons

Annual Energy Savings

37,000 MWh



Summary

Ameresco partnered with Memphis Light, Gas and Water (MLGW) and the City of Memphis for a comprehensive, citywide conversion of over 77,000 existing streetlights to new LED fixtures with networked lighting controls. The project is designed to increase system reliability, bolster public safety, drive energy savings, lower greenhouse gas (GHG) emissions, and enhance MLGW's operations and maintenance capabilities. This project, supporting the sustainable growth of the fifth-most populous city in the Southeast, has been honored with the *Smart 20 Award* for Transformative City Infrastructure in 2024.



Solution

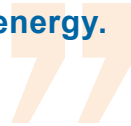
The City of Memphis aims to significantly reduce its carbon emissions, while simultaneously improving both streetscape and nighttime visibility in a cost-effective and energy-efficient manner through the completion of this project. In addition, the \$47M project brought forth significant investment in the Memphis economy through collaboration with local talent who were hired to participate in the construction of the streetlighting upgrades. The project was designed such that updated luminaires will be fully controllable through remote monitoring on a secure network capable of additional smart city applications. The project scope included:

- Conversion of 77,000 streetlights from high pressure sodium luminaires to LED fixtures
- Cellular-based controls for fixture-level remote monitoring and control of the LED lighting system
- Local workforce and business development for light fixture recycling effort



Ameresco's deep expertise has been invaluable throughout our complex LED lighting upgrade and controls integration project. Their team's knowledge was instrumental in every step, from initial evaluation to final implementation. Even though we are still in the final completion phase, the outcome of this LED lighting initiative has already been outstanding, providing better lighting for the residents of Memphis and simultaneously saving energy.

Doug McGowen
*President and CEO,
Memphis Light, Gas and Water*



Benefits

In addition to providing improved illumination, enhanced safety and reduced maintenance needs, the project is expected to result in annual energy consumption, costs, and carbon savings. The project supported significant business and economic growth across the Digital Delta region. By working in conjunction with the community, the project exceeded Memphis's goals for Minority or Women-owned Business (MWBE) participation for job creation and workforce development. The project is designed to deliver:

- Energy cost and consumption savings of 55%, ultimately allowing the upgrades to pay for themselves over the life of the system
- Improved both streetscape and nighttime visibility for enhanced public safety
- Reduced GHG emissions by more than 26,000 metric tons, supporting the Memphis Area Climate Action Plan objective of reducing GHG emissions by 51% below 2016 levels by 2035
- Compatibility with other smart city technology for further integration

Ameresco's team of energy experts can assist you in identifying the solution that fits your needs.

For more information about Ameresco and our full-range of energy efficiency and renewable energy solutions, please call **1-866-AMERESCO** or visit **ameresco.com**.

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