Siemens helps DeSoto County Board of Supervisors reduce energy, utility costs with critical infrastructure improvements

Background
Located just south of Memphis, DeSoto County, Mississippi is a fast-growing area currently home to approximately 160,000 residents and 37 county-operated buildings, including the county administration buildings, courthouse, and jail.

The DeSoto County Board of Supervisors engaged Siemens Industry, Inc., to provide critical infrastructure improvements, helping reduce the energy and utility costs associated with operating the facilities.

Objectives
The DeSoto County Board of Supervisors established the following goals for this project:
- Generate energy and utility cost savings
- Improve energy efficiency and water conservation efforts
- Reduce CO2 emissions
- Achieve green certification

Solution
Through a 15-year Guaranteed Energy Savings contract, Siemens is helping the DeSoto County Board of Supervisors address critical infrastructure improvements. The solutions include:
- Comprehensive lighting upgrades: Siemens will retrofit more than 6,000 T12 lamps and magnetic ballasts with T8 lamps and electronic ballasts. In addition, occupancy sensors and lighting controls will be installed.
- Building water fixture upgrades: High-flow devices will be replaced with low-flow devices at all county facilities.
- HVAC efficiency improvements: Siemens is installing a 600-ton chiller plant, and converting DX equipment to chilled water for the county administration building, courthouse, and jail.
- Energy management system: A building automation system will be installed in 27 county buildings.
- Green certification: Siemens is helping the county achieve Green Globes and Energy Star Certification for the administration building.

Siemens project scope includes turnkey design, engineering, and construction services through a Guaranteed Performance-based Solution.

Results
Siemens estimates the following results for the DeSoto County Board of Supervisors:
- $143,000 in average annual operational savings, resulting from capital cost avoidance of mechanical upgrades
- Energy and utility savings of:
  - Electricity: 2.5 million KWh
  - Natural gas: 34,456 CCF
  - Water: 4,429 kgal
  - CO2 reduction: 3.5 million pounds