

# CASE STUDY

## STATE GOVERNMENT IMPROVES FACILITIES, ENHANCES COMFORT AND SAVES TAX PAYER FUNDS IN THE PROCESS

### THE STATE OF MISSOURI STATE CAPITOL COMPLEX JEFFERSON CITY, MISSOURI



“Energy Systems Group and performance contracting are major parts of our effort to improve the energy efficiency and general operating effectiveness of our State Capitol Complex. Companies like ESG have allowed us the freedom to implement much needed projects without waiting for new capital appropriations.”

**David L. Mosby,**  
*Director, Facilities Management,  
Design and Construction*

## ENERGY AND OPERATIONAL SAVINGS OVER \$4 MILLION

#### ABOUT ENERGY SYSTEMS GROUP

ESG is an award-winning energy services company that provides its customers with innovative energy efficiency, technology, and long-term financing solutions for modernization of their facilities and energy infrastructure.

#### PROJECT BACKGROUND

The State of Missouri wanted to improve the State Capitol Complex to improve the government center serving the community of Missouri's capital city. The leaders also had a vision for this project to reduce energy consumption and trim operation and maintenance costs for the facilities.

#### STRATEGIES & SOLUTIONS

Energy Systems Group (ESG) conducted a comprehensive energy and operations study and developed a solution and implementation that reduced energy consumption, increased operational effectiveness and increased facility life without impacting existing budgets and function. Some of the benefits include:

- Financing Package With No Effect on Budgets or Taxpayers.
- Guaranteed Energy Savings to Fund Program
- Reduced Operational and Energy Costs to Maximize Existing Budgets
- Increased Equipment Control Providing Better Comfort and Indoor Quality

#### Key Installed Technologies included at the State of Missouri Capitol Complex:

##### HVAC Systems

- Provide outside air and relative humidity sensors for use in all programming
- Expand the temperature control system in the Department of Transportation Building
- Replace the main control systems that control steam and chilled water loop pumping and distribution in the Environmental Control Center

##### Lighting

- Install new lighting technology and ceiling improvements that will save energy and improve light quality throughout the State Information Center

##### Boiler and Chiller Replacements

- Air handler upgrades
- Installation of new Variable Frequency Drives

##### Replace main electrical service and sub-panels at the Supreme Court and Broadway Buildings