



BALTIMORE COUNTY

Baltimore, Maryland



\$265K

Verified Annual Savings

13,250 MMBTU

Verified Annual Energy Savings

929 GALLONS

Annual Water Savings

At a glance

CEG Solutions delivered an ESPC for two County facilities to cut utility costs, renew aging systems, and reduce O&M burden, while improving comfort and reliability across both sites.

OVERVIEW

The County sought a cost-effective path to reduce energy and water use while addressing critical maintenance at two high-use facilities. Challenges included aging steam infrastructure at Glen Arm, inconsistent controls, and comfort issues in shop and office areas. The project also adopted an unconventional financing approach—funding upgrades directly from the County’s budget to be repaid through savings over 14 years.

Project Highlights

- Reduce annual electricity usage by 2.2MM kWh
- Reduce annual natural gas usage by 5,825 MMBtu
- Reduce annual water usage by 929 kGal
- Reduce average EUI of the site by 58%
- Reduce emissions by >900,000 kg CO2e in Year 1



STRATEGIES

Energy & Operational Efficiency, Financial Structuring, Performance Contracting, Resiliency



Energy Conservation Measures

- Steam system decommissioning (replacement with natural gas condensing boilers and infrared heaters)
- Right-sized air compressor
- Building control strategies
- Lighting upgrades
- Domestic water fixture upgrades

SOLUTIONS



CEG decommissioned Glen Arm's central steam plant and installed high-efficiency condensing boilers and infrared (IR) heaters to reduce stratification and improve comfort. A new central BAS integrates heating & cooling for standardized schedules and setbacks. Additional ECMs include LED lighting upgrades, domestic water fixture upgrades, and a right-sized air compressor—together lowering electricity, gas, and water consumption while simplifying operations.

RESULTS



The project delivers \$265K in verified annual cost savings and 13,250 MMBtu in energy savings, including 2.2M kWh electricity, 5,825 MMBtu natural gas, and 929 kGal water saved each year. Average site EUI dropped 58%, with >900,000 kg CO₂e avoided in Year 1 and 13.2MM kg CO₂e avoided projected over the contract term.

