Energetic, LLC Energy Conservation Service Case Study

Washington College CHESTERTOWN, MARYLAND

Project description

Energetic's partner FESCO Energy designed, built and integrated campus wide energy and water improvement across 43 buildings including: lab buildings, academic, classrooms, dormitories, gymnasiums, dining, administrative and a central utility plant ("CUP"). The Washington College is located on 112 acres campus in Chestertown, MD. The campus was originally founded in 1782 and includes many historic buildings, which require adherence to historic build requirements. Most buildings are occupied at all times necessitating a high level of coordination throughout the design and construction process. This project leverages energy savings from infrastructure modernization projects to finance the capital costs for the energy conservation measures (ECM). The Energy-As-A-Service agreement includes fifteen years of operations and maintenance of applicable equipment and systems tied to the campus wide energy infrastructure improvements.

- Building Automation Controls
- Retro-Commissioning and Controls Upgrades
- Lighting Improvements
- Domestic Water Upgrades
- Agricultural Water Upgrades
- Steam Decentralization

- Building Thermal Envelope Upgrades
- Steam System Insulation
- HVAC Systems Modernization
- Boiler and Plant Upgrades
- Wholesale VRVVRF Upgrades in Dormitories
- New Hot Water Systems



The project was delivered on-time, with no issues, shutdowns or lost work time. The most challenge aspect of this project was to completely remove, design and construct new VRVVRF HVAC systems, fresh air intakes, new hot water systems and controls across two dormitories housing over 115 people in less than 9 weeks. AWARD DATE 2022

AWARD AMOUNT

\$25 million (financed)

DATE OF SUBSTANTIAL COMPLETION 2022

OWNER Private college

PROJECT TYPE

Energy-as-a-Service Agreement

ENERGY SAVINGS

4.1 million kWh annually248,000 steam therms8 million water gallons

GHG REDUCTIONS

4.1 thousand metric tons of CO2 (55%)

ANNUAL COST REDUCTIONS

\$1,204,869

SIMPLE PAYBACK 13.7 years

REBATES SECURED \$1.2 million

