



COLUMBIA HEIGHTS VILLAGE APARTMENTS

Washington, D.C.



\$228K

Verified Annual Savings

1,017 MMBTU

Annual Energy Savings

24 MM GAL

Annual Water Savings

At a glance

CEG Solutions delivered a comprehensive utility savings program for Columbia Heights Village Apartments, combining energy and water efficiency upgrades with rooftop solar PV, community engagement, and facility enhancements.

Project Highlights

- 406-unit, 31-building affordable housing community
- \$228K verified annual savings
- 1,017 MMBtu energy savings annually
- 24M gallons of water saved annually
- 25 MWh rooftop solar installed
- Community engagement: open houses, Energy Awareness Day
- Green roof, rooftop playground, and elevator installation

OVERVIEW

Columbia Heights Village faced rising utility costs and aging infrastructure across its 31-building campus. CEG developed a cost-effective solution that delivered immediate utility savings while also engaging residents in sustainability initiatives. Beyond traditional retrofits, the project introduced new community features to enhance quality of life, including a green roof, rooftop playground, and high-efficiency elevator with rooftop access.



STRATEGIES

Electrification & Carbon Reduction, Energy & Operational Efficiency, Energy Audits, Financial Structuring



Awards

- Received 2011
Communitas Award

Energy Conservation Measures

- Lighting retrofits
- Low-flow water fixtures
- Rooftop solar PV
- Utility rate/tariff change
- Community education

SOLUTIONS



The program included:

- Lighting retrofits in common and exterior areas.
- Low-flow water fixture upgrades in each residential unit (toilets, showerheads, aerators).
- 25 MWh rooftop solar PV system with resident tours and educational sessions.
- Utility rate analysis/tariff change to further reduce costs.
- Community engagement initiatives, including open houses and “Energy Awareness Day.”
- Facility enhancements: green roof, rooftop playground, and new high-speed elevator

RESULTS



The project saves \$228K annually, reducing consumption by 1,017 MMBtu, ~100,000 kWh electricity, and 24M gallons of water each year. In the first year alone, water usage was cut by 60% compared to the prior year. Rooftop solar provides clean power and offsets community demand, while resident engagement built awareness of conservation practices.

