



CITY OF CENTENNIAL

Centennial, Colorado



\$56K

Verified Annual Savings

2,934 MMBTU

Annual Energy Savings

214 KW

Solar PV System w/ PPA

At a glance

CEG Solutions partnered with the City of Centennial to deliver a hybrid ESPC and PPA that combined efficiency upgrades with renewable energy investments.

Project Highlights

- \$52K–56K verified annual cost savings
- 2,934 MMBtu annual energy savings
- 708,381 kWh electricity & 517 MMBtu natural gas saved annually
- 64% site-wide EUI reduction
- 155 metric tons CO₂e avoided annually
- 214 kW rooftop & canopy solar PV system (329 MWh annual production)
- \$600K+ lifetime solar savings through PPA

OVERVIEW



The project covered two key sites: the Civic Center (33,000 SF office facility with auxiliary fiber optic and storage structures) and the Public Works Building (14,660 SF warehouse, offices, community room, and Animal Services). The adjacent Eagle Street Garage, supporting Transportation Operations and snow/ice removal, was also included. These facilities required infrastructure renewal that balanced energy efficiency, renewable integration, and long-term reliability.



STRATEGIES



Electrification & Carbon Reduction, Energy & Operational Efficiency, Financial Structuring, Performance Contracting, Resiliency



Energy Conservation Measures

- 214 kW rooftop & canopy solar PV
- EMS upgrades
- RTU replacements
- Makeup air unit VFD
- Interior & exterior LED lighting
- Window film

SOLUTIONS



CEG implemented eight ECMs across Centennial's facilities. A 214 kW rooftop & canopy solar PV system was financed through a PPA, producing 329 MWh annually and generating \$600K+ in lifetime savings. Efficiency upgrades included EMS improvements, RTU replacements, a makeup air unit VFD, and installation of interior/exterior LED lighting. Window film reduced heat gain, while contracts covered long-term solar monitoring, maintenance, and inverter replacement to ensure reliable performance. Savings from faster-payback ECMs enabled inclusion of capital-intensive measures such as RTUs and solar.

RESULTS



The project achieves \$52K–56K in verified annual savings, reducing energy use by 2,934 MMBtu each year. Centennial cut electricity use by 708,381 kWh, natural gas by 517 MMBtu, and reduced site EUI by 64%. Annual CO₂ emissions decreased by 155 metric tons. The success of this project not only modernized key facilities but also laid the foundation for future efficiency and renewable initiatives across the city.

