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These American-made technologies were chosen in response to GSA’s most recent [Request for Information](#), which sought recommendations of

technologies that could improve the operating efficiency of commercial buildings while promoting healthy workplaces; enable whole-building electrification; facilitate greenhouse gas reductions; provide on-site energy generation and storage systems; or deliver electric vehicle fleet and load management solutions. Funding through the Inflation Reduction Act (IRA) has enabled GSA to expand this program to support GSA's ambitious goals to achieve a 65% reduction in GHG by 2030 and net-zero operational emissions by 2045.

"This significant expansion of the Green Proving Ground program is a prime example of how President Biden's Investing in America agenda is driving the next generation of clean energy jobs and innovation," said **Administrator Carnahan**. "Across the country, we're turning federal buildings into testbeds for clean energy innovation - which will mean more good jobs, savings for taxpayers, and a healthier planet for our kids."

The focus of this year's GPG program is on American-made technologies in seven areas:

- **Electric Vehicle Supply Equipment (EVSE)** technologies are critical in supporting the transition to an all-electric fleet by 2035. Four EVSE technologies will be evaluated: turnkey electric vehicle charging infrastructure from Loop Global, optimized charging through charge management software from bp pulse, a battery-buffered DC fast charger from ADS-TEC Energy, and vehicle grid integration (VGI) charging from General Motors LLC.
- **Germicidal Ultraviolet** technologies use next-generation LEDs and Far-UVC light to disinfect air without increasing ventilation. The GPG program will evaluate technologies that support healthier buildings while reducing energy use from Far UV Technologies, R-Zero, and PURO (subsidiary of Applied UV Inc.) with the Academy Energy Group.
- **Greenhouse Gas Accounting** technologies are essential to achieving 24/7 carbon-free electricity and net zero operational emissions. Cambio AI and nZero will aim to go beyond annual greenhouse gas reporting to operationally focused carbon management, including near-real-time 24/7 carbon-free electricity insights and impacts.
- **Grid-Interactive Efficient Buildings (GEBs)** deliver cost savings by leveraging technologies and strategies that provide continuous demand management and load flexibility. The energy management platform from COI Energy aims to optimize energy use through machine learning.

- **High-Performance** technologies help reduce operational and embodied carbon emissions. The GPG program will evaluate automated aerosol-based duct sealing from AeroSeal, LLC, an Internet-of-things (IoT) lighting system from Signify North America Corporation, and bio-engineered, low-embodied-carbon concrete from Biomason. DOE will seek commercial partners to validate Toggled, a plug load control solution, and a thermostatic radiator cover and hybrid electrification solution from Kelvin.
- **Onsite Renewables** are essential to meeting the Administration's net-zero operational emission goals. The GPG program will evaluate an integrated storage technology from Yotta Energy that is the size of a large laptop and installed in place of a ballast beneath a rooftop photovoltaic system. The program will also pilot a wind turbine from Accelerate Wind that can be installed at the edge of the building roof and complement rooftop solar.
- **Window Retrofit** technologies help improve the performance of the building's exterior envelope. The GPG program will evaluate three technologies: vacuum-insulated glazing from Pilkington, R14 interior window retrofit system from Vitro Architectural Glass, and a secondary window framing system from INDOW.

As the federal government's landlord, GSA manages a nationwide real estate portfolio of nearly 370 million rentable square feet and oversees approximately \$75 billion in annual contracts that serve millions of people across dozens of federal agencies. GSA's Green Proving Ground program leverages this extensive real estate portfolio to evaluate innovative building technologies in real-world settings, which helps GSA and DOE validate the technical characteristics and potential of these technologies for wide-scale adoption. GSA then uses these results to make sound investment decisions in next generation building technologies.

DOE's Building Technologies Office, particularly through its Commercial Buildings Integration (CBI) program, shares lessons learned from these tests with its extensive network of stakeholders across the buildings industry that could install them in buildings they own or operate. Research partnerships like this help CBI hear industry perspectives; connect, develop and disseminate technical expertise; access laboratory and testing infrastructure; and recognize, validate and collaborate with market leaders who can deploy technologies at scale. Through DOE's Better Buildings Initiative, for example, CBI can reach almost 1,000 organizations across the country that include 12 of the top 25 U.S. employers and 13% of the country's commercial building space

to deploy successful technologies like those tested in GSA's Green Proving Ground, the national labs, and other demonstration sites.

DOE and GSA have partnered through the Green Proving Ground program since 2015. To date, 23 GPG-evaluated technologies have been deployed in more than 700 facilities across GSA's real-estate portfolio.

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