



Managed Charging

Technology Overview

This electric vehicle (EV) charge management software integrates with vehicle telematics and prioritizes fleet charging based on vehicle driving requirements and available power based on building load profiles. For example, if you have 20 vehicles and only power for 10, the software delivers charge to the vehicles that need to be used first. The managed charging technology provides real-time monitoring and control of building load profiles and tracks charger availability with 99.9% network uptime. The product roadmap includes integration with utility signals and carbon emission tracking.

Why is GSA Interested?

The federal government is committed to shifting to a fleet of zero-emission vehicles by 2035.¹ However, EV charging infrastructure at federal facilities is generally limited, and achieving widespread electrification of the fleet will require a substantial investment. According to the U.S. Government Accountability Office, the federal government may require more than 100,000 charging ports—one charging port for every two electric vehicles acquired.²

Managed charging can help meet this need by delivering twice the charger capacity compared to non-managed charging. This approach prioritizes charging based on the vehicle's needs and the available power. The system necessitates only minimal upgrades to existing infrastructure and is easily integrated with distributed energy resources.

Deployment Potential

The managed charging technology is applicable across the GSA portfolio. It supports all zero-emission vehicles (ZEVs) and chargers with open charge point protocols and combined charging system standards.

¹ U.S. Government Accountability Office, Federal Vehicle Fleets: Observations on the Transition to Electric Vehicles (GAO-23-105635), <https://www.gao.gov/products/gao-23-105635>, accessed 08-2023.

² DOE/FEMP, Electric Vehicles for Federal Fleets, <https://www.energy.gov/femp/electric-vehicles-federal-fleets>, accessed 08-2023.

Green Proving Ground (GPG), in collaboration with the U.S. Department of Energy, is evaluating the real-world performance of managed charging in federally owned buildings within GSA's inventory. The technology will be provided by BP Pulse and coordinated with other ongoing evaluations of this technology.