PRELIMINARY TECHNOLOGY ASSESSMENT - NOVEMBER 2023

Portfolio Carbon Accounting



Technology Overview

In December of 2021, President Biden signed Executive Order 14057, Catalyzing Clean Energy Industries & Jobs Through Federal Sustainability. One of the targets outlined in EO 14057 is achieving net-zero carbon operations across the federal building portfolio by 2045.

Portfolio carbon accounting can support this goal by providing accurate and real-time data on carbon emissions. The system automatically ingests, aggregates, and normalizes near-real-time scope 1, 2, and 3 emissions data to create complex building models from advanced metering infrastructure (AMI) streams. No submetering or Internet-of-Things (IoT) feeds are required.

Why is GSA Interested?

The Portfolio Carbon Accounting platform can help GSA go from carbon tracking to carbon management and provide insights to inform carbon reduction strategies with the best return on investment. The vendor estimates that hourly scope 2 emissions are 35% more accurate than average grid emissions.

The platform has a non-invasive installation and requires zero maintenance on ongoing data feeds.

Deployment Potential

Portfolio carbon accounting is applicable throughout GSA.

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

¹The White House. Executive Order on Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability, https://www.whitehouse.gov/briefing-room/presidential-actions/2021/12/08/executive-order-on-catalyzing-clean-energy-industries-and-jobs-through-federal-sustainability/, accessed 11-2023.