

Argonne National Laboratory Sustainability and Resiliency Consulting



AECOM is providing Argonne National Laboratory with sustainability and resiliency consulting services that include multiple strategic and tactical assignments since the summer of 2020.

Client

Argonne National Laboratory

Location

Illinois, USA

Years

2020-present

Project Overview

With the advent of a new presidential administration with stated aggressive climate and energy related objectives, the project team proactively developed four key follow-on assignments, including:

1. High-Performance Sustainable Building Workbook
2. Green Design Outline Specifications
3. Decarbonization Planning
4. Resilience Planning

Client Benefits

Argonne is expecting a significant increase in electricity and process cooling water use due to the expansion for exascale computing. A significant benefit and challenge for the Argonne/AECOM project team is to comprehensively examine strategies that can help achieve decarbonization and sustainability objectives while achieving the labs mission requirements.

Argonne's proactive engagement has helped the Lab pre-position for the Biden Administration's energy and climate-related Executive Orders and budgetary directives that are driving aggressive planned actions at Argonne to significantly reduce Scope 1 and 2 GHG usage, increase carbon and pollution-free electricity use, improve energy efficiency and reduce carbon intensity of its buildings and transportation infrastructure. Lab leadership was able to brief the DOE Secretary of Energy within the first few months of the new Administration and show a proactive and engaged effort, building confidence in Argonne's ability to support the adoption of priorities and establish a strong basis for FY22 and beyond.

Work Performed

Originally conceived and won as an energy management services assignment by the Energy Business Line, the pandemic and changing Lab priorities led the Argonne and AECOM team to conceptualize a set of high priority assignments designed to align and embed sustainability objectives more effectively into ongoing infrastructure investments. A "Smart Labs Roadmap" was first developed to review all sustainability and infrastructure efforts and craft a plan to implement strategic infrastructure investments on 5,112,507 gross square feet and over 150 buildings.



photo by John Hill for Argonne National Laboratory