

Renovated, Historic Bath House Pursues Zero Energy Ready



City of Pittsburgh Drives Forward On New Zero Energy Ready Legislation

Oliver Bath House, Pittsburgh, PA

At the end of 2019, the City of Pittsburgh passed a law that all new or renovated City government buildings were required to reach zero energy ready. The City's Oliver Bath House was the first, historic city building to pursue this goal and AUROS Group was retained as the Zero Energy Ready consultant.



Credit: Buchart Horn Architects

Owner's Project Goals

The City of Pittsburgh embraced the use of an Owner's Project Requirements tool to align the project team to expected building performance metrics:

Metrics

- Since the Oliver Bath House is a high load building, the city set an energy consumption goal of reducing energy consumption by 35% from the baseline.
- The established baseline was an EUI of 420 kBtu/SF/year.

Sustainability Programs

- Passive House strategies for low energy
- Zero-Energy-Ready

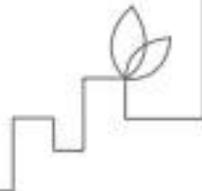
Project Highlights

Because the bath house was of such historical value to the City of Pittsburgh, many of the traditional approaches to passive building were inaccessible to the project team, i.e., the replacement of windows.

Nonetheless, the project team was able to utilize creative approaches to reducing energy consumption. The following energy efficiency measures (EEM's) yielded the best results:

- Pool cover
- R-30 roof insulation
- Sensible heat recovery
- Economizers
- Hot gas re-heat
- Pool pre-heat

Using that approach, the Oliver Bath House was able to reach a proposed EUI of 202 kBtu/SF/yr, representing a 50+% improvement over baseline.



Historic Renovation

Maintenance Facility
11,400 square feet
\$2.4 million

Project Team

AUROS Group
Buchart Horn
CJL Engineering

Project Reference

Claire Mastroberardino
City of Pittsburgh
Senior Project Manager, Department of Public Works
Claire.mastroberardino@pittsburghpa.gov



243 East Main Street
Carnegie, PA 15106
beth.eckenrode@aurosgroup.com

www.aurosgroup.com