

BENCHMARK 8760

An initiative to explore how **hourly data** can improve building benchmarking to be more precise, fair, and actionable in support of an affordable, low-carbon future.

With current energy consumption patterns, the cost of decarbonizing cities and communities is on a collision course with city, state, and federal economic development, social equity, and energy affordability goals. To make the clean energy transition **more affordable**, buildings must be come significantly more **energy-efficient, occupant-responsive, and grid-interactive**.

The **problem** is that current building performance assessment methods do not recognize these high-performance features because

they do not consider *when* a building uses energy, the GHG-intensity of available power, or the corresponding building occupancy.

As a result, building owners, developers and government officials cannot recognize or incentivize investment in load shifting, demand management and occupant-responsive building operations.

The **solution** is to use **hourly measured building data** in building performance assessment methods such as benchmarking and building performance standards.

Why Building Performance Assessment Methods Must Evolve

The EPA's **benchmarking platform**, Energy Star Portfolio Manager (ESPM), and NYC's **performance-based standard**, Local Law 97, would both evaluate the two buildings below as equivalent performance. In reality, Building A is underutilized, while Building B is energy efficient, occupant- responsive, and grid-interactive.



Benchmark 8760

The **Benchmark 8760** initiative aims to seed the evolution of building benchmarking platforms to use **hourly data**.

To explore the cost and scalability of collecting hourly building data, a coalition of **real estate owners, nonprofit thought leaders, government stakeholders, and academics have come together in Benchmark 8760.**

The initiative's first project is to build a proof-of-concept cloud-based benchmarking platform capable of ingesting hourly energy, occupancy, grid intensity and weather data from 10 New York City buildings.

With this project, we are learning how to overcome industry-identified barriers to collecting hourly building data and developing publicly available resources for the benefit of the industry.

Step 1: Convene Contributors



Benchmark8760.org.

To view the Benchmark 8760 platform,

data benchmarking, and explore lessons

learn more about the value of hourly

learned to date, visit our website at



Step 2: Build Proof-of-Concept Hourly Data Platform

Project Manager

IBB

Participating

Commercial Real

Estate Owners

Brookfield

Hines

Rudín

SL GREEN

TISHMAN SPEYER

**

TWO TREES

VORNADO

Step 3: Develop Industry Resources **Step 4:** Share Learnings

Project Sponsor

NEW YORK NYSERDA

Academic

Contributors

Stanford School

of Engineering

CORNELL TECHNION-CORNELL INSTITUTE



Project Highlights

• \$1M NYSERDA investment to build the Proof-of-Concept Platform and develop industry resources

Software Developer

Advisory Team

LABS Part of Google

SIDEWALK

soft**serve**

Data Contributors

Wall Time*

conEdison

OpenWeather

- 7 Real Estate companies representing over 130M sq.ft. of NYC commercial real estate
- 10 participating buildings sharing whole building or individual tenant floor hourly data with the Platform
- Public resources for the project will include:
 - Technical specifications for the Benchmark 8760 platform
 - Guidance on how to deploy and collect people counting technology at scale
 - Recommendations for hourly data standards
 - Information on data privacy and security