Green Building Alliance: Efficiencies, Cities, Circular Economy

September 27, 2019
Every building and every community is sustainable so every person can thrive.
Pittsburgh
2030 District
The 2030 Challenge

**EXISTING BUILDINGS**

- Baseline: 0%
- 2020: 20%
- 2025: 35%
- 2030: 50%

**NEW BUILDINGS & RENOVATIONS**

- Baseline: 0%
- 2020: 80%
- 2025: 90%
- 2030: Carbon Neutral

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**Energy Use**

**Water Use**

**CO₂ from Transportation**
2030 District Network

- **ESTABLISHED DISTRICTS**
  - Albuquerque, Ann Arbor, Austin, Burlington, Cincinnati, Cleveland, Dallas, Denver, Detroit, Grand Rapids, Ithaca, Los Angeles, Philadelphia, Pittsburgh, Portland (ME), San Antonio, San Diego, San Francisco, Seattle, Stamford, Toronto, and Tuscon

- **EMERGING DISTRICTS**
  - Erie and New York City
Energy Avoided by Year

- **2013**: 530 million KBTU (20.4%)
- **2014**: 1,243 million KBTU (14.2%)
- **2015**: 1,622 million KBTU (21%)
- **2016**: 1,853 million KBTU (19.2%)
- **2017**: 2,027 million KBTU (20.5%)
- **2018**: 2,413 million KBTU (23.6%)
2018 Energy Sources

- 45.2% Electric
- 30.2% District Steam
- 18.9% Natural Gas
- 5.4% District Chilled Water
- 0.3% District Hot Water
2018
ENERGY SOURCES

10% Renewable Energy
2018 PERFORMANCE

23.5% ENERGY REDUCTION
18.6% WATER REDUCTION
26% CO₂ REDUCTION
Building Performance Report


The chart below summarizes all PGH 2016 District committed Office properties, 2017 energy performance against baseline.

Water Use

Water Use by Calendar Month.

Water Use

Yearly water use comparison.

This Property Mode Breakdown

Make My Trip Count (MMTC) commuter survey results.

Survey Respondents: 1464

Downtown Baseline Mode Breakdown

Modeled commuter trips into Downtown Pittsburgh
Greater Pittsburgh’s International Center of Excellence for High Performance Buildings
Greater Pittsburgh’s Center of Excellence
headedquarter in Pittsburgh, led by GBA with strong public and private partners

Mission: advance rapid transition to high performance buildings, locally & around the world, while fostering a thriving building industry that creates healthy, comfortable, and sustainable buildings everywhere and for everyone

Goals:
- Rapid development of next generation of buildings consistent with UNECE High Performance Building Initiative
- Align with UN Sustainable Development Goals (2030 Agenda) & Paris Climate Agreement
- Provide education, training, and other critical resources
- Create demonstration projects throughout region
- Share resources globally through collaboration

Key Partners: Government (City, County, State), Businesses, Universities, Foundations, Trades, AEC Community
Thank You

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