

2030 DISTRICTS OF WESTERN PA

2025 Annual Progress Report

PUBLISHED MAY 2026



Green
Building
Alliance

HIGH PERFORMANCE AS A FOUNDATION FOR REGIONAL VITALITY

Since its formation, the 2030 District has been more than a collection of buildings. It has been a community defined by performance, accountability, and shared purpose. What started in Pittsburgh in 2012 and expanded to Erie in 2019 has grown into a regional movement grounded in the belief that high performing buildings are essential to strong, resilient communities.

Looking back, some might see the resurgence of investment and civic energy across Western Pennsylvania as inevitable. But the data and our lived experience tell a different story. High performance buildings are not just a byproduct of thriving communities; they are a driving force behind them. They reduce costs, attract investment, improve occupant health, and create environments where people and businesses can succeed. Sustainability is not separate from economic vitality. It is foundational to it.^{1,2}

The 2030 District has played a critical role as both a technical framework and a social infrastructure. It has provided the tools, benchmarks, and shared accountability needed to transform ambition into measurable progress. Just as importantly, it has created a network that connects property owners, developers, designers, and public leaders around a shared vision.

Together, we have demonstrated that high performance is not reserved for flagship projects, but is achievable across building types and communities, from iconic downtown developments to repurposed schools, from major event venues to long-dormant industrial sites finding new life.

Each improvement in energy, water, and emissions performance represents more than a metric. It reflects investment in our neighborhoods, reinvestment in our building stock, and confidence in our region's future.

Today, that future is coming into sharper focus. Erie stands on the threshold of transformative opportunity through Community Revitalization Improvement Zone (CRIZ) investment.³ Pittsburgh continues to demonstrate its global relevance, welcoming hundreds of thousands of visitors for major events,⁴ advancing critical infrastructure,⁵ and securing new resources for long-term planning and development. Across the region, momentum is building.

At the same time, the challenges we face are real and urgent. Rising energy demand, increasing utility costs, and global instability are reshaping how we think about resources, resilience, and local capacity. These pressures underscore the importance of designing and operating buildings that are efficient, adaptable, healthy, and future-ready.

In this context, high performance is no longer optional – it is essential.

This report marks a new chapter, bringing the Erie and Pittsburgh 2030 Districts – and their neighbors in between – into a unified Western Pennsylvania narrative. It reflects deeper alignment and exchange of ideas across communities. The projects and progress highlighted here show that when we prioritize performance, user experience, and strong connections to place, we create environments that are sustainable, competitive, and enduring.

We congratulate our 2030 District Property Partners on their achievements in 2025 and look forward to continued collaboration toward a future where every building is sustainable so that people, communities, and economies thrive.

GBA'S IMPACT IN 2025

1,058

HOURS OF
PROJECT COACHING
PROVIDED

1,411

BUILDINGS ENROLLED
IN GBA'S
PROGRAMMING

1,560

YOUTH & ADULT
EDUCATION
PARTICIPANTS

\$53.3M

UTILITY DOLLARS
SAVED IN
PITTSBURGH & ERIE

14

SCHOOL
DISTRICTS
SERVED

**BUILDING
IMPACT
ACROSS PA**

BUILDING IMPACT ACROSS PA

Leaders in the Erie and Pittsburgh 2030 Districts and the reverberating positive impacts of their building improvements have inspired communities across Pennsylvania. Property Partners have demonstrated that energy resiliency, airtight building envelopes, smart adaptive reuse, and countless other practices do more than simply bring sustainability targets within reach. They offer proof-of-concept that communities thrive when they prioritize high performance, walkability and public transit access, and clean energy. GBA is proud to have expanded our partnership with other cities, such as Meadville, New Kensington, and Reading in developing public-private partnerships for long-term place-based investment. We have been pleased to go further in our Green and Healthy Schools Academy and green building career upskilling initiatives to improve our learning environments and support local workforces. The 2030 District model of data-based performance tracking is one tool in a varied kit of partnership-driven progress, and we are excited to continue building on our shared successes in amplifying opportunity across PA.

Photos, clockwise from top: Tom Ridge Environmental Center, David L. Lawrence Convention Center rooftop, Pitt Bioforge hard hat tour, The Frick Greenhouse, Erie Bicentennial Tower

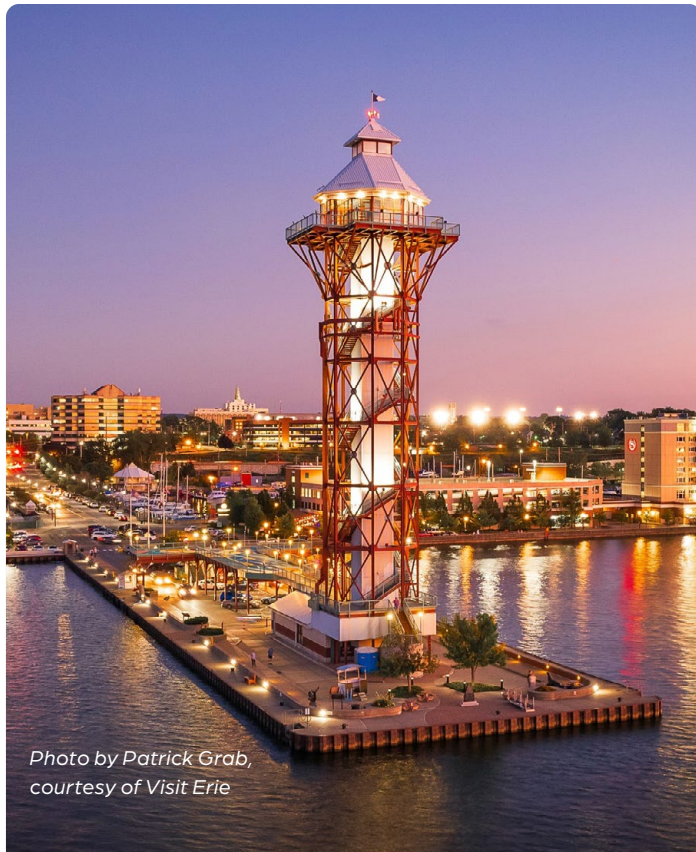
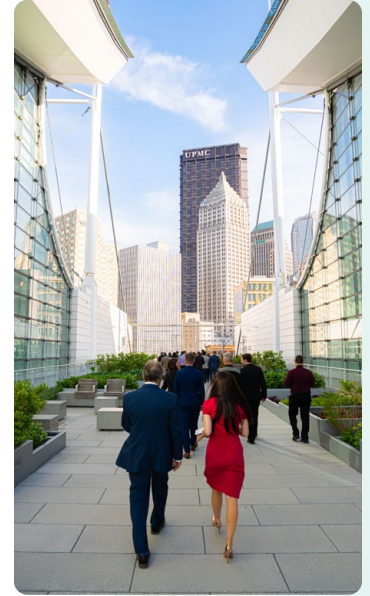


Photo by Patrick Grab, courtesy of Visit Erie

THE 2030 DISTRICT MODEL

A Network Built on Collaboration

The 2030 District program bridges the gap between public and private institutions through collaboration toward a shared building improvement goal. Property Partners work collectively toward the target of a 50–65% reduction in operational carbon emissions by the year 2030, through reduced energy use and clean energy adoption. They exchange ideas, learn together, and engage in friendly competition on their journey towards high-performing, energy efficient buildings.

The Pittsburgh and Erie 2030 Districts are members of the 2030 Districts Network, an international group of more than 20 established Districts. GBA established the Pittsburgh program as one of three founding members of the Network in 2012 and followed with the Erie District in 2019. While the various Districts operate independently, they share a common framework and goals.

Building for 2030 and Beyond

According to the United Nations, building construction and operations accounted for 32% of global energy demand in 2024.⁷ The 2030 District Challenge offers a helpful framework for measurable building improvement through benchmarking, education, and financial tool-sharing. Placing a unique emphasis on existing buildings, 2030 Districts offer a pragmatic path to modernizing outdated properties — a critical sustainability practice that is often neglected due to lack of policy requirements for existing properties — thereby unlocking environmental, health, and economic benefits across communities.

From waste to stormwater to the heat island effect, there are many other environmental impacts exacerbated by short-sighted building practices, and we stand ready to support Partners to build smart for thriving communities.

2030 CHALLENGE GOALS

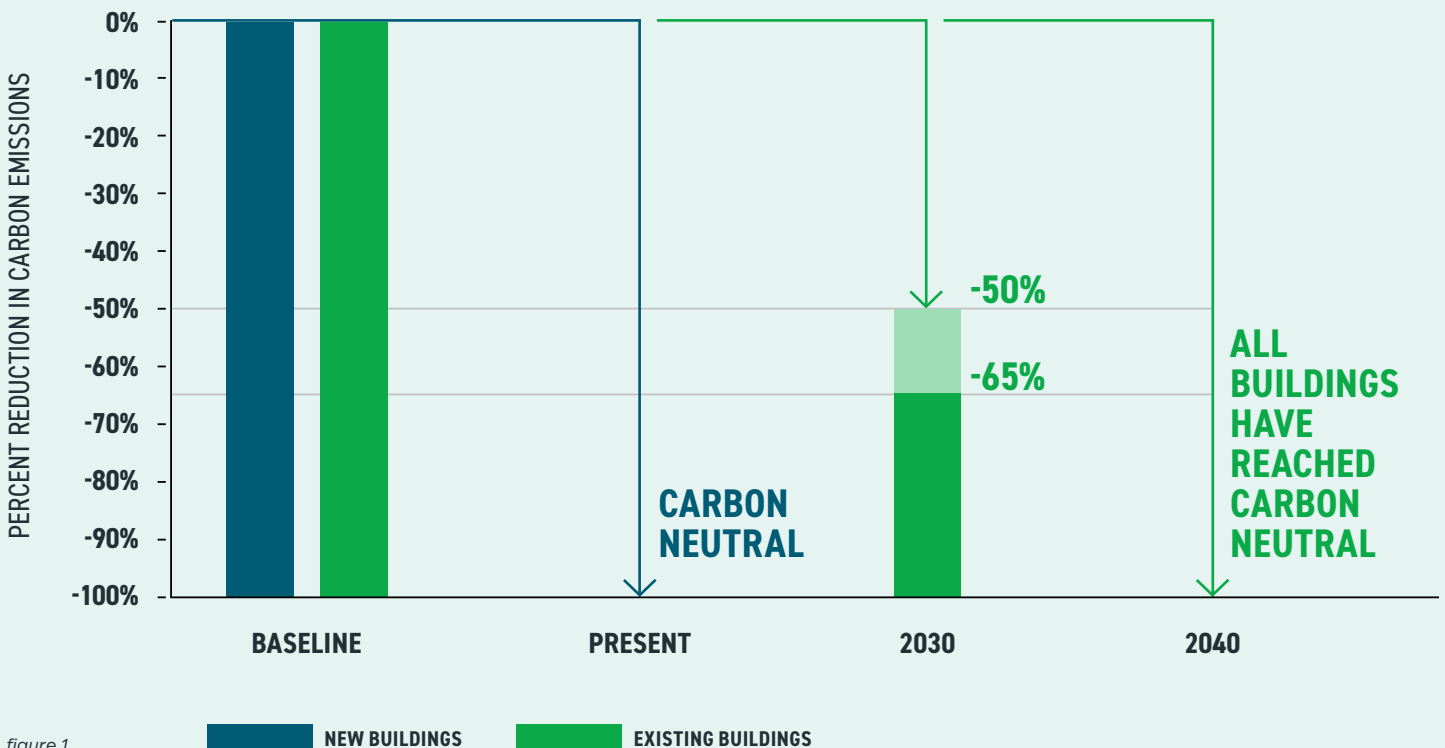


figure 1

■ NEW BUILDINGS ■ EXISTING BUILDINGS

2025 PITTSBURGH DATA



27.3%

**ENERGY
REDUCTION**

33.8%

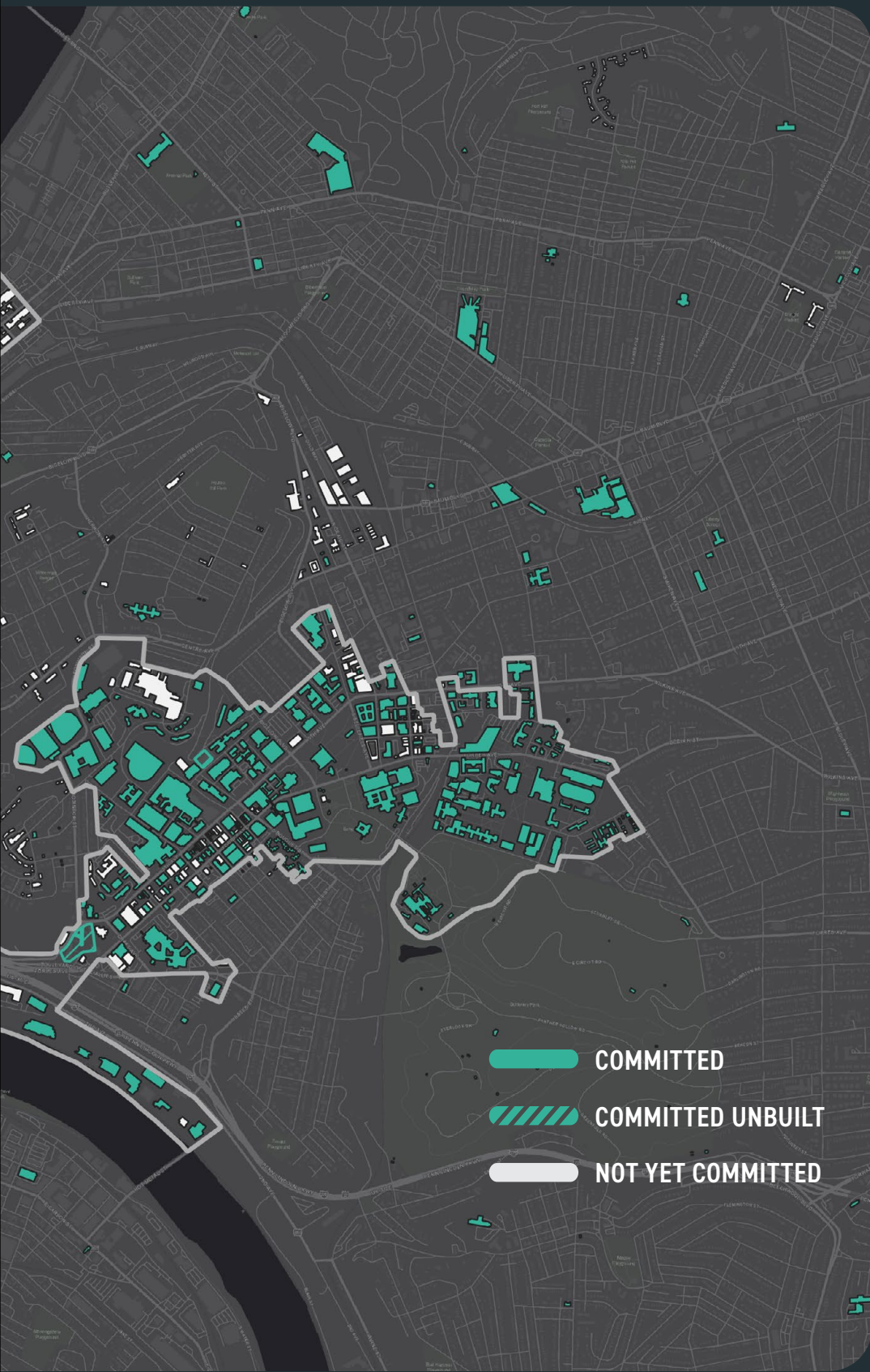
**WATER
REDUCTION**

334,000

**METRIC TONS OF CO₂e
EMISSIONS AVOIDED**

\$50M

**ANNUAL UTILITY
COST SAVINGS**



540+


**BUILDINGS
COMMITTED WITHIN
BOUNDARY**

86M+

**SQUARE FEET
COMMITTED WITHIN
BOUNDARY**

56.1%

**CARBON REDUCTION
(INCLUDING REC'S)**

-  **COMMITTED**
-  **COMMITTED UNBUILT**
-  **NOT YET COMMITTED**

\$579M

**CUMULATIVE UTILITY
COST SAVINGS**

\$5.4B

**CUMULATIVE CAPITAL
INVESTMENT**



PITTSBURGH CARBON EMISSIONS



David L. Lawrence Convention Center Rooftop

CARBON EMISSIONS METRICS

Baseline Type	National Baseline
Baseline Source	2003 Commercial Building Energy Consumption Survey (CBECS)
Baseline Considerations	<ul style="list-style-type: none"> • Climate zone • Building use type(s) • Occupancy • Weather
Impact Metric	Annual Emissions Intensity (EI)
Measurement Units	kg CO ₂ e/square foot/year
Tracking Method	ENERGY STAR Portfolio Manager
Reporting 2025 Performance	191 buildings, 38 million square feet, 44.1% of total committed square feet

From Energy to Carbon: Tracking Progress

From the inception of the 2030 District model, Property Partners have collectively committed to reduce greenhouse gas emissions resulting from the energy used in operating their buildings, **but meaningful emissions reduction requires a combination of decreased consumption and modifying energy sources.**

With the exception of renewables, producing and using energy creates carbon emissions, and different types of energy have different emissions factors. Depending on the amount of each fuel that a building uses, the volume of emissions produced will differ. ENERGY STAR Portfolio Manager tracks building-related emissions by determining the amount of each fuel type used and multiplying the usage by the corresponding emissions factor for that fuel.⁸ Combining practices of energy reduction with a transition to cleaner energy types moves us toward lower building emissions over time and eventually toward the net-zero emissions target we have set for 2040.

Carbon Performance

Without factoring in renewable energy purchasing, the District's carbon performance improved by 9%, from 41.2% below the baseline in 2024 to 50.5% in 2025. While some of this advancement reflects the District's reduction in energy consumption, much of it can be attributed to the improvement in our region's electricity grid (eGRID – RFCW). While fossil fuels still make up a large percentage of our region's energy, the mix of generation sources is always changing, and coal has seen a notable decline. Some of this has been picked up by natural gas, but solar saw an astounding 49% increase in generation!⁹

On the contrary, District Partners' direct purchasing of renewable energy declined significantly, contributing a smaller amount to the overall progress in the District's carbon performance: a 5.7% impact, compared to 10.7% in 2024. Several partners decreased their renewable energy purchasing, stopped purchasing it altogether, or had not completed the purchase by the time this report was published, leading to a decrease in the impact of renewable energy on the District's 2025

progress toward their 2030 target. Nonetheless, with energy reduction, regional grid modernization, and the remaining renewable energy purchasing that did occur, **the Pittsburgh 2030 District achieved an overall 56.14% reduction in carbon emissions in 2025.** If these trends continue, District Partners will be well-positioned to reach our longer-range targets in the remaining four years of our “race to 2030,” and continue toward a net-zero future.

How can we ensure emissions trends retain this momentum? One of the most critical actions is to renew commitments to clean energy purchasing and generation at the building level and neighborhood level, even as regional grid production improves over time. While it is a monumental win to see utility-scale operations get cleaner each year, the pace of grid decarbonization alone is insufficient to drive us to our net-zero targets, and increased renewables purchasing is low-hanging fruit for positive change. Ultimately, the primary goal of the 2030 District model was to drive the market toward change that would have global impact, and the highest energy users — our largest commercial buildings, large distributed portfolios, and healthcare and higher education campuses — can drive impact on their own emissions and on market demand by increasing their renewable energy purchasing in the coming years.

“Energy efficiency has been refined and established through two decades of sustained commitment, demonstrating the industry’s capacity for deliberate, portfolio-wide change. The challenge now is extending that same systematic approach to electrification, renewable energy, and the strategic positioning of buildings on a decarbonizing electricity grid.”

VINCENT MARTINEZ, HON. AIA, EIT,
CEO, ARCHITECTURE 2030

DISTRICT CARBON EMISSIONS PERFORMANCE

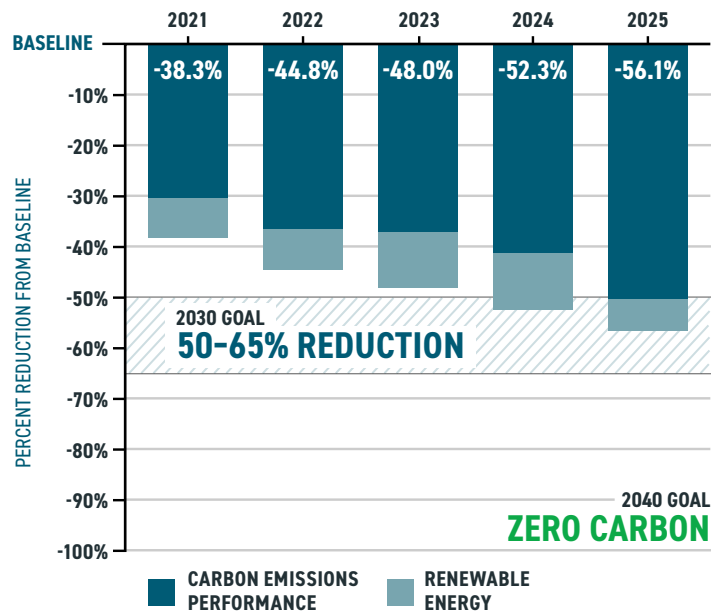


figure 2

TOTAL CARBON EMISSIONS AVOIDED

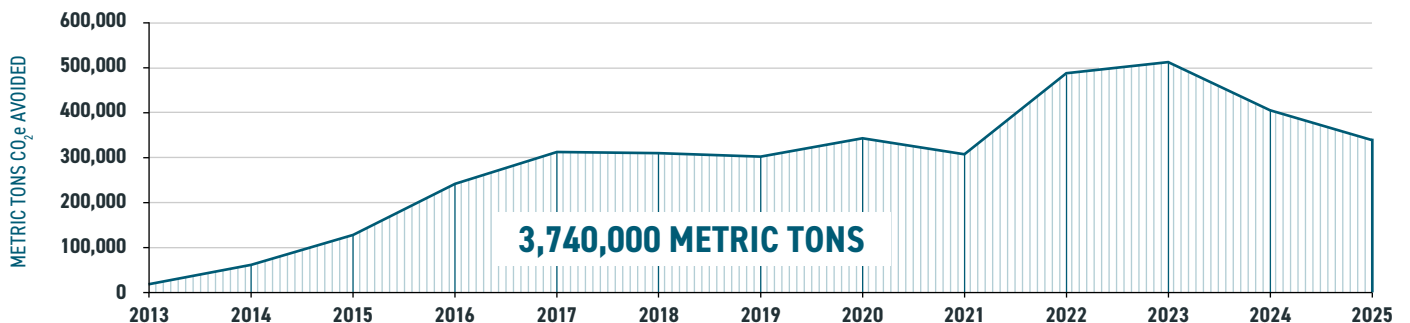


figure 3

CITY OF PITTSBURGH FIRE STATION 8



Incorporating Passive House Standards in Historic Restoration

It is one thing to build a new high-performance building. Transforming a nearly 100-year-old structure is another. In a remarkable testament to thoughtful planning and sustainable redesign, the City of Pittsburgh is wrapping up a major renovation of Fire Station 8 in its East Liberty neighborhood that is expected to reduce the station's annual energy use by 75%.

A project born from years of deferred maintenance and the need for a new facility to support modern fire operations, Fire Station 8 is expected to reopen this summer. In adherence with the City's Net Zero Ready Building Ordinance (2019) requiring all new or renovated city buildings to be designed to rigorous energy performance standards, the renovation of Fire Station 8 placed a high emphasis on reducing energy use. Additionally, recognizing the importance of maintaining the building's historic architecture, the project restored many original components while simultaneously updating the building with modern equipment and materials.

In keeping with Passive House principles and standards, the renovation included significant improvements to the building envelope. To preserve the existing art deco masonry facade and decorative iron detailing, the project team incorporated air and vapor barriers as well as new insulation on the building's interior. Care was taken to minimize thermal bridges — much of the interior insulation is continuous, with metal framing for drywall placed on top of the insulation layer. The new HVAC system features energy recovery capabilities, further improving the building's efficiency.

The project also centers firefighters' health and wellbeing. The new layout follows guidelines from the National Fire Protection Association (NFPA), separating the living quarters and support spaces from the station's "hot zones," spaces designed to handle dangerous chemical contaminants that firefighters and their equipment are exposed to during fires. This separation reduces cross-contamination of the bunk spaces and kitchen and helps minimize the time firefighters are exposed to these contaminants.

Since parts of the station's layout are meant for community access and town-hall style gathering space, the renovation incorporated trauma-informed design, making the environment welcoming to Public Safety personnel and community members alike. Natural light infiltration was expanded, offering a layout that is both inviting and energy efficient. Two existing lightwells are now covered with high-performance skylights, creating more useable interior space including a biophilic wellness area. Additional design improvements include gender-neutral bunk and hygiene quarters that reflect the gender diversity of modern fire operations and more group gathering space for teambuilding across the station.

Perhaps most inspiring about Pittsburgh's Fire Station 8 project is its demonstration of the feasibility – despite challenges and complexities – to successfully manage competing priorities such as historic preservation, code requirements, and passive design strategies, ultimately arriving at a result that reflects East Liberty's architectural history and promotes future resiliency.



Wall construction prioritizes a tight envelope



New skylight enhances lighting



PITTSBURGH ENERGY



Mill 19 at Hazelwood Green

ENERGY METRICS

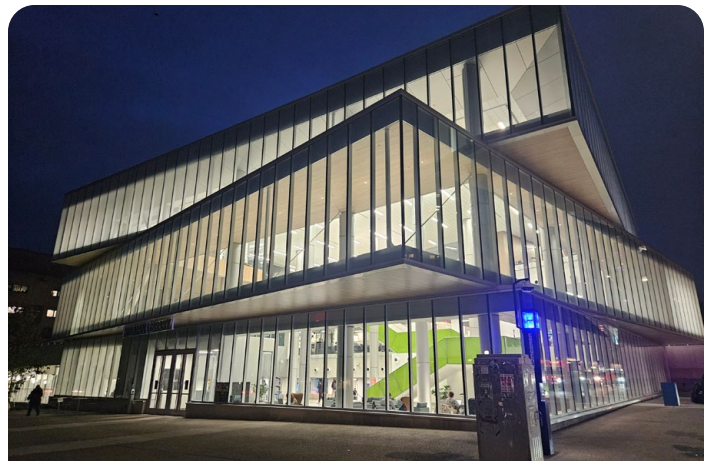
Baseline Type	National Baseline
Baseline Source	2003 Commercial Building Energy Consumption Survey (CBECS)
Baseline Considerations	<ul style="list-style-type: none"> • Climate zone • Building use type(s) • Occupancy • Weather
Impact Metric	Annual Energy Use Intensity (EUI)
Measurement Units	kBtu/square foot/year
Tracking Method	ENERGY STAR Portfolio Manager
Reporting 2025 Performance	192 buildings, 38.2 million square feet, 44.4% of total committed square feet

Energy Efficiency: Act Now

As we near 2030, energy efficiency is more important than ever. For a variety of reasons, energy supply is being rapidly outpaced by increases in demand.¹⁰ This in turn has caused energy prices to rise rapidly, so much so that Governor Shapiro filed a lawsuit against grid operator PJM with the aim of lessening the blow of energy volatility on average business and residential users.¹¹ While a cap on electricity prices was agreed upon,¹² this does not solve the problem of balancing energy supply and demand in the long term. Research has indicated that **deploying resources toward widespread energy efficiency initiatives would be significantly less costly and quicker** than building the required energy producing and interconnection infrastructure to bridge the market gap in the coming years.¹³ With various fuel markets now impacted by geopolitical conflict, business owners and residents across the region will continue to feel pressure to lower their utility use as a method to reduce the volatility resulting from the varying pressures and shocks.

Funding opportunities that can help you get started on your energy efficiency and renewable energy projects include state grant programs, local community foundations, energy performance contracts, and Act 129 rebates, among other options such as property assessed clean energy (PACE) financing and similar fixed-rate lending. Getting these projects started now can help minimize the effects of increasing energy prices, helping to keep your organization on track for financial and missional success. And because energy efficiency is so closely linked to design and systems practices like daylighting, envelope tightening, and indoor air quality improvements, the investment in improved energy performance will net benefits across the spectrum of utility costs, tenant attraction, and user experience in your properties.

University of Pittsburgh's Hillman Library



Energy & Benchmarking Performance

Based on the reported utility data, the District's energy performance improved slightly from 25.6% below the baseline in 2024 to 27.3% below the baseline in 2025. This is a continuation of improvement shown over the past several years and is an encouraging result when reflecting on the energy challenges that the region faces. On the downside, reporting percentage also decreased for the second straight year. We encourage Property Partners, and all building owners, to track and monitor their energy usage. GBA is always here to support you in benchmarking your properties and identifying energy saving opportunities.



Union Trust Building

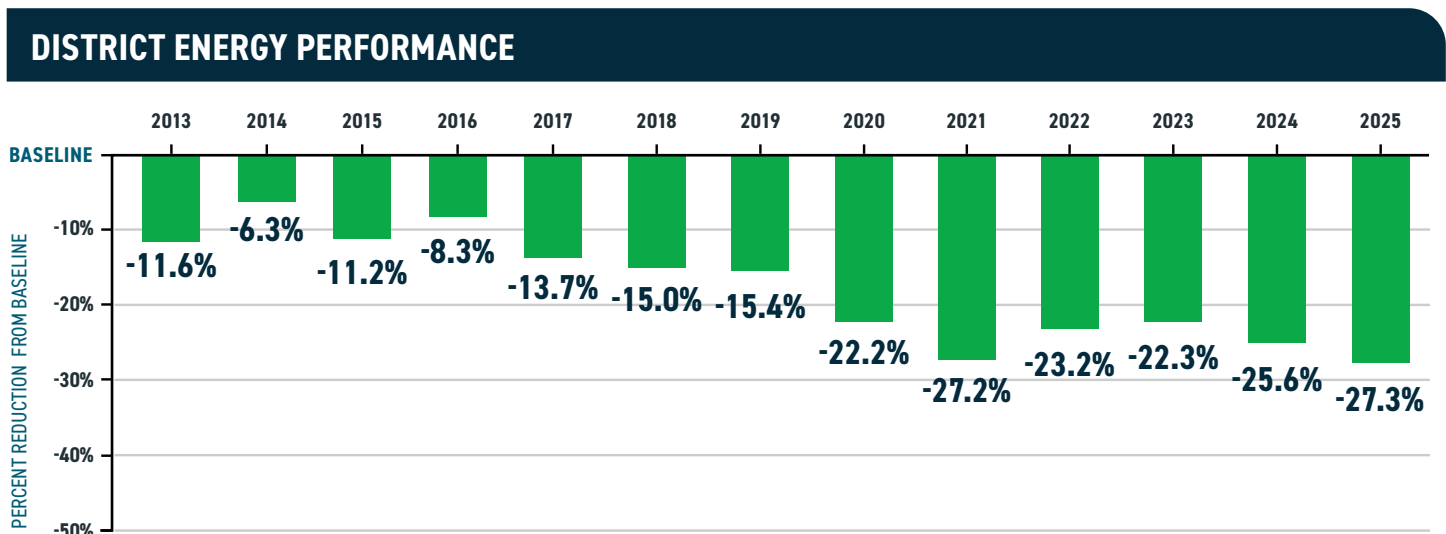


figure 4

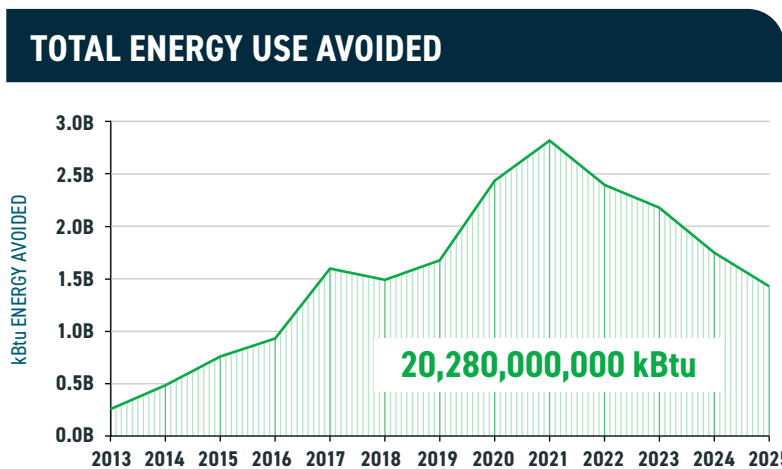


figure 5

2025 ENERGY COST SAVINGS:

\$42.8M

CUMULATIVE ENERGY COST SAVINGS:

\$465M



PITTSBURGH WATER



University of Pittsburgh Central Utility Building

WATER METRICS

Baseline Type	Local Baseline
Baseline Source	2009–2012 Pittsburgh Water & Sewer Authority water usage
Baseline Considerations	<ul style="list-style-type: none"> • Building use type(s) • Building size
Impact Metric	Annual water use intensity (WUI)
Measurement Units	Gallons/square foot/year
Tracking Method	ENERGY STAR Portfolio Manager
Reporting 2025 Performance	201 buildings, 35.7 million square feet, 41.4% of total committed square feet

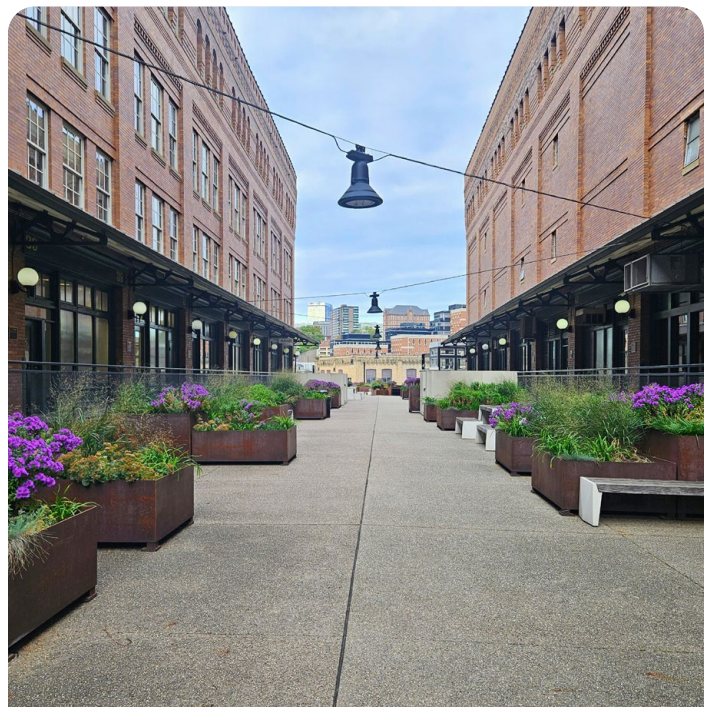
Water Performance

Properties across the District saw little change to water usage patterns in 2025 compared to 2024, only improving by 0.5%. As data from the Pittsburgh Downtown Partnership indicates, activity in Downtown Pittsburgh was largely the same in 2025 as in the previous year.¹⁴ Since water use and building occupancy are strongly correlated, this minimal change in water use is unsurprising.

Similarly to energy, water rates are also rising: a recent change by Pittsburgh Water increased residential rates by an average of 15%.¹⁵ While these increases are helping to fund water system upgrades, they reflect the ever-increasing financial challenges facing building owners and an imperative to explore more aggressive water reduction targets. Compounding the problem, traditional water saving opportunities are generally more limited than energy saving opportunities.

Advanced water saving opportunities involving greywater or stormwater reuse for nonpotable uses may become more prevalent and financially viable as rates continue to rise. For many property owners, 2026 may be an ideal time to pursue unrealized opportunities for greater water savings: updated low-flow fixtures and toilets, native landscaping and rainwater harvesting for smart irrigation, and broom or water broom sweeping for concrete and asphalt cleaning. As rate volatility continues, these are just some ways to positively impact water use and keep your water bill manageable.

The Highline





Phipps Conservatory & Botanical Gardens

“Solutions exist. Since 2012, Phipps has transformed more than 3 million gallons of annual stormwater runoff from a three-acre parking lot into a resource—capturing it for reuse or returning it to the ground through rain gardens, green roofs, lagoons, underground storage, and permeable landscapes.”

RICHARD PIACENTINI,
PRESIDENT & CEO,
PHIPPS CONSERVATORY &
BOTANICAL GARDENS

DISTRICT WATER PERFORMANCE

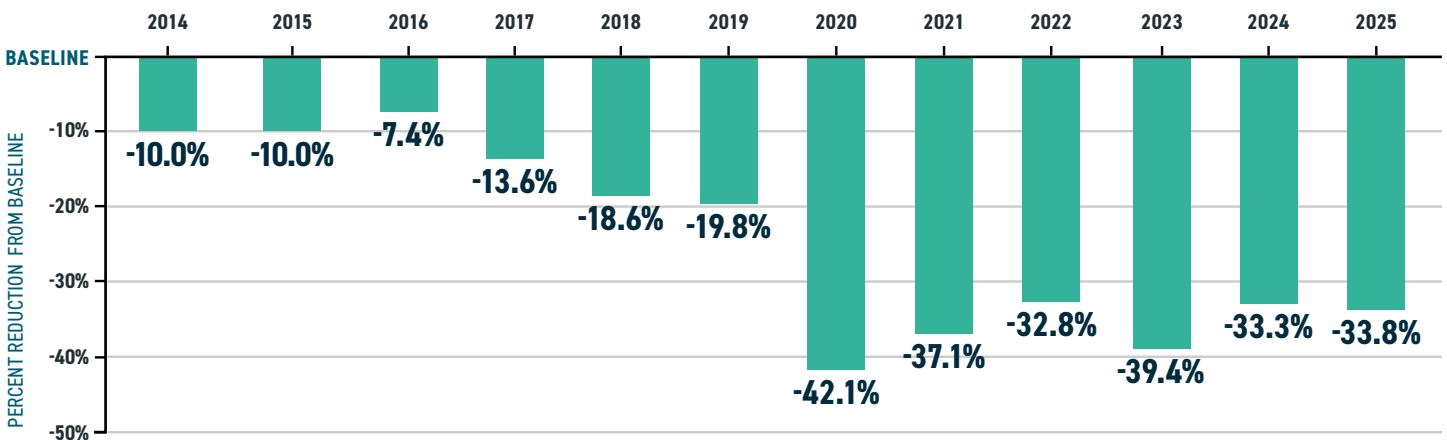


figure 6

TOTAL WATER USE AVOIDED

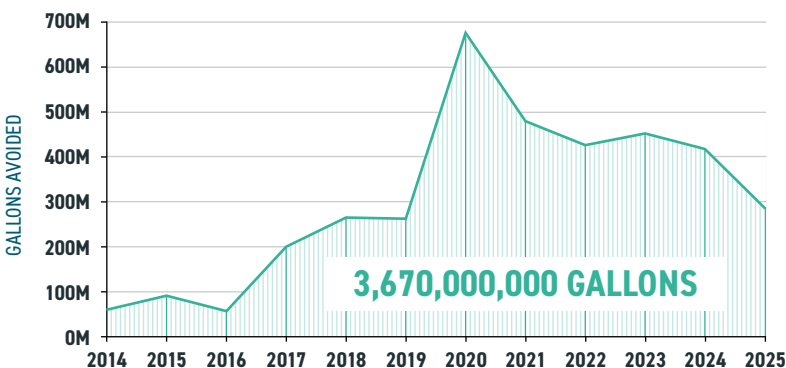



figure 7

2025 WATER COST SAVINGS:

\$7.1M

CUMULATIVE WATER SAVINGS:

\$114M



“THE CITY OF PITTSBURGH IS TRANSFORMING OLD FACILITIES INTO STATE-OF-THE-ART, SUSTAINABLE BUILDINGS WHERE WE CAN DELIVER EFFECTIVE AND EFFICIENT PUBLIC SERVICES AS WELL AS SUPPORT VIBRANT COMMUNITIES.

Thanks to the hard work of our teams in Public Works, Public Safety, City Planning's Division of Sustainability and Resilience, and our 2030 District commitment, more and more City facilities will operate with net zero targets, energy efficiency, clean air, and people-centered design that will support our workers and communities.”

MAYOR COREY O'CONNOR



Photo by Dustin McGrew, courtesy of Visit Pittsburgh

PITTSBURGH INTERNATIONAL AIRPORT



Photo by Ema Peter, courtesy of Allegheny County Airport Authority

The Pittsburgh International Airport Terminal Modernization Program (PIT TMP) has received much deserving attention for its design and sustainability initiatives, and as the Airport Authority's publicly visible infrastructure, it offers one glimpse into their ambitious work on driving sustainable changes across their operations, grounds, and client offerings. The average person experiences Pittsburgh International Airport (PIT) as a passenger, but the airport operates as a complex ecosystem serving the needs of passenger airlines, travelers, cargo shippers, terminal tenants, connecting airports, and regulatory environments. Within this ecosystem, PIT is establishing itself as an industry-leading air travel hub by advancing several pillars of sustainable development in its growth and evolution, not just nationally but globally. While over 20 other 2030 Districts operate across the country and Canada, the Allegheny County Airport Authority (ACAA) was the first ever airport to commit to a 2030 District and has demonstrated that environmental and community responsibility is key to creating a world-class air travel experience.

Pillar 1: Efficiency and Conservation

The \$1.7B Terminal Modernization Program encompasses a new landside terminal designed by Gensler + HDR in association with luis vidal + architects; and new parking structure, associated roadway, and customer service building led by Michael Baker International. The

terminal's design includes an infusion of natural light and optimized energy and air quality systems, offering energy efficient practices that directly contribute to passenger and staff experience in the facility. Behind the scenes, its baggage handling upgrades have saved energy and will reduce costs to the tune of \$18M annually. The removal of the tram shuttle, which consumed a staggering 3 megawatts of electricity each time it moved to transport passengers between the landside and airside terminals, led to a massive energy reduction starting on day one of the new terminal operation.

On track to obtain LEED Gold certification, the new terminal building features an undulating roof that enables rainwater harvesting for use in terrace garden irrigation, along with native landscaping, rainwater retention swales, and low-flow fixtures, all of which reduce use of potable water.¹⁶ The building design includes lush outdoor terraces, which are accessible to passengers as they navigate through the building. Supporting all of this is an intentional multi-phase construction effort that prioritized local workforce, incorporated high rates of locally produced and recycled content materials, and diverted a staggering 99% of construction waste away from landfill disposal back into downstream markets or for reuse on site — a shining example of the regenerative possibility of local circular economies.

Beyond the impressive vantage point that the terminal building offers, the Allegheny County Airport Authority (ACAA) is advancing a wide array of resiliency and

innovation initiatives across airport grounds and operations. Working with The Efficiency Network (TEN), all of the runway lights are being upgraded to LEDs. This is no simple project: besides meeting required FAA regulations, the retrofit will replace several thousand runway lights that guide aircraft landings, takeoffs, and taxiing, all while ensuring the airport continues to function normally. The airport's central utility plant, which provides heating and cooling for all three airport terminals, is being assessed to determine the best avenue for updating the equipment to improve the plant's efficiency.

Pillar 2: Resiliency

The airport is unique in that it has an on-site microgrid, comprising five natural gas turbines and a 9,300-panel solar array. The microgrid was installed primarily to ensure campus resiliency. In the event of a power outage, the airport can remain operational, keeping planes moving and preventing a logistical domino effect that can delay flights across the nation and globe. This past year, the airport announced a major expansion of their solar array, adding more than 11,000 panels by the end of 2027.

Pillar 3: Innovation

The Airport Authority is embarking on groundbreaking initiatives that will contribute to its rise as a regional and national economic and industry hub. The ACAA is developing partnerships to produce sustainable aviation fuel (SAF) on the airport grounds, a process that uses agricultural waste and other biobased materials. While still in the early design stages, the expectation is that they will be able to produce enough SAF to not only keep all the planes at the airport fueled, but also to export fuel to nearby airports. SAF would offer a domestic raw material source not impacted by global trade markets and can immediately be used in existing airplanes with no modifications. The environmental benefits are immense: use of SAF releases 60–80% fewer carbon emissions than traditional jet fuel, less particulate matter in the exhaust, and reduced contrail formation, which significantly contributes to climate change. The airport has also supported hydrogen and biofuel research and pilot projects, offering a glimpse into its long-term strategy for leading in the global airline industry.

BUILDING PERFORMANCE & PROJECT SUSTAINABILITY STATISTICS

Terminal Modernization Program (Full Scope)

99%

construction and demolition diversion, including 15,600 tons of concrete crushed and reused onsite

Customer Service Building

37.84%

indoor water use reduction below the baseline

46.3%

energy cost savings below the baseline

Parking Garage

75%+

of materials were manufactured within 300 miles of Pittsburgh

60%+

target for regional labor

Photo by Ema Peter, courtesy of Allegheny County Airport Authority





INDOOR AIR QUALITY



*An air curtain manufactured by Berner,
installed in an entryway*

Air curtains are an example of one technology that supports indoor air quality metrics. Because they help to contain heated or conditioned air, they provide sizable energy savings and increased personal comfort when applied in industrial or commercial settings. They also help to stop the infiltration of pollutants and flying insects.

Photo and text courtesy of Berner Air Curtains

Indoor Air Quality: Why Do We Care?

Indoor air quality (IAQ) differs significantly from the other performance factors that GBA tracks and reports. There is no singular defining metric for IAQ, and no line-item utility costs like energy and water. So why do we care? IAQ affects us all, and its impacts are numerous and range in severity and time frame. In the short term, pollutants can cause respiratory irritation, headaches, fatigue, decreased cognitive performance, and contribute to absenteeism in schools and the workplace. Long term exposure to some pollutants can cause serious health problems, including chronic respiratory diseases, heart diseases, and cancer.

Indoor air quality is likely the most direct reflection of how high-performance buildings translate to quality of life for building occupants. Schools are particularly impacted by indoor air quality, because of the high density of people per square foot in the building during classes, the outdated state of many school facilities in the country, and the vulnerability of children's developing lungs and respiratory systems.¹⁷ Poor indoor air metrics — present in roughly half of US schools — are shown to lead to reduced school attendance, lower educational performance as measured by standardized test scores, and higher dropout rates, along with the higher disease rates we know are associated with poor air quality exposure.¹⁸ For our health, our economic stability, and our community benefit, maintaining good IAQ is incredibly important, and the 2030 District is an ideal channel for educating, surveying, and reporting on the best practices in maintaining optimal IAQ in our region.

What Impacts IAQ?

The quality of our indoor air is influenced by many factors. Major sources of indoor air pollutants include:

- **Combustion appliances** such as furnaces, boilers, and cooking equipment. Improper ventilation of these appliances can expose indoor environments to dangerous gases and particulate matter.
- **Building materials and furnishings.** Many products commonly found in buildings are made with volatile organic compounds (VOCs), chemicals that easily vaporize into gases. Some products commonly made with VOCs include paint, adhesives, flooring, pressed wood products, furniture, pesticides, and air fresheners, among others.¹⁹

- **Cleaning and maintenance products.** Likewise, cleaners and disinfectants commonly emit VOCs, and if sprayed, can also be a source of particulate matter.
- **Outdoor air pollution and environmental elements.** Outdoor air comes into buildings in a variety of ways: mechanically through HVAC systems, naturally through intentionally opened windows and doors, and via infiltration through cracks in the building envelope. If not filtered, this air brings with it whatever pollutants exist outdoors into our buildings.

IAQ in Green Building Rating Systems

This year, GBA released a new version of our Indoor Air Quality survey. This 33-question survey is designed to introduce building owners and operators to the basics of IAQ and best practices in building operation and design. It is a tool that can be used to help identify opportunities to improve IAQ.

Following a review of IAQ best practices and credits across a range of common green building rating systems, GBA staff developed the 2026 survey with the aim of simultaneously capturing current IAQ trends in the region and offering a reference guide that partners can return to for IAQ guidance. These rating systems included BREEAM (Building Research Establishment Environmental Assessment Method), Fitwel, Green Globes, LEED (Leadership in Energy & Environmental Design), Living Building Challenge (LBC), and WELL. Each of these standards has a focus and framework. For example, Fitwel and WELL focus primarily on occupant health, whereas BREEAM,

Green Globes, LEED, and LBC are more holistic, and include aspects of energy efficiency, water efficiency, and environmental sustainability, alongside IAQ.

Even within IAQ practices, there are variances between standards. However, there are some common themes that appear in multiple standards and that the 2026 survey measures as adopted practices (table 1).

Reporting on IAQ Trends

We encourage you to complete the 2026 version of our IAQ survey! Developed as a multi-use tool, the survey collects information from Property Partners about their building operations, and also serves as a reference guide, compiling a range of green building frameworks together for easy use in preventive maintenance procedures and trainings. As with all building performance trends, GBA will report on IAQ practices in an aggregated and anonymized fashion, and we will distribute a special limited-length digital report on the region’s commercial and institutional IAQ trends, offering opportunities for improvement and growth. We will publish our IAQ report later this year, comparing it to the results of the prior surveys in 2019 and 2021 to see how regional IAQ trends have changed over time.

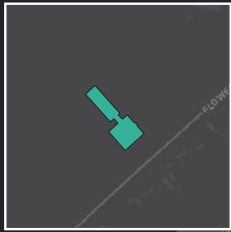


GBA Indoor Air Quality programming is supported by Highmark Blue Cross Blue Shield.

Certification Framework	Monitoring of Pollutants (besides CO & CO ₂)	Demand-Controlled Ventilation in High-Occupancy Areas	Use of Green Cleaning Products	Selecting Materials with Product Disclosure Labels (HPDs/Declare)	Installing Entryway Systems to Capture Dirt and Particulate Matter
BREEAM in Use ²⁰	Credit Option	Credit Option	Credit Option		
Fitwel ²¹	Credit Option		Credit Option		Credit Option
Green Globes Existing Buildings ²²		Credit Option	Credit Option	Credit Option	Credit Option
LEED v5 Operations & Maintenance ²³	Credit Option		Credit Option		
Living Building Challenge ²⁴			Required	Required	Required
WELL v2 ²⁵	Required	Credit Option	Credit Option	Credit Option	Credit Option

table 1

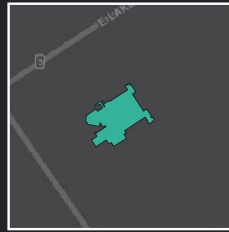
2025 ERIE DATA



ERIE COUNTY PUBLIC
SAFETY BUILDING



MERCYHURST
UNIVERSITY



MOUNT SAINT
BENEDICT



ERIE FOOD COOP



SISTERS OF ST. JOSEPH



PENN STATE BEHREND

36.8%

CARBON REDUCTION
(INCLUDING RECS)

16.3%

ENERGY
REDUCTION

29,800

METRIC TONS OF CO₂e
EMISSIONS AVOIDED

\$3.4M

ANNUAL ENERGY
COST SAVINGS



172

**BUILDINGS
COMMITTED WITHIN
BOUNDARY**

9.3M

**SQUARE FEET
COMMITTED WITHIN
BOUNDARY**

-  **COMMITTED**
-  **COMMITTED UNBUILT**
-  **NOT YET COMMITTED**

\$25.5M

**CUMULATIVE ENERGY
COST SAVINGS**



ERIE CARBON EMISSIONS



City of Erie Central Fire Station

Converting Energy to Carbon

Despite establishing a 2030 District in 2018, six years after Pittsburgh’s effort, Erie 2030 District Partners have pursued the same targets in energy and operational carbon emissions as their southwest PA peers and have made notable strides forward. On page eight of this report, we describe the methodologies that drive the 2030 Challenge Goals and the reporting process that illuminates how decisions on energy source and use patterns impact carbon emissions from building operations.

District Performance

Erie 2030 District properties reported a very slight increase in 2025 carbon emissions compared to the previous year, measuring at 36.8% below baseline. This demonstrates that District-wide emissions performance is stagnating somewhat as compared to the annual rate of change over the previous five years. Owners and managers can cut their buildings’ operational carbon emissions in two ways: by reducing the total

energy used in their buildings through structural, mechanical, and operational improvements, and by converting to clean, renewable energy sources to power their remaining energy requirements. As in prior years, renewable energy purchasing among Erie Partners in 2025 was minimal.

As Erie 2030 District Partners continue to pursue energy demand reduction, an increased uptake in clean energy conversion will be necessary to bring Erie properties closer to the 50–65% reduction targets. A convergence of financing opportunities in the City of Erie may make 2026 an ideal time for property owners to explore onsite renewable energy generation and electrification initiatives, leveraging opportunities such as the Community Revitalization Improvement Zone (CRIZ) investment funds or Commercial Property Assessed Clean Energy (C-PACE) financing. These programs have helped many developers and property owners bridge the gap in fully modernizing their properties.

GBA aims to convene and support leaders across sectors to leverage the latest incentives for incorporating more renewable, domestic, and resilient energy sources. These incentives can include electricity cost savings as well as grants and more favorable capital lending than a traditional construction project; these are all dollars that can be reinvested in people, products, and mission.

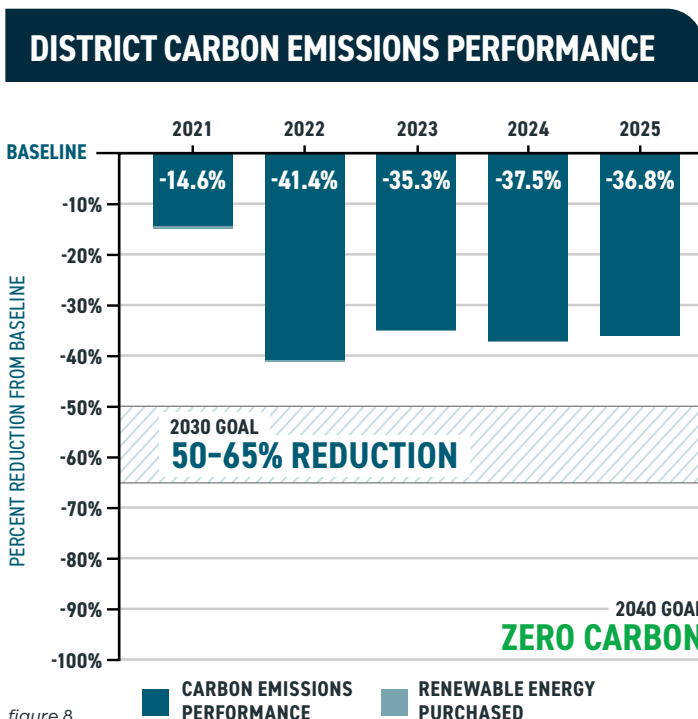


figure 8

2025 METRIC TONS CO₂e AVOIDED

29,800

CUMULATIVE METRIC TONS CO₂e AVOIDED:

158,100



ERIE ENERGY



Mercyhurst University

2025 District Performance

As with carbon emissions, energy use performance by Erie 2030 District Partners experienced a slight setback, with Erie energy use increasing by over 2% from 18.9% below the baseline in 2024 to 16.3% below the baseline in 2025. This performance outcome is a result of an average use rate that was stagnant or slightly higher across properties, rather than being attributed to one sector or portfolio of sites. One plausible explanation is the gradual increase of in-office work schedules each year since 2020, in conjunction with renovations and expansions among several Property Partners who have been updating their properties to accommodate higher occupancy rates.

The average quality of local building stock in downtown Erie and surrounding neighborhoods presents a continued challenge to Erie District Partners who are committed to reduced energy consumption but face an uphill battle in rehabilitating long underutilized buildings with deferred maintenance. However, the establishment of Erie’s CRIZ Authority in 2025 has already begun bringing substantial local tax revenues right back into Erie development.

GBA is encouraging local owners and developers to seize this once-in-a-generation opportunity to approach community redevelopment the right way. Many local leaders in development may not be educated on how sustainable design and long-term economic growth are intrinsically linked, and that is where the Erie 2030 District Partners come in. The participating property owners and community leaders that make up this collaborative are northwest PA’s firsthand experts in the value of designing for resiliency, and we are hopeful that our collective leadership can spread the seed of sustainable building at this critical time in Erie’s renaissance.

Intentionally linking investment with modern, efficient design; leading by example through visible local demonstration projects; and remaining committed to the often unseen but vital preventive maintenance practices that protect our local properties will bring Erie 2030 District Partners to their 2030 Challenge targets.

TOTAL ENERGY USE AVOIDED

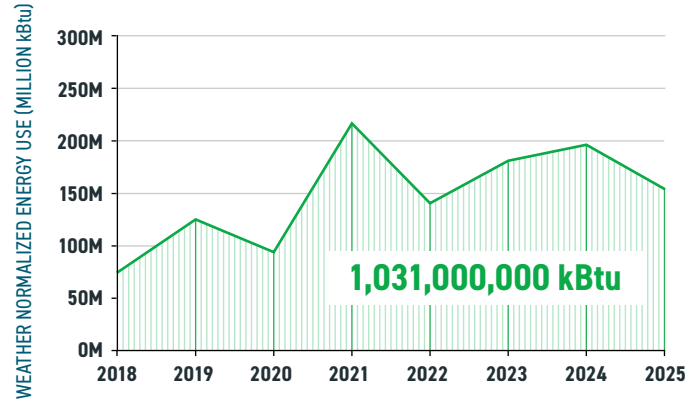


figure 9

DISTRICT ENERGY PERFORMANCE

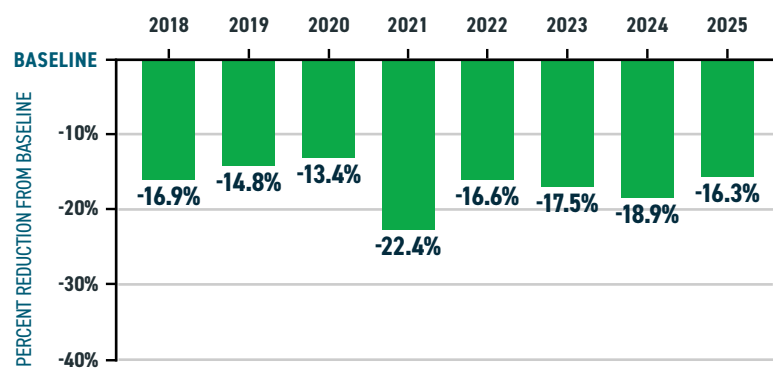


figure 10

2025 ENERGY COST SAVINGS:

\$3.4M

CUMULATIVE ENERGY COST SAVINGS:

\$25.5M

ERIE INSURANCE INDOOR AIR QUALITY



Home to over 3,000 employees, Erie Insurance's headquarters in downtown Erie encompasses over 900,000 square feet of office space and parking garages, as well as the firm's Technical Learning Center, a facility offering hands-on training and testing capabilities for the Erie Insurance claims team. This complex is well maintained, in no small part due to Gary Diley, VP of Property Management Department; Pat Feikles, VP of Environmental Management and Energy; and the Erie Insurance facilities team. Over the past several decades, this team has created a comfortable and healthy indoor environment throughout Erie Insurance's facilities.

Recognizing that indoor air quality (IAQ) is an important aspect of occupant health and comfort, Erie Insurance has long placed emphasis on both monitoring and improving IAQ. While Erie has not seen the levels of heavy industry that other nearby cities have, Erie Insurance's headquarters lies in close proximity to Erie's wastewater treatment facility, and until 2019, the Erie Coke Plant.

Erie Insurance has spent many years monitoring for the presence of potential harms within their indoor air, including CO₂, CO, VOCs (volatile organic compounds), particulate matter, mold, and radon. Testing is conducted periodically as a preventive maintenance measure, and any identified issues or complaints are addressed promptly to maintain a healthy environment.

Erie Insurance's leadership view their IAQ practices as a critical investment in supporting their most valuable resource: their employees. Placing a premium on staff wellbeing and a safe, welcoming environment, the company began implementing the highest standards of IAQ maintenance voluntarily, prior to pandemic-led awareness of air quality issues.

And alongside their monitoring procedures, Erie Insurance has numerous operational policies designed to improve IAQ, all meeting or exceeding industry standards for air quality optimization. While the industry default for humidity control hovers around 15–20% humidity in winter, Mr. Diley opted to implement a 30% humidity saturation level for some buildings – the standard for healthcare facilities – because of research demonstrating reductions in airborne illness transmission.

They began adopting MERV-13 filters in their HVAC systems long before COVID, creating much healthier spaces through enhanced removal of particulate matter, allergens, bacteria, and viruses. Their initiatives extend beyond air quality to address broader Indoor Environmental Quality, ensuring green cleaning practices, consistent preventative maintenance, and an emphasis on providing employees access to ample natural light.

Supporting Erie Area Schools with IAQ Leadership

In the Indoor Air Quality section of this report, we address how the unique activities and occupant density of school buildings, along with their average age and low maintenance budgets, make indoor air quality a higher priority in schools than in almost any other building type. Recognizing this, Erie Insurance leadership have expanded their individual and company legacy to schools in the broader community. Around 2011, Gary Diley partnered with GBA's Green & Healthy Schools Academy personnel to establish an environmental quality initiative in the Erie School District. Spurred by teacher and student enthusiasm for enhancing the schools' air quality, water quality, energy performance, and environmental impact, the initiative comprised bimonthly meetings with students and staff, helping them to develop improved practices, systems, metering, and testing. Students took the lead on implementing air quality testing, meter reading, and resource consumption tracking, demonstrating a true synergy between learning and stewardship in their school facilities. With this contribution of expertise, Mr. Diley brought Erie Insurance's mission to bear on behalf of youth thriving in the community, kickstarting an effort that organically grew to include community gardens and more.

"Maintaining and monitoring for optimal air quality requires a capital investment, but it is really an investment in our most valuable resource: our people."

PAT FEIKLES, VP OF ENVIRONMENTAL MANAGEMENT AND ENERGY, ERIE INSURANCE

Thomas B. Hagen Building, Erie Insurance



JOIN THE 2030 DISTRICT

The Value of Community

The success of the 2030 District stems from its extensive community of partners and sponsors spanning multiple sectors across western PA. Property Partners have opportunities to learn and benefit from personalized support, professional guidance, training, and technical assistance available through the 2030 District program, and GBA works with every 2030 District partner to create a warm, trusted relationship. GBA provides high-quality education sessions on relevant topics, including energy efficiency technologies and best practices, industry trends, and decarbonization strategies, as well as building tours of successful local projects. The resulting network fosters peer-to-peer relationships and learning opportunities, allowing partners to learn from their neighbors and share their own successes. Pittsburgh and Erie 2030 District Partners form a community of educated, purposeful leaders that have the knowledge to positively impact building development and operations throughout the region.

Individual Building Utility Use Assessments

GBA consults with Property Partners one-on-one to identify and prioritize critical investments toward achieving individual reduction targets. Partners receive a confidential annual performance report that analyzes their progress towards energy reductions, water reductions, utility cost savings, zero carbon, and indoor air quality performance. These reports highlight Partners' current and former performance, while GBA staff provide context and ideas for specific building upgrades. Where possible, reports also compare a building's performance to similar, anonymous local buildings.

Become a Property Partner

Distinguish your organization or school district by joining Western Pennsylvania's most influential network of building owners and developers! Upon commitment to the 2030 Challenge goals, Property Partners gain access to a community of technical experts, service providers, and fellow building management professionals, as well as individualized property benchmarking and evaluation. Any new or existing developments in Western Pennsylvania are welcome. Contact GBA today to join!



**Green
Building
Alliance**

Green Building Alliance (GBA) works across sectors and with communities to create beautiful, efficient, high-performing spaces that are as healthy for people as they are for the environment, and that contribute to a thriving economy. As Pennsylvania's authority on high-performance building design and construction, we equip, train, educate and inspire designers, builders, manufacturers, developers, policymakers, and educators to catalyze systemic change.

GBA's event reception at The Assembly



Property Partners & District Affiliates:

A.W. Beattie Career Center*
 ALCO Parking
 Allegheny Center Alliance Church
 Allegheny County*
 Allegheny County Airport Authority*
 Allegheny Health Network*
 ASCEND Pittsburgh*
 Avenu/Innovate PGH
 Avison-Young
 Bellefield Presbyterian Church
 Benedum Trees
 Berner International Corp.*
 Bethlehem Haven Of Pittsburgh
 Blind & Vision Rehabilitation Services
 BNY Mellon
 BPG 360 Real Estate Services
 Braskem America
 Bridgeway Capital*
 Burns Scalo Real Estate
 Butler Area School District*
 California Area School District*
 Carlow University
 Carlynton School District*
 Carnegie Library of Pittsburgh*
 Carnegie Mellon University
 Carnegie Museums
 CBRE
 Central Catholic High School
 Chatham University*
 Children's Museum
 City of Pittsburgh*
 Collaborative Real Estate
 Community College of Allegheny County (CCAC)*
 DMI Companies*
 Dollar Bank
 Duquesne University
 East Liberty Lutheran Church*
 Elmhurst Group
 Environmental Charter School*
 Faros Properties
 First Presbyterian Church
 Forest Hills Borough*
 General Services Administration
 Giant Eagle
 Global Links*
 Grant Liberty Development
 Group Associates & Ix
 Liberty Center Venture
 Hazelwood Green*
 Heinz History Center
 Hertz Investment Group

Highmark
 Highwoods Properties
 Hilltop Alliance*
 Housing Authority of the City of Pittsburgh (HACP)*
 Hullett Properties
 JLL
 Kairos Real Estate
 Kossman Development*
 M&J Wilkow
 McAllister Equities
 McKnight Property Management*
 Mt. Lebanon School District*
 Mountain Watershed Association*
 Murland Associates
 National Aviary
 Neighborhood Legal Services
 Newmark Grubb Knight Frank
 Oxford Development
 Penn Hills School District*
 Pennsylvania Department of Conservation and Natural Resources (DCNR)
 Phipps Conservatory and Botanical Gardens
 Piatt Companies
 Pittsburgh Cultural Trust
 Pittsburgh Gateways
 Pittsburgh Musical Theater*
 Pittsburgh Parking Authority*
 Pittsburgh Parks Conservancy*
 Pittsburgh Penguins
 Pittsburgh Pirates
 Pittsburgh Public School District*
 Pittsburgh Steelers
 Planned Parenthood of Western PA
 PNC Financial Services Group
 Point Park University
 Project Love Coalition*
 Protoshaven*
 Residences at Wood Street
 RIDC*
 RJ Community Management*
 Rodef Shalom Congregation
 Rothschild Doyno Collaborative
 Rugby Realty/Rexxhall Management
 Shadyside Academy*
 Shorestein
 Soldiers & Sailors Memorial Hall & Museum Trust
 South Fayette Township School District*
 Sports & Exhibition Authority of Pittsburgh and Allegheny County
 The Davis Companies

The Ellis School*
 Tree Pittsburgh*
 University of Pittsburgh*
 UPMC*
 Volpatt Construction*
 Walnut Capital*
 Western Pennsylvania School for Blind Children*
 Wexford SciTech*
 Winchester-Thurston School*
 Winthrop Management
 Woodland Hills School District*
 WQED Multimedia
 YWCA Greater Pittsburgh*
**Properties with an asterisk denote the Partner has at least one building committed outside of the boundary as a District Affiliate.*

Erie 2030 District Property Partners:

1001 State OZ Operator, LLC
 Allegheny Health Network
 Benedictine Sisters of Erie
 Cathedral of St. Paul
 City of Erie
 Emmaus Ministries Inc.
 Erie Art Museum
 Erie City Mission
 Erie County
 Erie Food Cooperative
 Erie Insurance
 Erie United Methodist Alliance
 First Presbyterian Church of the Covenant
 Gannon University
 Mercyhurst University
 PA Department of Conservation and Natural Resources
 PA Performing Artists Collective Alliance (PACA)
 Penn State Behrend
 Sisters of St. Joseph of Northwestern Pennsylvania
 UPMC Hamot

Community/ Resource Partners:

AIA Pittsburgh
 Allegheny Conference on Community Development
 Allegheny County Health Department
 Allegheny County
 Architecture 2030
 ASHRAE - Pittsburgh

Bike Pittsburgh
 Bridgeway Capital
 Building Owners & Managers Association of Pittsburgh (BOMA)
 Carnegie Museum of Natural History & BirdSafe Pittsburgh
 City of Pittsburgh
 Community Resilience Action Network of Erie (CRANE)
 Congress of Neighboring Communities (CONNECT)
 Cordia Energy
 Duquesne Light Company
 Erie Bird Observatory
 Generation180
 Group Against Smog and Pollution (GASP)
 International Living Future Institute
 International Union of Operating Engineers, Local 95
 Keystone Energy Efficiency Alliance (KEEA)
 Master Builders' Association of Western Pennsylvania
 NAIOP Pittsburgh
 New Sun Rising
 Northside/Northshore Chamber of Commerce
 Oakland Business Improvement District (OBID)
 Oakland Planning and Development Corp. (OPDC)
 Oakland Task Force
 Oakland Transportation Management Association (OTMA)
 PA Sea Grant
 Pennsylvania Solar Center
 PennFuture
 Pennsylvania Environmental Council
 Pennsylvania Resources Council
 Pennsylvania Technical Assistance Program (PennTAP)
 Pittsburgh Downtown CDC
 Pittsburgh Downtown Partnership
 Pittsburgh Parks Conservancy
 Pittsburgh Regional Transit (PRT)
 Pittsburgh Water
 POGOHO
 Riverlife
 Southwestern Pennsylvania Commission
 Student Conservation Association
 Sustainable Pittsburgh
 Uptown Partners of Pittsburgh
 Urban Land Institute - Pittsburgh
 Urban Redevelopment Authority
 VisitPittsburgh

THANK YOU TO GBA'S SPONSORS AND FUNDERS

This report represents the collective efforts of GBA staff and the guidance of its Board of Directors.

We also acknowledge the valuable contributions of our 2030 District Partners, members, and sponsors, whose engagement makes this work possible.

Emerald



Platinum



Gold



Silver



Bronze

- | | | |
|----------------------------|---------------------------|--------------------------------|
| ALCOSAN | The Davis Companies | Neighborhood Community |
| Blue Delta Energy | DMI Companies | Development Fund |
| Buro Happold | evolveEA | PWWG Architects |
| Carnegie Mellon University | Faros Properties | Rothschild Doyno Collaborative |
| | Green Building Initiative | |

Funders



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Alliance**

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