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The EVOLUTION of a REGION and an INDUSTRY



Gretchen Givens Generett, Natalie Harmon, and Jenna Cramer Enjoy the Summer Soiree in 2018



Rebecca Flora at the Design Competition for the David L. Lawrence Convention Center

The passing of time is a curious thing. In the work that takes place in what we refer to as the long game – like the turning around of climate change or the shifting of cultures and mindsets – it can be especially deceiving. In some ways, it may feel like the clock is standing still, though more often than not, it feels as though our time is already up. And yet as I reflect on the last 30 years of work that has taken place in Western Pennsylvania since the founding of Green Building Alliance, I see with so much clarity what gifts that time has bestowed on us and the proof of what can be accomplished in just a few short decades. And as in years past, I am filled with not just pride but also hope for the time we still have left to continue our important work together.

Look back on those 30 years with me, and you will see the evolution of a region and the reinvention of an industry. You will see that levers of change pulled right here have influenced people and buildings and companies and governments around the world. Look back with me, and you will see choices made, risks taken, plans drawn, status quo ignored, expectations shattered. You will see connections forged, tears shed, crowds gathered, committees convened, buildings going up, walls coming down, and communities coming together.

Look back on those 30 years, and you will see what I see.

I see the story of us.

The sustainable development movement relies on the critical contributions of each individual and the power of our collective community. I want to thank each and every one of you for spending some of the last 30 years with us. For using your precious time to positively transform the world. For pulling that lever, making that choice, and taking those risks.

In the time since Green Building Alliance was born — out of the heart of Teresa Heinz and in the home of Conservation Consultants, Inc. — our region has accomplished so much together. We have led the country in early adoption of green buildings. We have harnessed our innovative spirit to produce sustainable and healthy products. We have certified nearly 400 green building projects, including some of the first—ever LEED and Living Building Challenge properties in the world. We have fought for healthy children and families. We have transformed industrial brownfields into community assets. We have built the largest single–sloped solar array in the country. We have set the foundation to define what it means to be a healthy, equitable, and sustainable community. We have shown the world what is possible.

It turns out you can do a lot with the time you are given, especially when you work together.

This celebration of the past 30 years is for you.

Thank you, and Happy Anniversary!

Jenna Cramer

Jenna Cramer, President and CEO

Impact Report CLIMATE

PURPOSE STATEMENT

What do green buildings have to do with climate?

Scientists agree that increased carbon in the atmosphere is contributing to rising global temperatures, with devastating effects. The built environment is a major contributor to this issue, but it also provides large scale solutions: high-performing buildings not only decrease energy use and emissions, but also conserve other resources while improving quality of life. Green buildings are essential for climate adaptation, mitigation, and resiliency; they can protect us from fluctuating temperatures, poor air quality, and more serious natural disasters. In 2021, the built environment rose to the top of the climate agenda at the 26th meeting of the United Nations' Conference of Parties (COP26). The sector has come to be widely seen as a critical tool in the fight against climate change and global warming, and as a vehicle for health, safety, and comfort in the face of increasing climate impacts.

BIG DATA

What do global findings about buildings and climate tell us?

- The 2022 Global Status Report for Buildings and Construction finds that the sector accounted for over 34% of energy demand and 37% of energy and operational CO2 emissions in 2021.¹ Green buildings can reduce energy use by more than 50% and CO2 emissions by nearly 40%.
- In addition to CO2 emissions, the buildings sector is responsible for more than 40% of waste output and 12% of water use. Meanwhile, 75% of all raw materials in the U.S. are used for building construction.²
- In 2040, nearly 2/3 of the global building stock will be buildings that already exist today. Without widespread existing building decarbonization across the globe, these buildings will still be emitting CO2 emissions in 2040 and we will not achieve the Paris Agreement's 1.5°C target.³
- The World Economic Forum has found that by increasing green roofs on buildings in urban areas, summer temperatures in cities could be decreased by 2 degrees Celsius.⁴
- Project Drawdown, the world's leading resource for climate solutions, identified buildings as one of nine main sectors that could help stop climate change. If the industry were to achieve the solutions laid out in Project Drawdown, they could reduce or sequester between 72 and 144 gigatons of carbon emissions by 2050.⁵

GBA'S IMPACT

How does GBA's work address climate change?

Driving Down Emissions Through Data and Collective Impact

Using data and analysis to customize approaches in more than 550 buildings in Pittsburgh, GBA's 2030 District partners have collectively reduced energy use by more than 24% and collective carbon emissions by nearly 45% since 2012. Together they have avoided 492,000 tons of carbon emissions.

Developing Champions for Energy Efficiency Across the Value Chain

GBA has trained more than 400 practitioners in understanding the principles of LEED, Passive House, green building operations and maintenance, and more. We educate designers and builders on thoughtful decision-making and early energy interventions in design and construction while training facility managers on making actionable energy-saving changes to building operations strategies.

Supporting Large-Scale Climate Projects

GBA's team leads or engages in large-scale projects that represent regional commitments to major emissions reduction. Some examples include our facilitation of the first Pittsburgh Climate Action Plan, the Oakland Energy Master Plan, and the Higher Education Climate Consortium, and our participation in the Pittsburgh International Airport modernization project, the Hazelwood Green development, and the Uptown Ecolnnovation District.



Camila Rivera-Tinsley Shows Off the Frick Environmental Center

A Solar Array at Chatham University's Eden Hall Campus



ON EQUITY

How does GBA help ensure everyone benefits from climate solutions?

Empowering Community Members to Influence Development and Policy

GBA's Sustainable Communities program works directly with neighborhood residents in intergenerational cohorts to learn about sustainable and healthy communities while building skills to influence future policies that will impact them. GBA also trains historically under-represented community developers on green buildings so they have necessary information to develop their own healthy and high-performing spaces.

Ensuring New Developments are Good for People and the Planet

Through GBA's technical assistance program, our team of experts reviews developments proposed through the URA and provide input to the neighborhood planning process. This ensures that new developments are meeting the climate, health, and equity goals of community members.

Helping Schools and Non-Profits Save Energy

PreK-12 schools and non-profit organizations are among the Property Partners who participate in the Pittsburgh and Erie 2030 Districts. GBA's team offers these buildings free and customized solutions to conserve energy, not only reducing their emissions but also saving them money.



PreK-12 Schools Support Each Other at the School Sustainability Culture Program

A Tour Group Learns About Residential Solar in 2016



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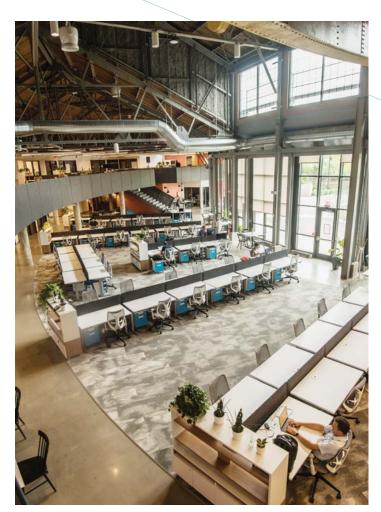
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Impact Report ECONOMY

PURPOSE STATEMENT

What do green buildings have to do with the economy?

Green buildings support a healthy economy by increasing demand for quality construction jobs, reducing building management costs, upskilling the workforce, prioritizing regional purchasing of products and materials, increasing asset value and investments, and supporting the attraction of visitors and talent.



BIG DATA

What are global green building trends telling us?

- The green building construction market is projected to reach \$774 billion by 2030.¹
- The green building materials market is projected to grow 12% annually and reach \$939 billion by 2030.²
- Commercial buildings that are constructed to green building standards like LEED often see up to 10% increase in value. Additionally, a CBRE analysis of 20,000 U.S. office buildings found that average rent of those with LEED certification is 31% higher than that of non-LEED-certified buildings.³
- The green building industry contributes more than \$134.3 billion in labor income to working Americans.⁴
- According to the Pennsylvania Clean Energy Employment Report, "from Q4 2020 through Q4 2021, Pennsylvania's clean energy economy grew by 5.1%, while during the same period, U.S. clean energy sector jobs grew 4.8%."⁵

An Old Industrial Roundhouse is Now a Hub for Tech Innovation

GBA'S IMPACT

How does GBA's work specifically impact the regional economy?

Investing Money in Local Building Retrofits

Property Partners in GBA's Pittsburgh 2030 District have invested \$2.3 billion in energy efficiency and retrofit projects over the past 10 years. Green building jobs like the ones required for these retrofits are most often completed by a local workforce.

Saving Funds through Improving Building Performance

GBA's Pittsburgh 2030 District works with partners to reduce energy use, water use, and carbon emissions in their buildings. Since 2012, our Property Partners have saved \$403.8 million through energy and water reduction measures.

Strengthening Career Pathways

GBA has trained 400+ people in green building professional credentials including LEED Green Associate, Passive House Designer, Passive House Tradesperson, and GPRO Operations & Maintenance. This has contributed to Pennsylvania's 2022 ranking in the Top 10 states for LEED Accredited Professionals by the U.S. Green Building Council.

Seeking Funds for PreK-12 Schools

GBA's 2030 District team works with 141 school buildings who have committed to reduced CO2 emissions and improved indoor air quality. School districts have limited bandwidth for seeking and securing grants to cover building upgrades, so GBA staff members identify opportunities and assist with developing proposals to fund projects.

Fostering Green Building Product Innovation

Between 2007 and 2011, GBA's Green Building Product Innovation Grant program invested \$1.2 million in Product Innovation Grants to 24 regional projects that sought to translate sustainable principles into Pennsylvaniamanufactured building products and technologies.

Pitt Ohio's Trucking Terminal Incorporates Renewable Energy and Natural Daylight

ON EQUITY

How does GBA help ensure equitable economic opportunity?

Supporting Local Craft Manufacturers

In partnership with the International Living Future Institute and Monmade, GBA advised small, local manufacturers who were pursuing transparency labels for their building products. These labels help manufacturers increase their chances of being specified on green building projects. GBA also features many of these producers in its own office.

Helping Non-Profit Organizations Save Money

GBA provides technical assistance for non-profits seeking to make their buildings healthier and more efficient. Increasing their energy and water efficiency helps them direct more money to their missions, retain staff, and provide comfortable and inspiring spaces for their clients. In past programs, GBA has engaged local National Organization of Minority Architects (NOMA) members to be contracted for work, thus ensuring related design work went to under-represented architects. GBA's 2030 District regularly helps improve energy and water efficiency across 51 non-profit Property Partners representing 692 buildings.

Expanding Access to Professional Development

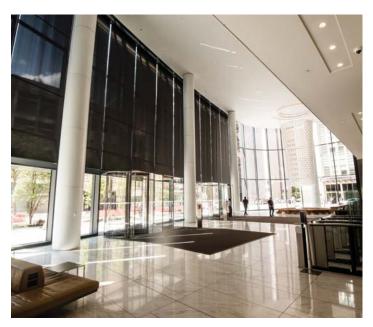
Between 2018 and 2023, GBA distributed more than \$10,000 in training and networking scholarships to increase the accessibility of our professional development offerings and ensure that everyone has access to the robust green building network we convene.





The Renovated Highline
Provides New Opportunities to
Connect with the Outdoors

The Lobby at PNC Tower Uses Shading to Control Heat Gain



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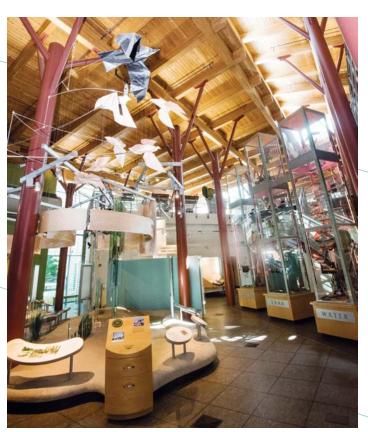
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Impact Report HEALTH

PURPOSE STATEMENT

What do green buildings have to do with health?

Buildings and our well-being are intricately linked at both the individual and systemic level. According to the CDC, the buildings and spaces a person spends time in are a key social determinant of health. Buildings contribute to emissions and pollution not only from operations but also from related transportation and energy production, which impact overall air quality. Thoughtfully designed spaces can serve to re-connect us to nature and each other through biophilic elements, opportunities to be outside, and incorporation of natural daylight and improved ventilation.



BIG DATA

What does the research on buildings and health tell us?

- Americans spend 90% of their time inside, where air quality can be up to five times worse than outside. Focusing on improving indoor air quality is essential to improving overall human health.¹
- The annual cost attributed to "sick building syndrome" (SBS) due to poor air quality in commercial workplaces could be up to \$70 billion. Meanwhile, sick leave associated with SBS dropped by 35% when ventilation rates were increased.²
- The total healthcare system costs related to mold and dampness in indoor environments were estimated to be up to \$18.4 billion annually in North America.²
- Healthy properties rent at 4% to 7% more per square foot, and at a macroeconomic level, simple improvements to indoor air quality could generate more than \$13 billion in benefits for the U.S. economy due to improved health and work performance.³

Inspired by Nature at Erie's Tom Ridge Environmental Center

GBA'S IMPACT

How does GBA's work positively impact our region's public health?

Exploring Health and the Built Environment with Stakeholders

Between 2019 and 2022, GBA hosted an annual public education series to help participants identify connections between buildings and human health.

The series – which covered topics like specifying local healthy building products, equitable access to healthy spaces, the energy-health nexus, and the impact of COVID-19 on building ventilation – presented 16 workshops and nearly 40 expert presenters to more than 300 participants representing government, schools, design and construction, healthcare, and more.

Helping Building Owners Prioritize Indoor Air Quality

GBA's 2030 District program includes indoor air quality (IAQ) as a performance metric along with energy and water use. The program tracks IAQ in buildings through a survey and visualizes it for Property Partners via a scorecard. GBA surveyed owners of 141 buildings in 2019 and 2021, asking questions relating to actions and building characteristics that impact indoor air quality. Analysis of the answers provided partners with a diagnostic of areas in which they were performing well and those that had room for improvement. The survey will be administered every three years to track progress.

Artists Like Candy Chang Share New Perspectives at the Inspire Speakers Series

Inspiring Community Members to Draw Their Own Connections

GBA's Inspire Speakers Series has brought 135 national and local speakers to its stage since 2012 through lectures aimed at challenging citizens and leaders to think differently about what is possible for our region. The series connects the dots between climate, economics, and healthy communities while making topics of sustainability relatable. This is done on stage through various perspectives including artists, economists, veterans, and urban planners. Lectures in the series have explored environmental health, art, and activism with McArthur Fellow Mel Chin; equitable healthy food access with Dr. Antwi Akom; and inspirational stories on the intersections of climate, equity, and health told by our own community members.





Colleagues Gather for Dinner with Inspiring Speaker Majora Carter (far right) in 2014

ON EQUITY

How does GBA help ensure equitable access to healthy spaces?

Creating Healthy Spaces for Non-Profit Employees

On behalf of the Forbes Funds, GBA's team helped guide small non-profit organizations in achieving healthy and high-performing spaces that can best serve their clients while helping their hard-working staff thrive. These cohorts included both group workshops on specific topics as well as individualized technical assistance, all at no cost to the organizations.

Ensuring Students Can Learn in Green & Healthy Schools

School students and teachers spend 1,000 hours per year in school buildings where health officials are concerned with the impacts of these aging structures and their systems on health of those who use them.

GBA's 10+ years of school-focused work has impacted more than 4,800 teachers and 58,000 students through programs like the Green & Healthy Schools Academy and School Sustainability Culture Program. GBA's team also supported Women for a Healthy Environment in its 1,000 Hours per Year project (funded by the Heinz Endowments) to address lead and radon in schools.



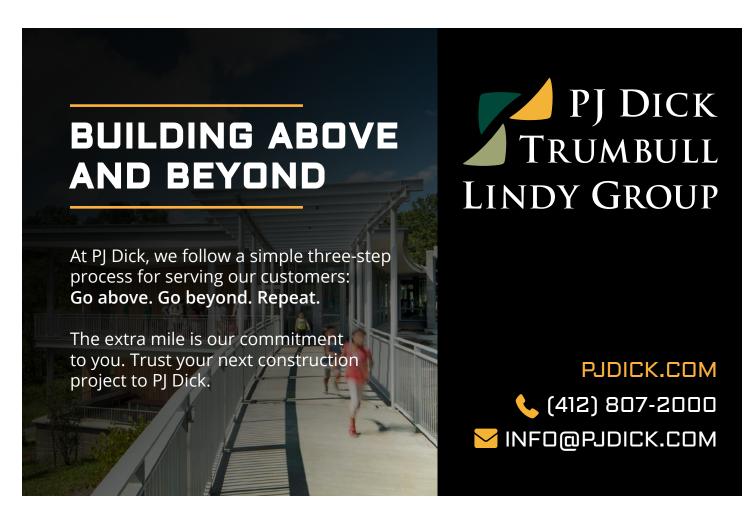
Inspiring a Bike Friendly Lifestyle at the Thelma Lovette YMCA

Green Building Alliance positively transforms the world through the built environment to address climate change, advance human health, achieve social equity, and create thriving economies. Our vision is to create a future where every building and community is sustainable so that every person can thrive.

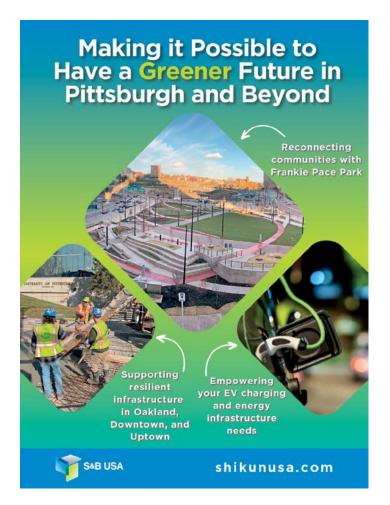
Learn more at gba.org.

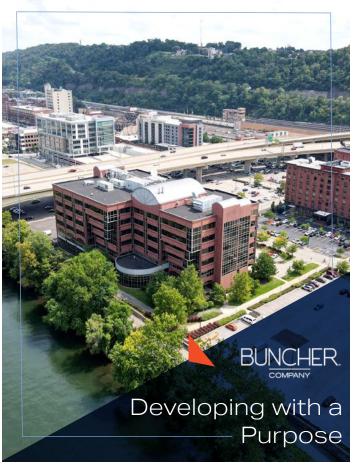
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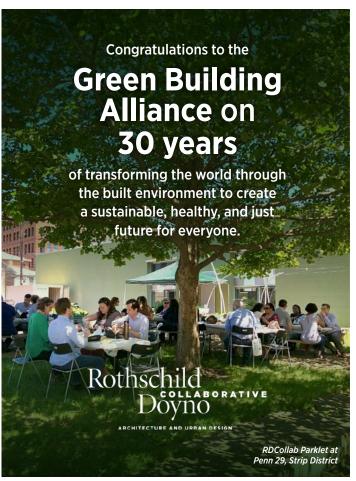


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PreK-12 SCHOOLS

School buildings host the future generation of world leaders, so the health and performance of these spaces are vital to children's growth and development. Students spend a significant amount of time in their school buildings and ensuring they feel healthy, safe, and ready to learn at school is essential to their academic and personal success. Green building strategies in PreK–12 schools safeguard human well-being and can also be more cost-effective for school districts. Here are some PreK–12 school buildings in Western Pennsylvania that are cultivating a sustainable and healthy environment for our most precious building users.



A W Beattie Career Center Solar Panel

Project Name	Certifications	Owner	County
A. L. Wilson Elementary School	LEED Silver	Albert Gallatin School District	Fayette
A.W. Beattie Career Technology Center*	LEED Gold; Green Ribbon School	A.W. Beattie Technical Career Center	Allegheny
Aliquippa High School	LEED Silver	Aliquippa School District	Beaver
Allegheny Clarion Valley High School	ENERGY STAR	Allegheny Clarion Valley School District	Clarion
Baker Elementary School	WELL Health- Safety Rated	Upper St. Clair School District	Allegheny
Bedford Middle School	LEED Silver	Bedford Area School District	Bedford
Bethel Park High School	Green Globes Certified	Bethel Park School District	Allegheny
Boyce Middle School – Renovation	LEED Silver; WELL Health- Safety Rated	Upper St. Clair School District	Allegheny
Bradford Area High School	ENERGY STAR	Bradford Area School District	McKean
Butler Area School District*	ENERGY STAR	Butler Area School District	Butler
California Area School District*	Green Ribbon School	California Area School District	Washington
Cardinal Wuerl North Catholic High School	LEED Silver	Diocese of Pittsburgh	Butler
Carriage House Children's Center	LEED Gold	Carriage House Children's Center	Allegheny
Connoquenessing Valley Elementary School	ENERGY STAR	Seneca Valley School District	Butler
Corry Area Intermediate School	ENERGY STAR	Corry Area School District	Erie
Corry Area Primary School	ENERGY STAR	Corry Area School District	Erie
Crossroads School	ENERGY STAR	Hempfield Area School District	Westmoreland

Building a Sustainable Future

Deer Lakes High School – Renovation	LEED Gold	Deer Lakes School District	Allegheny
Eden Hall Upper Elementary School	Green Ribbon School	Pine-Richland School District	Allegheny
Eisenhower Elementary School	WELL Health- Safety Rated	Upper St. Clair School District	Allegheny
Evans City Elementary/Middle School	ENERGY STAR	Seneca Valley School District	Butler
Forest Hills Middle-High School	Green Globes Certified	Forest Hills School District	Cambria
Fort Allen Elementary School	ENERGY STAR	Hempfield Area School District	Westmoreland
Fort Couch Middle School – Renovation	LEED Silver; WELL Health- Safety Rated	Upper St. Clair School District	Allegheny
Fort LeBoeuf High School	ENERGY STAR	Fort LeBoeuf School District	Erie
Fort LeBoeuf Middle School	ENERGY STAR	Fort LeBoeuf School District	Erie
George G. Blaisdell Elementary School	ENERGY STAR	Bradford Area School District	McKean
Hance Elementary School	Green Ribbon School	Pine-Richland School District	Allegheny
Harrold Middle School	ENERGY STAR	Hempfield Area School District	Westmoreland
Hempfield Area Senior High School	ENERGY STAR	Hempfield Area School District	Westmoreland
Jeannette Senior High School	ENERGY STAR	Jeannette City School District	Westmoreland
Maxwell Elementary School	ENERGY STAR	Hempfield Area School District	Westmoreland
McKee Elementary School	ENERGY STAR	West Allegheny School District	Allegheny
Mill Village Elementary	ENERGY STAR	Fort LeBoeuf School District	Erie
Moshannon Valley Elementary & High School	ENERGY STAR	Moshannon Valley School District	Clearfield

Mt. Lebanon High School*	Green Ribbon School	Mt. Lebanon School District	Allegheny
Punxsutawney Area High School	ENERGY STAR	Punxsutawney Area School District	Jefferson
Robison Elementary	ENERGY STAR	Fort LeBoeuf School District	Erie
Rowan Elementary School	ENERGY STAR	Seneca Valley School District	Butler
Seneca Valley Middle- Intermediate-High Schools	ENERGY STAR	Seneca Valley School District	Butler
Sewickley Academy – Means Events Center	LEED Silver	Sewickley Academy	Allegheny
Shady Side Academy – McIlroy Center for Science & Innovation*	LEED Gold	Shady Side Academy	Allegheny
Shady Side Academy – Rowe Hall Renovation*	LEED Gold	Shady Side Academy	Allegheny
Spectrum Charter School	ENERGY STAR	Spectrum Charter School	Allegheny
Streams Elementary School	WELL Health- Safety Rated	Upper St. Clair School District	Allegheny
Union City Elementary	ENERGY STAR	Union City Area School District	Erie
Union City Middle & High School	ENERGY STAR	Union City Area School District	Erie
Upper St. Clair High School	WELL Health- Safety Rated	Upper St. Clair School District	Allegheny
Villa Maria Academy	ENERGY STAR	Sisters of Saint Joseph	Erie
Waterford Elementary School	ENERGY STAR	Fort LeBoeuf School District	Erie
Wattsburg Area School District	ENERGY STAR	Wattsburg Area School District	Erie
Wendover Middle School	ENERGY STAR	Hempfield Area School District	Westmoreland
West Allegheny High School	ENERGY STAR	West Allegheny School District	Allegheny

Building Alliance Building a Sustainable Future

West Branch Area School	ENERGY STAR	West Branch School District	Clearfield
West Hempfield Elementary School	ENERGY STAR	Hempfield Area School District	Westmoreland
West Point Elementary School	ENERGY STAR	Hempfield Area School District	Westmoreland
Western Pennsylvania School For The Deaf – Residence Hall	LEED Silver	Western Pennsylvania School for the Deaf	Allegheny
Wexford Elementary School	Green Ribbon School	Pine–Richland School District	Allegheny
Wilson Elementary School	ENERGY STAR	West Allegheny School District	Allegheny

The Etna Eco Park



NEIGHBORHOODS and COMMUNITIES

With hard work that focuses on collaboration and empowerment of all voices, communities can grow from a group of people living near each other into a supportive, caring, and strong network of individuals from all walks of life. Sustainable communities prioritize environmental stewardship and understand that economic vitality and equitable and inclusive standards of living also contribute to the happiness and success of all community members. The communities listed here strive to build places that put people first while ensuring the environmental systems around them thrive.

EcoDistricts:

The EcoDistricts designation promotes a new model of urban development to empower just, sustainable, and resilient neighborhoods. It guides a collaborative, holistic, neighborhood-scale approach to community design to achieve rigorous, meaningful performance outcomes that matter to people and planet. Certified EcoDistricts in our region include:

- The Borough of Etna
- The Borough of Millvale
- The Borough of Sharpsburg

LEED for Neighborhood Development Communities:

LEED for Neighborhood Development (LEED ND) was engineered to help create better, more sustainable, well-connected neighborhoods. It looks beyond the scale of buildings to consider entire communities. Communities can either be certified for planning or for completed projects. Our region has the following LEED ND communities:

- Eastside III
- Edgewater
- Former Civic Arena Site
- Hazelwood Green
- Larimer

Other Sustainable Community Highlights:

- The Uptown EcoInnovation District is a first of its kind and an opportunity to utilize the ways in which redevelopment can improve the environment, support the needs of existing residents, and expand entrepreneurship and job growth. The EcoInnovation District Plan was adopted by the City Planning Commission in 2017.
- Green Building Alliance serves as project manager for the Oakland Energy Master Plan on behalf of the City of Pittsburgh, Carnegie Museums, Carnegie Mellon University, the University of Pittsburgh, UPMC, Phipps Conservatory, Carlow University, and local utility providers to create a comprehensive energy plan and evolution for Oakland.
- A grant from the Kresge foundation has facilitated a community-wide focus on Climate Change, Health, and Equity and guides residents through leadership development in policy and advocacy in the neighborhoods of Hazelwood, Homewood, and the Hill District.
- The Rachel Carson EcoVillage is a multigenerational cooperative community under development in Gibsonia. The 35 units and common facilities whose design is Passive House certified will help residents cultivate a low-energy, low-carbon lifestyle while contributing positively to the health and resilience of natural ecosystems.

22 30 Years of Green Building Alliance

HIGHER EDUCATION

At colleges and universities, students must meet the challenge of navigating a constantly changing world both in and out of the classroom. These colleges and universities are often on the cutting edge of research in many facets of the green building landscape. As microcosms of the communities around them, higher education institutions also allow students to implement and critically examine sustainability solutions. In particular, these colleges and universities in the region incorporate sustainability into their buildings, academics, and culture.



CMU Collaborative Innovation Center

Allegheny College (Crawford County):

- Carr Hall Renovations, LEED Gold
- North Quad Housing Phase 1, LEED Certified
- North Village Phase 2, LEED Gold

Carlow University (Allegheny County):

Pittsburgh 2030 District
Property Partner

University Commons, LEED Silver

Carnegie Mellon University (Allegheny County):

Higher Education Climate
Consortium Partner

Pittsburgh 2030 District
Property Partner

Oakland Energy
Master Plan Partn

- 300 and 407 S. Craig Street: LEED Silver
- 4721 Fifth Avenue: LEED Gold
- ANSYS Hall: LEED Gold
- Carnegie Mellon Cafe: LEED Gold
- Cohon Center Addition: LEED Silver
- Doherty Hall Renovation and Phase II: LEED Silver
- Fifth & Clyde Residence Hall: LEED Gold
- Gates and Hillman Centers: LEED Gold
- GSIA First Floor and West Entry Addition:
 LEED Silver; LEED Gold
- Hamburg Auditorium: LEED Gold
- Hamerschlag Hall Maker Wing: LEED Gold
- Henderson House: LEED Silver
- Mehrabian Collaborative Innovation
 Center: LEED Gold
- Mellon Institute Imaging Facility: LEED Silver
- Porter Hall 100: LEED Silver
- Posner Center: LEED Certified

- RIDC Mill 19 Buildings A&B: LEED Gold;
 AIA COTE Top 10 Award 2023
- Scott Hall: LEED Gold
- Stever House Residence Hall: LEED Silver; Pennsylvania Governer's Award for Environmental Excellence
- Tata Consultancy Services Hall, North: LEED Gold
- TCS Hall: LEED Gold
- Tepper Quad: LEED Gold

Chatham University (Allegheny County)

Pittsburgh 2030 District Property Partner

- **Dairy Barn**: LEED Platinum
- Eastside Interior: LEED Silver
- Eden Hall Campus: PEER Certification;
 AIA COTE Top 10 Award 2017
- Esther Barazzone Center: LEED Platinum
- **Field Lab**: LEED Platinum
- Orchard Hall: LEED Platinum

The Esther Barazzone Center at Eden Hall



Building a Sustainable Future



CMU ANSYS Hall

PennWest Clarion (Clarion County):

- Campus & Valley View Suites: LEED Silver
- Clarion Biotechnology Center: LEED Gold
- Science & Technology Center: LEED Gold
- Tippins Gym Renovation & Addition: LEED Certified

Duquesne University (Allegheny County):

Higher Education Climate
Consortium Partner

Pittsburgh 2030 District Property Partner

- Des Places Residence Hall: LEED Gold
- Power Center: LEED Silver

PennWest Edinboro (Erie County):

- Institute for Human Services & Civility: LEED Gold
- Student Housing Phase I: LEED Silver

Indiana University of Pennsylvania (Indiana County):

Student Housing Phases 1 through 4 and Northern Suites: LEED Certified

Penn State University:

- Penn State Beaver Michael Baker
 Hall: LEED Silver (Beaver County)
- Penn State Behrend Trippe Residence
 Hall: LEED Silver (Erie County)
- Penn State Center Higher Education Climate Consortium Partner (Allegheny County)
- Penn State Erie Metzgar Admissions & Alumni Center: LEED Certified (Erie County)
- Penn State University Greater Allegheny
 Ostermayer Lab Renovation: LEED
 Gold (Allegheny County)

Point Park University (Allegheny County):

Higher Education Climate
Consortium Partner

Pittsburgh 2030 District Property Partner

George Rowland White Performance
Center: LEED Gold

Robert Morris University (Allegheny County):

School of Nursing and Health Sciences: LEED Silver

Slippery Rock University (Butler County):

- Macoskey Center for Sustainability
 Education & Research: LEED Silver
- Robert M. Smith Student Center: LEED Silver
- Student Housing Phase 2: LEED Certified

St. Vincent's College (Westmoreland County):

- Dupre Science Pavilion: LEED Gold
- Fred M. Rogers Center: LEED Gold
- Latimer Library: LEED Silver

Thiel College (Mercer County):

Thiel Peddas Communication Center: LEED Silver

University of Pittsburgh Greensburg Life Sciences Building



University of Pittsburgh:

Higher Education Climate Consortium Partner

Pittsburgh 2030 District
Property Partner

Oakland Energy Master Plan Partner

- Benedum Hall Phase 1 and Phase 2a: LEED Gold; LEED Silver (Allegheny County)
- **Biomedical Sciences Building**, 12th Floor Renovations: LEED Gold (Allegheny County)
- Chevron Annex: LEED Gold (Allegheny County)
- Clapp Hall Renovation: LEED Silver (Allegheny County)
- Graduate School of Public Health
 Addition and Renovations: LEED Certified;
 LEED Silver (Allegheny County)
- Mark A. Nordenberg Hall: LEED Silver (Allegheny County)
- Mascaro Center for Sustainable Innovation (Benedum Annex); LEED Gold (Allegheny County)
- McGowan Institute for Regenerative
 Medicine: LEED Gold (Allegheny County)
- Mid Campus Research Complex, Nuclear Physics Lab Renovation: LEED Silver (Allegheny County)
- Salk Hall Pavilion: LEED Silver (Allegheny County)
- Salk Hall Renovation: LEED
 Platinum (Allegheny County)
- University of Pittsburgh Bradford Livingston
 Alexander House: LEED Silver (McKean County)
- University of Pittsburgh Greensburg– Frank A.
 Cassell Hall: LEED Gold (Westmoreland County)
- University of Pittsburgh Greensburg Life Sciences
 Building: LEED Silver (Westmoreland County)
- University of Pittsburgh Johnstown Health
 Sciences Building: LEED Gold (Cambria County)
- University of Pittsburgh Johnstown –
 John P. Murtha Center for Public Service:
 LEED Certified (Cambria County)

HEALTHCARE

While operating healthy buildings may seem intuitive for a healthcare institution, it can seem daunting to balance the high stakes of keeping a fragile population well with the need to operate sustainably and conserve resources. Nevertheless, a healthcare facility can achieve that delicate and necessary balance. These Western Pennsylvania health clinics, hospitals, and offices are contributing to both a healthy human population and a healthy environment.



UPMC Children's Hospital

Highmark Health:

Pittsburgh 2030 District
Property Partner

- Several Highmark properties are LEED and ENERGY STAR certified, and six are WELL Health-Safety rated.
- Highmark's Fifth Avenue Place was awarded with the GBA Emerald Evening Vanguard Award in 2021.
- Highmark is a three-time winner in the Large Company category of the Sustainable Pittsburgh Challenge and is a Bike Friendly Business designated by the League of American Bicyclists.

University of Pittsburgh Medical Center (UPMC):

Pittsburgh 2030 District
Property Partner

Erie 2030 District
Property Partner

Oakland Energy Master Plan Partner The following UPMC Healthcare sites have either LEED or ENERGY STAR certifications (in Allegheny County unless otherwise noted):

- UPMC East
- UPMC East Emergency Department Expansion
- UPMC Executive and Administrative Offices
- UMPC Harbor Gardens, 4th Floor
- UMPC Hampton Outpatient Center
- UPMC Magee Women's Hospital Expansion
- UPMC Melwood Avenue Technology Center
- UPMC New Kensington Family Health Center (Westmoreland County)
- UPMC Northwest Hospital (Venango County)
- UPMC Passavant Pavilion
- UPMC Presbyterian, 12th Floor
- These UPMC's offices in the U.S. Steel Tower are LEED certified at the Silver or Gold levels and are WELL Health-Safety rated: Floors 4–9, 11, 12, 14, 25, 31, 36, 37, 40–42, and 55.
- UPMC Children's Hospital of Pittsburgh has multiple LEED certifications and was ranked in the Top 10 Most Beautiful Hospitals in 2010 and 2012.

Other Healthcare Highlights:

Project Name	Certifications	Owner	County
Abie Abraham VA Healthcare Center	LEED Silver	Cambridge Healthcare Solutions	Butler
East End Veterinary Medical Centre	LEED Certified	East End Veterinary	Allegheny
VAPHS – H.J. Heinz Div. Central Building	LEED Silver	VA Pittsburgh Healthcare System	Allegheny
Aetna – Green Tree	ENERGY STAR	Diversified Healthcare Trust	Allegheny
Aetna – Moon Township	ENERGY STAR	Aetna Life NGKF	Allegheny
Allegheny Health Network – Wexford Health & Wellness Pavilion	LEED Certified	Allegheny Health Network	Allegheny
Centre Commons	ENERGY STAR	Diversified Healthcare Trust	Allegheny
Core – Broznick Surgery and Research Pavilion	LEED Silver	CORE	Allegheny
Pittsburgh Skilled Nursing & Rehabilitation Center	ENERGY STAR	Weltower	Allegheny
Shadyside Nursing & Rehab Center	ENERGY STAR	Weltower	Allegheny

Building a Sustainable Future

INSTITUTIONAL:

Government, Cultural, Non-Profit, and Religious Entities

A region's institutions set the standard for its citizens – government, cultural, and religious buildings reflect a society's values and communicate its identity across time. Non-profit organizations often work behind the scenes to make the world a better place, but their missions for good and thoughtful stewardship of funds often lead them to seek out sustainable building practices when considering their spaces. The following institutions are serving, educating, and inspiring their communities through healthy and high-performing spaces.



California DEP Office in Cambria County

Project Name	Certifications	Owner	County
151571–Pittsburgh ARS Reserve Lodge Phase I	LEED Gold	Army Corps of Engineers	Allegheny
Alcosan – Customer Service and Training Building	LEED Gold	Allegheny County Sanitary Authority	Allegheny
Alcosan – O&M Building	LEED Certified	Alcosan	Allegheny
August Wilson Center for African American Culture	LEED Certified	August Wilson Center	Allegheny
Bottle Works	LEED Silver	ARTworks Johnstown	Cambria
Butler Intermodal Transit Facility	LEED Silver	Undisclosed	Butler
CATA Inter-Modal Transit Center	LEED Silver	Undisclosed	Crawford
CCI Center	LEED Gold; ENERGY STAR; AIA COTE Top 10 Award 1999; Governor's Award for Environmental Excellence	Conservation Consultants Inc.	Allegheny
Cedars Community Hospice Facility	LEED Gold	Monroeville Christian Judea Foundation	Allegheny
Citizenship & Immigration Services	LEED Silver	Undisclosed	Allegheny
City County Building*	ENERGY STAR	Allegheny County	Allegheny
Community Opportunities Building	LEED Silver	Fayette County Community Action Agency	Fayette
CORO Pittsburgh Terminal Offices	LEED Gold	CORO	Allegheny
D.G.S. 575-4, SCI Pine Grove	LEED Certified	Pennsylvania Department of General Services	Indiana
David L. Lawrence Convention Center*	LEED Gold; LEED Platinum	Sports & Exhibition Authority	Allegheny
DCNR Bureau of Forestry – Clarion Resource Management Center	LEED Certified	DCNR Bureau of Forestry	Clarion
DEA Pittsburgh District Office	LEED Silver	DEA	Allegheny
Delaware Water Gap Welcome Center	LEED Silver	Pennsylvania Department of General Services	Fayette

Building a Sustainable Future

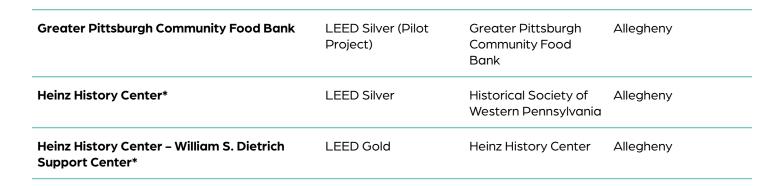
Department of Environmental Protection – Cambria Office	LEED Gold; AIA COTE Top 10 Award 2000	PA Department of Environmental Protection	Cambria
Department of Environmental Protection – California Office Building	LEED Gold	MBC Properties	Washington
Department of Environmental Protection – Northwest Region	ENERGY STAR	Redevelopment Authority of the City of Meadville	Crawford
East End Cooperative Ministry – Community House	LEED Platinum	East End Cooperative Ministry	Allegheny
eCenter@LindenPointe Business Incubator	LEED Silver	City of Hermitage	Mercer
Edgewood Group Home	LEED Certified	Human Service Center	Lawrence
Elk County Courthouse	ENERGY STAR	Elk County	Elk
Elk County Visitor's Center	LEED Gold	Elk County	Elk
Erie Art Museum*	LEED Gold	Erie Art Museum	Erie
Felician Sisters Convent & School	LEED Gold	Felician Sisters of Pennsylvania	Allegheny
Flight 93 National Memorial – Phase 1B	LEED Gold	Department of Interior National Park Service	Somerset
Frank Sarris Public Library	LEED Silver	Undisclosed	Washington
Frick Environmental Center*	LEED Platinum; Living Building Challenge Certified; AIA COTE Top 10 Award 2019	Pittsburgh Parks Conservancy	Allegheny

eCenter@LindenPointe

Erie Art Museum







Master Builders Association







Human Services Center Building	ENERGY STAR	Human Services Center	Lawrence
Kaufmann Program Center – Renovation	LEED Silver	ACH Clear Pathways	Allegheny
Keystone Elk County Alliance Classroom	LEED Gold	Keystone Elk Country Alliance	Elk
Kinzua Bridge State Park – Visitor's Center	LEED Silver	Department of Conservation & Natural Resources	McKean
Master Builders' Association Headquarters	LEED Gold	Master Builders' Association of Western Pennsylvania	Allegheny
McGinnis Education Center – Boy Scouts	LEED Silver	Boy Scouts of America Greater Pittsburgh Council	Allegheny
McKeesport Social Security Administrative Building	LEED Silver	Undisclosed	Allegheny
Millvale Boathouse & Training Center	LEED Certified	Three Rivers Rowing Association	Allegheny

Moorehead Federal Building*	LEED Silver; ENERGY STAR	General Services Administration	Allegheny
National Aviary – Four Seasons Pavilion*	LEED Silver	National Aviary	Allegheny
National Aviary – Garden Room*	LEED Gold	National Aviary	Allegheny
North Side Christian Health Center	LEED Silver	Undisclosed	Allegheny
North Street SRO	LEED Certified	Human Services Center	Allegheny
Ohiopyle State Park Visitor's Center	LEED Gold	Pennsylvania Department of Conservation & Natural Resources	Fayette
PA State Police – Everett Barracks	LEED Silver	Pennsylvania Turnpike Commission	Bedford
Park Sheldon Community Center	LEED Certified	Undisclosed	Allegheny
Pittsburgh Children's Museum Expansion*	LEED Silver	Children's Museum of Pittsburgh	Allegheny
Pittsburgh Children's Museum – MuseumLab*	LEED Gold; isUD (Universal Design)	Children's Museum of Pittsburgh	Allegheny
Pittsburgh Glass Center	LEED Gold; AIA COTE Top 10 Award 2005	Pittsburgh Glass Center	Allegheny
Pittsburgh Opera	LEED Silver	Pittsburgh Opera	Allegheny
Pittsburgh Theological Seminary – Barbour Library Renovation	LEED Certified	Pittsburgh Theological Seminary	Allegheny
PNC Park – Gold 1 Garage*	Parksmart Gold	Stadium Authority of the City of Pittsburgh	Allegheny
PPG Paints Arena*	LEED Gold	Sports & Exhibition Authority	Allegheny
Presque Isle Center	LEED Silver	Undisclosed	Erie
Regional Interpretive Center at Bear Run	LEED Certified	Western Pennsylvania Conservancy	Fayette
Regional Learning Alliance at Cranberry	LEED Silver	Regional Learning Alliance	Butler
Sarah Heinz House	LEED Gold	Undisclosed	Allegheny

Sisters of St. Joseph ENERGY STAR; HERS Trek Development Beaver Rated





Regional Learning Alliance

Six & Kane

Six & Kane	EnerPHit Plus (Passive House)	West Penn Power Sustainable Energy Fund	McKean
Social Security Administration – McKeesport	LEED Silver	Strategic Concepts in Engineering Ltd.	Allegheny
Sports & Exhibition Authority Office*	LEED Platinum	Sports & Exhibition Authority of Pittsburgh	Allegheny
Steel City Rowing Club – Boathouse	LEED Gold	Steel City Rowing Club	Allegheny
System–Wide Fare Collections Warehouse	LEED Gold	Undisclosed	Bedford
The Barn at Fallingwater	LEED Silver; AIA COTE Top 10 Award 2005	Western Pennsylvania Conservancy	Fayette





The Barn at Fallingwater

The Felician Sisters Convent

The Midwife Center - Addition	LEED Silver	The Midwife Center	Allegheny
The Pittsburgh Project	LEED Gold	The Pittsburgh Project	Allegheny
Tom Ridge Environmental Center*	LEED Silver	PA Department of Construction and Natural Resources	Erie
Uniontown Army Reserve Center	LEED Silver	Undisclosed	Westmoreland
US District Court – Western District of PA*	LEED Certified; ENERGY STAR	General Services Administration	Allegheny
VA Pittsburgh CARES – Admin Building	LEED Silver	Department of Veterans Affairs	Allegheny
VAPHS - H.J. Heinz Division ACC Building 71	LEED Silver	Department of Veterans Affairs	Allegheny
VAPHS – University Drive Consolidation Building 29	LEED Silver; ENERGY STAR	Department of Veterans Affairs	Allegheny
VAPHS – University Drive Research Office Building	LEED Silver	Department of Veterans Affairs	Allegheny
WESA and WYEP Radio Station	LEED Silver	Pittsburgh Community Broadcasting	Allegheny

Westmoreland Museum of American Art – East Wing Addition	LEED Silver	Westmoreland Museum of American Art	Westmoreland
Women's Center & Shelter of Greater Pittsburgh	LEED Silver	Women's Center & Shelter of Greater Pittsburgh	Allegheny
Women's Humane Society	1997 Governor's Award for Environmental Excellence	Women's Humane Society	Allegheny
YMCA – Thelma Lovette	LEED Silver	YMCA of Greater Pittsburgh	Allegheny
Youth Enterprise Zone	LEED Silver	Boys & Girl's Club of Western Pennsylvania	Allegheny

Carnegie Libraries of Pittsburgh:

Pittsburgh 2030 District Property Partner

- **Brookline**: LEED Certified
- Allegheny: LEED Silver
- Carrick: PHIUS (Passive House) Certified
- **East Liberty**: LEED Silver
- **Hill District**: LEED Silver; AIA Pgh Certificate of Merit for Design Excellence 2009
- South Side: LEED Silver
- Squirrel Hill: LEED Silver
- Woods Run: LEED Silver

Carnegie Museums of Pittsburgh:

Pittsburgh 2030 District
Property Partner

Dakland Energy Master Plan Partner

- Carnegie Museum of Natural History
- Dinosaur Exhibit: LEED Silver

- Carnegie Science Center PPG
 Science Pavilion: LEED Gold
- Carnegie Science Center SportsWorks: LEED Certified

Phipps Conservatory & Botanical Gardens:

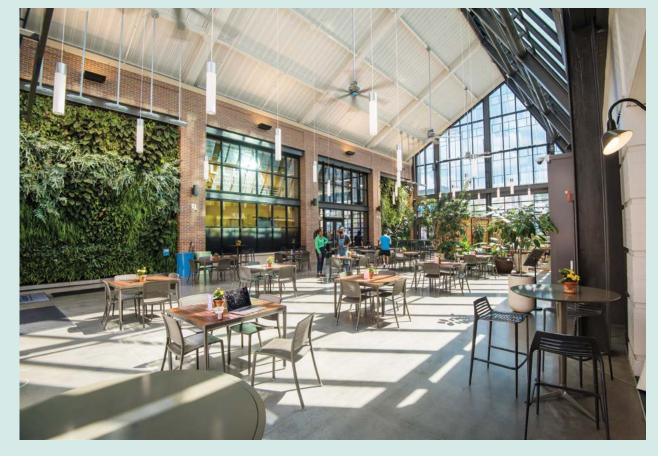
Pittsburgh 2030 District Property Partner

lakland Energy laster Plan Partner

- Center for Sustainable Landscapes: LEED Platinum;
 WELL Platinum; Living Building Challenge Certified,
 SITES Platinum, Zero Energy, Fitwell 3–Star, BREAMM
 Outstanding In–Use; COTE AIA Top 10 Award 2016
- **Exhibit Staging Center**: LEED Platinum; WELL Platinum; Living Building Challenge Certified
- Production Greenhouse: LEED Platinum
- Welcome Center: LEED Silver

COMMERCIAL and INDUSTRIAL

Building sustainably allows businesses to lead by example and can inspire organizations across industries to adopt environmentally friendly building practices. Additionally, investing in building green up front leads to long-term cost savings through increased energy efficiency. The private sector throughout Western Pennsylvania has demonstrated that green buildings and sustainable development make good business sense and contribute to the economic health of the region. These commercial and industrial buildings pave the way for all businesses to operate out of high-performing spaces and demonstrate their commitment to a clean and green future.



Bakery Square

Project Name	Certifications	Owner	County
11 Stanwix	LEED Gold; ENERGY STAR	11 Stanwix LLC	Allegheny
1600 Smallman Street	LEED Gold	McCaffery Interests Inc.	Allegheny
20 Stanwix*	ENERGY STAR	M & J Wilkow LLC	Allegheny
2000 & 3000 Park Lane*	LEED Certified; ENERGY STAR	CBRE Inc.	Allegheny
3R Sustainability	LEED Gold; WELL Health-Safety Rated	SRI Quality System Registrar	Allegheny
411 Seventh Avenue*	ENERGY STAR	411 Seventh Avenue Associates LP	Allegheny
415 & 501 Holiday Drive	ENERGY STAR	HRPT Properties Trust	Allegheny
661 & 680 Andersen Drive	ENERGY STAR	HRPT Properties Trust	Allegheny
800 Cranberry Woods Drive	ENERGY STAR	McKnight Cranberry LP	Butler
Alcoa Corporate Center*	LEED Silver	Alcoa	Allegheny
Aldi – Carnegie	ENERGY STAR	Food Lion Corporation	Allegheny
AmeriServ Financial Corporate Headquarters	ENERGY STAR	AmeriServ Financial	Cambria
Apple - Pittsburgh	LEED Gold; WELL Health-Safety Rated	Apple	Allegheny
Ardagh Group – Port Allegany	ENERGY STAR	Ardagh Glass Inc.	McKean
Bakery Square – Nabisco Building; New Retail, & Bakery Square 2.0 – A*	LEED Platinum; LEED Silver; LEED Gold	Bakery Square Holdings	Allegheny
Bayer Corporation – Building 14	LEED Gold; ENERGY STAR	Bayer Corporation	Allegheny
Brockway Plant 18	ENERGY STAR	Owens-Brockway Container Glass, Inc.	Jefferson
Buchanan Ingersoll & Rooney – Pittsburgh	LEED Certified	Buchanan Ingersoll & Rooney PC	Allegheny
Building 6	LEED Pilot Project	Soffer Organization	Allegheny
Castcon Stone	LEED Silver	Castcon Stone Inc.	Butler

Building a Sustainable Future

CBRE - Pittsburgh*	LEED Certified	CBRE	Allegheny
Celli-Flynn Brennan Offices (now Buchart Horn)	LEED Silver	Celli–Flynn Brennan Architects	Allegheny
Cemex	ENERGY STAR	Cemex USA	Lawrence
Concord Sierra Hotel Pittsburgh – Smallman Street	LEED Certified	Concord Sierra Hotel Partners	Allegheny
Consol Energy – CNX Center	LEED Certified	Horizon Properties	Washington
Consol Energy – Corporate Headquarters	LEED Certified	Horizon Properties	Washington
Courtyard Marriot –Washington Meadowlands	LEED Certified	Concord Hospitality Enterprises	Washington
Courtyard Marriott – Pittsburgh Airport	ENERGY STAR	Marriott International Inc.	Allegheny
Crossroads Center*	LEED Certified	Millcraft Industries	Washington
Deloitte - Pittsburgh	LEED Certified	Deloitte Services	Allegheny
Desmone Architects	WELL Certified Gold	Desmone Architects	Allegheny
Dick's Sporting Goods – Robinson	ENERGY STAR	Dick's Sporting Goods	Allegheny
Dick's Sporting Goods Corporate HQ	LEED Certified	Horizon Properties Group LLC	Allegheny
DMI Industries – Charleroi*	ENERGY STAR; TRUE Zero Waste	DMI Industries	Washington
Dominion Transmission – Western HQ	LEED Silver	Dominion Transmission	Westmoreland
Eastside – Building C	LEED Gold	The Mosites Company	Allegheny
Eastside III – East , Middle, and West Buildings	LEED Gold	The Mosites Company	Allegheny
Eaton – ESS HQ Cherrington	LEED Silver	Eaton	Allegheny
Eaton – Technical Center	LEED Gold	Eaton	Allegheny
Eco Bistro	LEED Certified	PNC/Parkhurst	Allegheny
Energy Innovation Center*	LEED Platinum	Pittsburgh Gateways	Allegheny
EQT Plaza*	ENERGY STAR	Highwoods Properties	Allegheny
Erie Insurance – Warrendale	ENERGY STAR	Erie Insurance Company	Allegheny

evolveEA	LEED Platinum	evolveEA	Allegheny
Express Scripts – Pharmacy	LEED Certified	Clayco, Inc.	Westmoreland
Fairmont Hotel*	LEED Gold	PNC Financial Services	Allegheny
Federal Reserve Bank of Cleveland – Pittsburgh	ENERGY STAR	Federal Reserve Bank of Cleveland	Allegheny
Fidelity Investments – Mt. Lebanon	Green Globes Certified	Fidelity Investments	Allegheny
Forbes at Coltart Office Building*	LEED Gold	Murland Associates LP	Allegheny
Google Headquarters at Bakery Square	LEED Certified	Google	Allegheny
Graybar	ENERGY STAR	Graybar	Allegheny
H.F. Lenz Company – Johnstown	ENERGY STAR	H.F. Lenz Company	Cambria
Hampton Inn & Suites – Settler's Ridge	LEED Certified	Concord Hospitality Enterprises	Allegheny
Hilton Garden Inn – Downtown Pittsburgh*	LEED Certified	Millcraft Industries	Allegheny
Homewood Suites - Moon Township	LEED Certified	Concord Hospitality Enterprises	Allegheny
Homewood Suites – Smallman Street	LEED Certified	Smallman Hotel Associates LP	Allegheny



RIDC Mill 19



interARCHITECTURE

40 Building Alliance Building a Sustainable Future

LEED Certified	Oxford Concord Sierra Southside Assets LP	Allegheny
LEED Certified	Oxford Concord Sierra Southside Assets LP	Allegheny
ENERGY STAR	LSREF3/AH Chicago Tenant LLC	Butler
LEED Certified	IKM Inc.	Allegheny
LEED Certified	Innovation Center Associates LP	Allegheny
LEED Gold	inter*ARCHITECTURE	Allegheny
LEED Gold	MetLife (Bridgewater)	Cambria
LEED Silver	Jones Lang LaSalle IP Inc.	Allegheny
LEED Gold	Clearview Project Services	Allegheny
LEED Certified	Ross Development Company	Allegheny
ENERGY STAR	Kmart Corporation	Mercer
ENERGY STAR	Sears Holding Management Corporation	Allegheny
LEED Silver	KPMG LLP	Allegheny
LEED Certified (LEED Pilot Project)	Lawrenceville Development Corporation	Allegheny
	LEED Certified ENERGY STAR LEED Certified LEED Gold LEED Gold LEED Gold LEED Gold LEED Gold LEED Silver LEED Certified ENERGY STAR ENERGY STAR LEED Silver LEED Silver	LEED Certified Oxford Concord Sierra Southside Assets LP ENERGY STAR LSREF3/AH Chicago Tenant LLC LEED Certified IKM Inc. LEED Certified Innovation Center Associates LP LEED Gold inter*ARCHITECTURE LEED Gold MetLife (Bridgewater) LEED Silver Jones Lang LaSalle IP Inc. LEED Gold Clearview Project Services LEED Certified Ross Development Company ENERGY STAR Kmart Corporation ENERGY STAR Sears Holding Management Corporation LEED Silver KPMG LLP LEED Certified Lawrenceville Development

LIP III Building 900



Penn Center Boulevard Building 6



L.L. Bean – Pittsburgh	LEED Silver	L. L. Bean	Allegheny
Lamar Advertising – Pittsburgh	LEED Certified	TLC Properties	Allegheny
Lindy Paving	LEED Silver	Lindy Paving	Beaver
LIP III Building 900	LEED Certified	Chapman Properties	Allegheny
Local 95	ENERGY STAR	International Union of Operating Engineers Local 95	Allegheny
Market Square Place	LEED Gold	Undisclosed	Allegheny
Massaro Office – Addition	LEED Certified	Massaro Corporation	Allegheny
MAYAspace	LEED Certified	MAYA	Allegheny
MEDRAD – Global Center	LEED Gold	Bayer Healthcare – Medrad Inc.	Allegheny
MEDRAD – Saxonburg	LEED Certified	Bayer Healthcare – Medrad Inc.	Butler
Mylan Inc – Robert J. Coury Global Center	LEED Certified	Mylan Inc.	Washington
New CJL Engineering Building	LEED Silver; ENERGY STAR	CJL Engineering	Cambria
NOVA Chemicals – Coraopolis	ENERGY STAR	Dicicco Development	Allegheny
One Main Financial – North Huntingdon–Irwin	LEED Certified	One Main Financial	Westmoreland
One Oxford Centre*	LEED Gold	Undisclosed	Allegheny
One PPG Place*	LEED Certified; ENERGY STAR	Highwoods Properties	Allegheny
PACEC - Rosslyn Commons	LEED Certified	PACEC LLC	Allegheny
Paramount Senior Living – Peters Township	LEED Silver	Paramount Senior Living	Washington
Park Place I & II*	LEED Gold; ENERGY STAR	CBRE	Allegheny
Parkway Center – Buildings 1, 9, & 10	ENERGY STAR	PWC Associates	Allegheny
Penn Center West Technology Center	LEED Pilot Project	The Soffer Organization	Allegheny
Penn29	LEED Gold	Penn29 LLC	Allegheny
Perkins Eastman – Pittsburgh Studio	LEED Gold	Perkins Eastman	Allegheny

Pitt Ohio Trucking Terminal & Offices	LEED Gold	Pitt Ohio	Allegheny
Pocket Nurse	Green Globes Certified	Pocket Nurse Enterprises	Beaver
Produce Terminal Redevelopment	LEED Silver	Pittsburgh Urban Redevelopment Authority	Allegheny
Range Resources – Marcellus	LEED Certified	Horizon Properties, Southpointe North	Washington
Reed Smith LLP	LEED Gold	Reed Smith LLP	Allegheny
REI – East Coast Distribution Facility	LEED Silver	Recreational Equipment Incorporated	Bedford
REI – Southside Works	LEED Silver	Recreational Equipment Incorporated	Allegheny
Residence Inn Marriott – Pittsburgh	LEED Certified	Undisclosed	Allegheny
RIDC – Corporate Center*	ENERGY STAR	RIDC	Allegheny
RIDC – Mill 19*	LEED Gold; AIA COTE Top Ten Award 2023	RIDC	Allegheny
Rosslin Commons	LEED Certified	Pace	Allegheny
Sheetz – Center for Shwellness	LEED Gold	Sheetz, Inc.	Blair
Shop N' Save – Bethel Park, Carnegie, Lawrenceville, & Westwood Locations	ENERGY STAR	SuperValu Inc.	Allegheny
Sota Construction – Office Expansion	LEED Platinum	Sota Construction Services Inc.	Allegheny
Southpointe – Town Square Building	LEED Silver	Southpointe II Town Square Building LP	Washington
Southpointe II – Buildings 1 & 2*	LEED Certified	Burns & Scalo	Washington
SpringHill Suites – Latrobe	LEED Certified	Concord Hospitality Enterprises	Westmoreland
Springhill Suites – Southside Works	ENERGY STAR	Garrison Pittsburgh Southside OpCO LLC	Allegheny
	LEED Gold; WELL	Tanger Outlet Centers	Washington

Technical Learning Center – Erie Insurance*	LEED Gold	Erie Insurance Company	Erie
The Greater Johnstown Tech Park	LEED Silver	Conemaugh Health System	Cambria
The Highline – West Tower & Garage*	LEED Certified	McKnight Realty Partners	Allegheny
The Lot at Edgewater	LEED Certified	Undisclosed	Allegheny
The New Century Building	LEED Gold	Undisclosed	Allegheny
The Penguin Bookshop	LEED Certified	Janet & Bud McDanel	Allegheny
The Roundhouse	LEED Gold	Almono LLC	Allegheny
Thorp Reed and Armstrong	LEED Certified	Thorp Reed and Armstrong	Allegheny
Three – Six PPG Place*	ENERGY STAR	Highwoods Properties	Allegheny
Tower Two Sixty*	LEED Silver	Millcraft Industries	Allegheny
Transplace – Moon Township	ENERGY STAR	CommonWealth REIT	Allegheny
Union Trust Building*	LEED Silver; ENERGY STAR	The Davis Companies	Allegheny
United Steelworkers*	LEED Certified	United Steelworkers	Allegheny
US Steel – Research & Technology Center	LEED Certified	United States Steel Corporation	Allegheny
US Steel Tower*	LEED Silver; WELL Health-Safety Rated; ENERGY STAR	Winthrop Management	Allegheny
VA Human Engineering Resources Lab*	LEED Silver	Walnut Capital	Allegheny
Valesky's	ENERGY STAR	Valesky's	Crawford
Verizon – Cranberry	ENERGY STAR	Verizon Wireless	Butler
Verizon – Greensburg & North Huntingdon	ENERGY STAR; LEED Gold	Verizon Wireless	Westmoreland
Verizon – McKnight Rd., Monroeville, North Hills	ENERGY STAR	Verizon Wireless	Allegheny
Weis – Altoona	ENERGY STAR	Weis Markets	Blair
Western PA Operating Engineers Apprenticeship Training Facility	LEED Certified	Western Pennsylvania Operating Engineers	Westmoreland

LEED Certified; ENERGY STAR	Westinghouse Electric Company, LLC	Butler
LEED Gold	DiCicco Development	Allegheny
Green Globes Certified	NorthPoint Development	Allegheny
LEED Certified	Burns & Scalo	Washington
	ENERGY STAR LEED Gold Green Globes Certified	ENERGY STAR Electric Company, LLC LEED Gold DiCicco Development Green Globes Certified NorthPoint Development

Bank of America:

Six LEED Certified branches and one LEED Gold branch in Allegheny County.

Bank of New York Mellon:

Pittsburgh 2030 District
Property Partner

- ENERGY Star and LEED certifications (Silver, Gold, and Platinum) for Floors 7, 27, 30, 32, and 33 at One Mellon Center
- 525 and 526 William Penn Place: LEED Gold and Silver

Giant Eagle:

Pittsburgh 2030 District Property Partner

- 61 ENERGY STAR locations in Allegheny, Beaver, Fayette, Mercer, Indiana, Cambria, Armstrong, Westmoreland, Washington, Lawrence, Blair, and Erie Counties.
- One LEED Certified, two LEED Silver, one LEED Gold store location, and two LEED certified GetGo locations all in Allegheny County.

Huntington Bank:

15 ENERGY STAR locations in Allegheny, Mercer, Lawrence, Beaver, and Butler Counties.

JC Penney:

14 ENERGY STAR locations in Allegheny, Mercer, Westmoreland, Clearfield, Venango, Erie, Cambria, Clarion, and Erie Counties.

JP Morgan Chase:

26 WELL Health–Safety Rated locations throughout Allegheny County.

Kohl's:

15 ENERGY STAR locations, four LEED Certified, and one LEED Silver location in Allegheny, Blair, Butler, Erie, Mercer, Indiana, Beaver, Westmoreland, and Washington Counties.

PNC Financial Services:

Pittsburgh 2030 District Property Partner

- PNC Firstside Center: LEED Silver; COTE Award 2001
- One PNC Plaza LEED certifications and ENERGY STAR on Floors 10, 14, 25, 26, 30
- Two PNC Plaza: LEED Silver, ENERGY STAR
- Three PNC Plaza Offices: LEED Gold
- The Tower at PNC Plaza: LEED Platinum
- 45 green bank branches in Allegheny, Washington, Greene, Westmoreland, Erie, Mercer, Armstrong, Lawrence, Fayette, Beaver, Clarion, and Butler Counties including nine LEED Certified, 11 Silver, and 4 Gold certified branches.

Sears Home Services:

10 ENERGY STAR properties in Allegheny, Cambria, Erie, Venango, Westmoreland, and Armstrong Counties.

Staples:

Six ENERGY STAR properties in Allegheny, Cambria, Erie, Clearfield, and Washington Counties.

Starbucks:

15 LEED Certified locations in Allegheny, Westmoreland, Mercer, Butler, and Erie Counties.

Target:

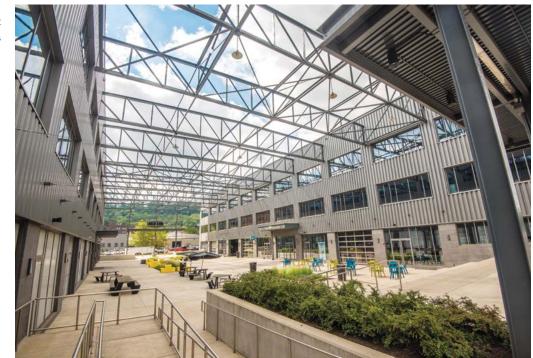
19 locations are ENERGY STAR certified in Allegheny, Washington, Westmoreland, Beaver, Butler, and Blair Counties

Three Crossings:

Pittsburgh 2030 District Property Partner

- The Stacks: LEED Silver; WELL Health-Safety
- The Yards: LEED Gold; WELL Health-Safety
- 2501 Smallman Street: LEED Silver, ENERGY STAR, WELL Health-Safety
- 2555 Smallman Street: LEED Gold;
 WELL Health-Safety Rated
- Riverfront East: LEED Silver; WELL Health-Safety Rated
- **Riverfront West**: LEED Gold; WELL Health-Safety Rated

The Stacks at Three Crossinas



RESIDENTIAL

Sustainable homes support healthy and sustainable lifestyles. Occupants of a green-built home can live in a more environmentally friendly way, sometimes without even having to think about it. The expenses saved through lower utility bills and higher property values allow residents to allocate their spending toward other areas of their lives. Fewer toxins and better indoor air quality mean healthier homes for families. With home-building technology that is constantly innovating, the possibilities for homeowners to build sustainably are endless. Here are some of the greenest homes in Western Pennsylvania.

Gardner Residence



Project Name	Certifications	Owner	County
247 – 249 Larimer Avenue	LEED Platinum	Undisclosed	Allegheny
318 South Street	LEED Silver	Undisclosed	Cambria
5505 Margaretta Street	LEED Gold	Undisclosed	Allegheny
729 Sherman Street	LEED Silver	Undisclosed	Cambria
AJ Stones Renovation	ENERGY STAR	AJ Stones	Allegheny
Allegheny Hills Retirement Residence	LEED Gold	Undisclosed	Clarion
AMR Retirement Residence of Glassport	Passive House Design Certified	Undisclosed	Allegheny
Anti Residence	LEED Certified	Undisclosed	Allegheny
Arneman Place	LEED Certifed	The Woda Group, LLC	Erie
Baumhaus	LEED Silver	Vitmore Baum Holdings	Allegheny
Blackbird Artist's Lofts	LEED Certified	Artists & Cities	Allegheny
Century Building	LEED Gold	Century Housing LP	Allegheny
Cherry Hill Apartments	ENERGY STAR	Cherry Hill Apartments	Erie
Clairton Inn Apartments	HERS Rated, ENERGY STAR	Mon Valley Initiative	Allegheny
Commonwealth Building	Green Globes Certified	Commonwealth Development Partners LLC	Allegheny
East Braddock Housing Development	HERS Rated, ENERGY STAR	Mon Valley Initiative	Allegheny
Eastside Building B	LEED Gold	Undisclosed	Allegheny
Edgewood Group Home	LEED Certified	Human Services Center	Lawrence
Emerald Hills Retirement Residence	Passive House Certified	Undisclosed	Allegheny
Fifth & Dinwiddie – East Side	Fitwel Design Certification	Bridging the Gap Developent	Allegheny
Flagship City Apartments	LEED Silver	Undisclosed	Erie

Building a Sustainable Future 49





Glasshouse Apartments

Lucyna DeBarbaro's Passive House in Squirrel Hill

Forbes Avenue Apartments	LEED Gold	Campus Advantage	Allegheny
Gardner Residence	Passive House Certified, Net Zero Energy Building	J. Gary Gardner, RA,	Beaver
Garfield Glen	HERS Rated, ENERGY STAR	Gatesburg Road Development	Allegheny
Glasshouse Apartments at Station Square	National Green Building Standard Bronze	High Street Residential Station Square Pittsburgh One	Allegheny
Heidelberg Passive House	Passive House Certified	ACTION Housing	Allegheny
Helm on the Allegheny Apartments*	LEED Gold; WELL Health-Safety Rated	Oxford Development Company	Allegheny
Highpoint Towers	Enterprise Green Communities; ENERGY STAR	Beacon Communities LLC	Erie
Hillcrest Senior Residences	Passive House Certified	The Community Builders	Allegheny
Homestead Apartments – Phases II & III	LEED Silver	Trek Development	Allegheny
Homestead Senior Housing – Buildings A & B	LEED Silver	Undisclosed	Allegheny
Lake View Apartments	ENERGY STAR	Maleno Lakeview Apartments, LLC	Erie
Lot 24	LEED Certified	McCaffery Interests, Inc.	Allegheny

McKeesport Downtown Housing	Passive House Design Certified	Undisclosed	Allegheny
Melody Place	HERS Rated Rated	Undisclosed	Armstrong
Middle Hill	Enterprise Green Communities; ENERGY STAR	Keith Key	Allegheny
Mt. Lebanon Senior Housing	Passive House Design Certified	Allegheny County Housing Authority	Allegheny
Negley Neighbors Development	HERS Rated; ENERGY STAR	Gatesburg Road Development	Allegheny
Neighborhood Stabilization Project I and Project II	LEED Gold	Undisclosed	Westmoreland
North East Manor	LEED Silver	Undisclosed	Allegheny
North Hills Highlands – Phase 1	LEED Certified	Ralph A. Falbo, Inc.	Allegheny
North Negley Residences	Passive House Design Certified	Undisclosed	Allegheny
Oak Hill Apartments	HERS Rated; ENERGY STAR	Renewal Housing	Venango
Parade Street Commons East – Building A	Passive House Certified	PSC East LLC	Erie
Perrytown Place	ENERGY STAR	Forest City Realty Trust, Inc.	Allegheny
Pioneer Apartments	LEED Certified; PHIUS Certified	Undisclosed	Westmoreland
Riverside Mews	Net-Zero Energy; ENERGY STAR	Undisclosed	Allegheny
Roxbury Place Apartments	Passive House Certified	Undisclosed	Cambria
Shadow Pines Apartments	ENERGY STAR	Shadow Pines Apartments LLC	Erie
South Hills Retirement Residence	LEED Gold	Undisclosed	Allegheny
Squirrel Hill Duplex	Passive House Certified, National Green Building Standard Gold	Lucyna de Barbaro	Allegheny

Susquehanna Homes	HERS Rated; ENERGY STAR	Gatesburg Road Development	Allegheny
The Bridge on Forbes	LEED Gold	Undisclosed	Allegheny
The Encore on 7th	LEED Certified	Lincoln Property Co.	Allegheny
The Lumiere Residences	LEED Silver	Smithfield Oliver Partners	Allegheny
The Retirement Residence of Plum	LEED Silver	Undisclosed	Westmoreland
The Ridge at Robinson	LEED Silver	Fore Property Company	Allegheny
The Ridge at Robinson – Buildings 1 – 5	LEED Gold	Fore Property Company	Allegheny
The Village on Pacific	ENERGY STAR	Maleno Diversified Properties, LLC	Erie
Third East Hills Affordable Housing	HERS Rated; ENERGY STAR	Telesis Corporation	Allegheny
Thomas Village	HERS Rated; ENERGY STAR	Trek Development	Allegheny
Thompson Greene	LEED Silver	Thompson Greene Limited Partnership	Butler
Three Crossings – The Yards & Apartments*	LEED Gold; WELL Health-Safety Rated	Oxford Development Company	Allegheny
Uptown Lofts	Passive House Certified	ACTION Housing	Allegheny
Westminster Place at Huntingdon	Passive House Certified	Presbyterian Senior Living	Huntingdon
Woodcrest Retirement Residence	LEED Gold	Undisclosed	Allegheny

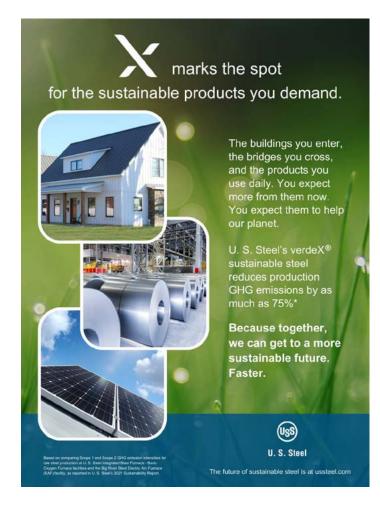


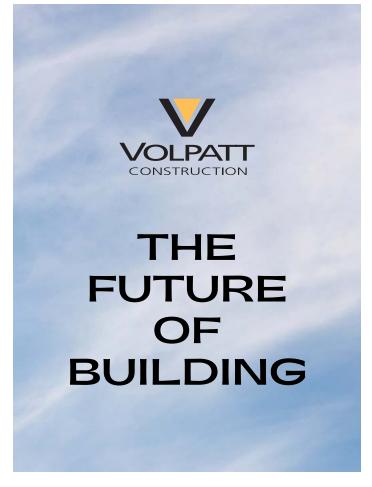
Uptown Lofts

A strong community takes the support of many.











PROUD TO SUPPORT THE

GBA'S 30TH
ANNIVERSARY
EMERALD
EVENING EVENT

PITTSBURGH'S
TRUSTED
CONSTRUCTION
PARTNER SINCE
1989

RYCON Construction Inc.

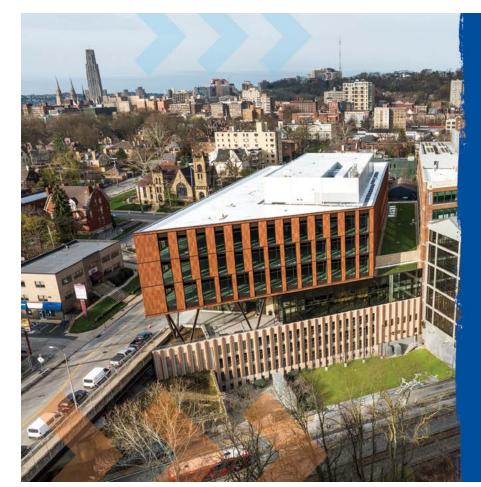
AN ENR TOP 100 GREEN CONTRACTOR

CONGRATULATIONS TO GREEN BUILDING ALLIANCE ON ITS 30TH ANNIVERSARY



We have been proud to partner with Green Building Alliance since 2012 as we focus, collectively, on reducing energy and water and transportation emissions. Our commitment to sustainability has never been stronger thanks to partnerships like ours with GBA. Together, we can meet your vision of a future where every building and community is sustainable so every person can thrive.





The University of Pittsburgh has been a proud supporter of Green Building Alliance for 30 years.

With 1.2 million square feet of LEED certified space across 17 buildings, we are committed to working together to continue to create environmentally friendly, socially just, and economically viable buildings, campuses, and communities.



Our region's 2030 DISTRICTS

In addition to all the buildings and spaces in our region that have achieved certifications through green building rating systems, we would like to recognize a group of properties for their commitments in ongoing operations. Existing buildings are incredibly important to environmental health and human well-being, and they represent a massive percentage of operational energy use and carbon emissions.

The 2030 Districts that GBA facilitates in Erie and Pittsburgh comprise more than 150 Property Partners and 1,000 individual buildings that are committed to 50–65% reductions in carbon emissions by 2030 and carbon neutrality by 2040. Owners and operators representing these buildings meet on a monthly basis to learn strategies, share resources, and help each other meet these goals. GBA's team develops baselines and annual reports for every Property Partner, providing customized technical assistance to share leverage points along the way. GBA's annual 2030 Progress Reports for Erie and Pittsburgh provide a roadmap to guide the group members collectively along the way.

Existing buildings around the world are a critical key to curbing climate change. We are incredibly proud of our region's leadership in this area, and we are grateful to our many partners in the 2030 Districts who work to create healthier and higher-performing spaces every day.



A Creative Space to Inspire Creativity at MuseumLab

2022 DATA 44.8%

CARBON REDUCTION (INCLUDING RECs)

23.2% ENERGY

REDUCTION

30M SQUARE FEET EVALUATED FOR IAQ (2021 DATA) 32.8% WATER

REDUCTION

492,000
METRIC TONS OF CO2e EMISSIONS AVOIDED

\$59.7M

ANNUAL UTILITY
COST SAVINGS

\$393.4M

CUMULATIVE UTILITY

COST SAVINGS



2022 DATA 41.4%

CARBON EMISSIONS REDUCTION (INCLUDING RECs)

16.6% ENERGY REDUCTION

33,000
METRIC TONS OF CO2e AVOIDED

\$3.0M
ANNUAL UTILITY
COST SAVINGS

\$10.4M CUMULATIVE UTILITY COST SAVINGS



TOM RIDGE ENVIRONMENTAL CENTER



MERCYHURST UNIVERSITY



ERIE COUNTY PUBLIC SAFETY BUILDING



HERITAGE APARTMENTS



MOUNT SAINT BENEDICT



ERIE FOOD CO-OP



SISTERS OF ST. JOSEPH

128

BUILDINGS COMMITTED

7.8M
SQUARE FEET COMMITTED

COMMITTED





Looking back at 30 Years of LEADERSHIP

1993

Pittsburgh's Heinz Family Foundation funds the launch of Green Building Alliance (GBA).

GBA hosts its first regional green building conference with 125+ attendees.

1997

Rebecca Flora is hired as GBA's first executive director; she heads GBA for 11 years and later becomes the first female chair of the U.S. Green Building Council.



2003

Pittsburgh hosts the 2nd annual international Greenbuild Conference & Expo at the David L. Lawrence Convention Center.

2005

Pittsburgh is ranked #1 nationally for number and square footage of LEED-certified buildings.

2006

GBA convenes
Pittsburgh's Green
Government Task
Force and oversees
the completion of the
city's first greenhouse
gas inventory.

GBA launches its Green Building Products Initiative (GBPI) to commercialize Pennsylvania green building products.

2007

GBA Launches branches in Northwest PA and Laurel Highlands.

2008

GBA leads the creation and adoption of the Pittsburgh Climate Action Plan, Version 1

2009

GBA creates the first online searchable Pennsylvania Green Building Products Directory.

2010

Erie's Tom Ridge Environmental Center achieves LEED-NC Silver certification.

CJL Johnstown achieves LEED-NC Silver Certification for its new engineering offices.

2011

GBA's two-year Building Performance Case Study of the David L. Lawrence Convention Center is published.



2012

ACTION Housing and Thoughtful Balance break ground on Pittsburgh's first Passive House.

GBA launches its Inspire Speakers Series.



GBA establishes
Pittsburgh as one of
the first ever 2030
Districts along with
Seattle and Cleveland.



GBA formalizes its Green & Healthy Schools Academy.

A.W. Beattie Career Center recieves one of the first national Green Ribbon Schools Award from the U.S. Department of Education.

2013

GBA is local host for the first national 2030 Districts summit.

Larimer's neighborhood plan becomes LEED-ND Silver Certified.

2014

The Erie Art Museum becomes the city of Erie's first LEED Gold certified building (LEED-NC Gold).



Pittsburgh becomes selected as one of 100 Resilient Cities, pioneered by the Rockefeller Foundation to help cities

more resilient.

around the world become

GBA expands its
Green & Healthy
Schools Academy
to West Virginia, and
wins national Green
Schools Award for best
transformation program.



2015

Chatham University opens its Eden Hall Campus to students as a living laboratory for sustainability.

City of Pittsburgh begins its Riverfront Rezoning effort to balance goals of development, riverfront access, equitable open space, improved public safety, and environmental quality.

Ohiopyle State Park Visitors Center acheives LEED-NC GOLD certification.

2016

Pittsburgh becomes the area with the highest concentration of Passive House trainers in the United States.



The Tower at PNC Plaza becomes one of the greenest skyscrapers in the world at the time of construction (LEED-NC Platinum).

GBA launches GPRO training program for facility and operations teams.

The Pennsylvania
Housing Finance
Authority begins
incentivizing Passive
House through its
Low-Income Housing
Tax Credit program.

The City of Pittsburgh enacts a Benchmarking Ordinance requiring large buildings to report their energy and water use annually, encouraging data-driven decisions.

Pittsburgh and GBA host national Green Schools Conference at the David L. Lawrence Convention Center.

Pennsylvania's
Department of
Conservation and Natural
Resources commits
Point State Park to
the 2030 District.



2017

Pittsburgh becomes a Living Product Hub of the International Living Future Institute and home to the Living Products Expo.



GBA offers the Love Your Space cohort to assist non-profit organizations seeking greener, healthier spaces for staff and clients.

Pittsburgh's City
Planning Commission
approves the Uptown
Ecolnnovation District
Plan to create a more
resilient, sustainable,
and healthy Uptown.

2018

Pittsburgh hosts the North American Passive House Network's international Passive House conference.

GBA hosts its first ever Women+ in Green Breakfast.



GBA offers a Biophilic Design Summit to more than 100 practitioners, K-12 school students, and teachers.



Pittsburgh hosts national Getting to Zero Forum with New Buildings Institute.

2019

GBA launches the
Greater Pittsburgh
International Center
of Excellence on High
Performance Building
in collaboration with the
United Nations Economic
Commission for Europe.



GBA launches its Sustainable Communities program.

The Inspire Speakers Series welcomes its 100th speaker to the stage of the Elsie H. Hillman auditorium in the Hill District.

DMI Companies – a former recipient of a GBA Green Building Product Innovation grant – becomes first manufacturing facility in Pennsylvania to achieve a TRUE Zero Waste certification.

GBA launches the Erie 2030 District.

Desmone Architects renovate their office at Two Doughboy Square, achieving WELL Gold certification. Pittsburgh hosts national EcoDistricts Summit for over 300 attendees.

GBA and Homewood Children's Village receive a Kresge Foundation award to join a national cohort focused on climate change, health, and equity in communities.

GBA presents at UNECE's Committee on Sustainable Energy in Geneva, Switzerland.

2020

GBA moves all programming online during COVID-19 and works to support owners and facility managers in navigating building operations during the pandemic.

Hazelwood Green's plan becomes LEED-ND Platinum Certified.

Mill 19 becomes home to the largest single-sloped solar array in the country.

University of Pittsburgh commits to carbon neutrality by 2037.

2021

Western Pennsylvania sends a contingent to Glasgow to participate in COP26, the international climate conference.

Green Building Alliance begins work on the Oakland Energy Master Plan with the City of Pittsburgh, Carnegie Museums, Carnegie Mellon University, University of Pittsburgh, UPMC, Phipps Conservatory, Carlow University, and local utilities.

2022

GBA gathers international thought leaders in a workshop focused on Clean Energy, Climate, and the Built Environment at the Global Clean Energy Action Forum hosted in Pittsburgh.



Pennsylvania is ranked as a Top 10 State for LEED Accredited Professionals.

DCNR commits to using fully renewable energy by 2030.

The Pittsburgh 2030 District's Property Partners achieve a 44.8% reduction in carbon emissions from baseline.

2023

By the time GBA celebrates its 30th anniversary, it has engaged nearly 25,000 participants in events and trainings, impacted 4,800 school teachers and 58,000 students. offered more than 3,000 hours of project technical assistance, directly supported communities, and worked with more than 1.000 buildings in the Erie and Pitsburgh 2030 District.



It turns out you can do a lot with the time you are given, especially when you work together.

Jenna Cramer, President and CEO

A new narrative for our region's MANUFACTURING LEGACY

Better Products Make Better Buildings

The products and materials we use to build healthier and higher performing spaces have – for some time now – been observed as "the next frontier" of the green building industry. While most aspects of sustainable design and construction have evolved to a state of widespread awareness and near market transformation over the past three decades, product specification remains difficult to navigate.

Yet the products and materials we use in a building have a massive impact on its health and sustainability,

carbon and energy performance to toxin exposure. The major green building standards and certification systems recognize this and have long incorporated material selection priorities into their frameworks with the expectation that the market would continue to transform, but it has proven to be a difficult shift. In an effort to expedite solutions, dozens of leaders representing construction, architecture, and manufacturing have entered a dialogue to further extend the market shift across

on everything from embodied

with the green building certifying bodies, the interdisciplinary group anticipates that higher demand for healthier and greener products will result in better conditions for those who make them, more choices for specifiers and building users, and rewards for manufacturers that prioritize not only health and sustainability but also transparency.

The great challenge of sourcing healthy and sustainable materials for buildings is finding products that meet three main criteria: They have a small environmental footprint (including low embodied carbon), can contribute to ongoing building performance (in the case of envelope enclosure, fixtures, and HVAC products), and will not negatively impact the health of those using the building or those making the product. Due to the expansive nature of the consumer products industry and the United States' lax approach to regulating toxins, it can be difficult to find products that meet all three of these goals, or even have enough information to compare among the available choices. Further complicating the process, the specification of materials can lack consistency across projects, especially in a quickly changing products landscape.

Students Get Hands On Learning at the Passive House Trades Training



While a focus on material health, sustainability, and transparency is an international trend, the implications of the trend are local. Regional sourcing of materials remains a highly valued metric among the multiple attributes of sustainable product selection; "regional" of course being a matter of where a project is in relation to where its comprising products were made (for purposes of LEED, a regional product is one that is sourced and manufactured within 100 miles of the project). The benefit to sourcing from regional manufacturers is twofold: First, it reduces the overall environmental footprint of a product by reducing vehicle miles traveled, and



second, it supports the local economy.

Networking at a GBA
Town Hall in Erie in 2008

Given all of these factors, a team seeking the most sustainable products for their building project will surely seek out those that are produced regionally. But while the building products market has evolved greatly over the years, it remains difficult to find products that are not only sustainable, but also manufactured nearby. The challenge is that most buildings are not constructed in locales that have access to a large number of nearby building products, let alone those that are otherwise sustainable or healthy for users. Many cities and communities are simply lacking in green building products that can be sourced for projects locally.

Western Pennsylvania, however, is different.



The Past and Future
Converge at the Energy
Innovation Center

Fostering an Ecosystem of Innovation

Western Pennsylvania has long been known for its resourcefulness — in both its proximity to vast natural resources and its ability to innovate and iterate. In the past, we used that ingenuity to create products at the expense of our environment and our own health, even while building up the country around us. These days, innovators are channeling that same dedication to creation with a focus on environmental protection, social equity, and public health.

Among technology advancements, robotics competitions, and groundbreaking research in healthcare and higher education, individuals and companies have emerged in the green building industry to take their place among this new generation of innovators. This will come as no surprise to those following our region's leadership in sustainable development for the last 30 years. Our community has long been an early adopter in green building strategies and frameworks,

so it is appropriate that, harnessing our talent in manufacturing, we would come to develop product solutions for the built environment as well.

In Western Pennsylvania, our legacy of manufacturing, spirit of innovation, shared interest in sustainability across industries, and drive to improve the health and well-being of our citizens have combined to forge a very special kind of community that is well positioned to be a leader in the green building products industry.

SUSTAINABLE Product Profiles

Here are just some examples of how our region is blending a spirit of innovation with a commitment to sustainability. These profiles highlight regional companies and individuals that are creating sustainable products, using responsible practices in manufacturing, and contributing to healthy and high-performing buildings at home and around the world!



FSC-Certified Wood at Hickman Lumber

A Creative Approach to an Inclusive Green Economy: Monmade

Originally started as a program of the Creative Business Accelerator, Monmade is an impact-driven company working with a network of regional artisans, connecting their unique products to design and development projects. Monmade offers planning, procurement, and integration services to help architects and developers maximize impact and minimize the challenges of working with a variety of specialized small businesses. Its most recent program, Green Leap, is a productdevelopment program fostering sustainable products for the built environment. The Green Leap cohort, which led 10 local producers through curriculum and a layered sustainability assessment, resulted in local products ready for specification by the A&D industry. With this focus on sustainability, Monmade supports responsibly made products and the growth of regional economies, integrates technical specifications into projects to increase the transparency of responsible and safe materials for clients, and finds innovative products that comply with industry-recognized green building certification programs.

"I am developing best practices for sustainability in my studio production by assessing the durability and longevity of products by developing a life cycle strategy and evaluating material choice, sourcing, and processes."

- Pati Beachley, Monmade Green Leap Cohort Participant

Preserving A Forest and a Family Legacy: Allegheny Mountain Hardwood Flooring

Jessica Hickman Fresch is among the fourth generation of Hickmans to work at her family's business, which operates an FSC-certified forest (the Forest Stewardship Council – FSC – verifies forests that are managed sustainability), a lumber sawmill, and an award-winning flooring company in Emlenton, Pennsylvania.

One major aspect of the Hickmans' sustainability focus is ensuring no part of the trees they harvest goes to waste. According to Jessica's dad, Dennis Hickman, "100 percent of each log that comes into our sawmill is used: The bark is used by landscaping companies, wood chips are made into FSC-certified paper, sawdust from the mill is used as the fuel to run the boiler for the dry kilns, and scraps of flooring are used to heat our employees' homes."

When the family first discovered the Forest Stewardship Council certification, they found that the requirements of FSC aligned with the practices they had already been using for decades. Jessica explains some of their approach:

"Our goal with most of the forest is to create an uneven, age-managed forest. You want young trees, middle-aged trees, and old trees. Across Pennsylvania, trees are dying at a faster rate than we are harvesting them, and when a tree dies, the carbon it is sequestering is rereleased into the atmosphere. So one big goal we are working toward as a state is to utilize more of this wood."



Jessica Hickman Fresch Leads a Tour of Her Family Operation

In the industry, it can be tempting to overharvest the wood that is popular and in demand at any given moment. But the Hickmans use a longer-term, regenerative methodology.

According to Jessica, "The goal is natural regeneration. We don't do a lot of re-planting. When you cut down a mature tree, it will open the canopy and allow the sunlight to reach the forest floor, helping the seeds to germinate and the young saplings to grow. The younger trees are taking in carbon at a faster rate, while your older trees are storing a lot of carbon but not sequestering it as quickly — so having an age mix in the forest is good for the carbon balance. Then, the bonus to the environment is that carbon will continue to be stored in wood products that will last multiple generations in people's homes."

Green From the Inside Out: EPIC Metals

Sustainability for EPIC Metals began in the company's early days, 55 years ago. In 1968, Donald Landis, founder of EPIC Metals and father of current president David Landis, purchased a trolley barn built in 1900 in Rankin (Pittsburgh), Pennsylvania, and recycled it into EPIC's first manufacturing facility.

EPIC's modern sustainability efforts began years later in 2010, when a new Landis generation, David's son, Ben, spent a high school summer break on a project to add solar panels to the company's current home office in Braddock, Pennsylvania.

David's interest in solar energy, his passion for sustainability, and a commitment to mitigating the climate crisis has continued to drive EPIC Metals' commitment to sustainability. Solar panels now installed at three manufacturing plants in addition to the home office – which now also includes a solar parking canopy – have generated enough electricity to drive a car around the circumference of the earth 295 times.

As of the end of July 2023, solar panel installations at EPIC's various manufacturing plants have achieved an estimated reduction of 3,549,353 pounds of CO2 and is the equivalent of planting 45,517 trees.

EPIC's commitment to sustainability is not limited to solar energy. Three vertical axis Windstax wind turbines (also locally manufactured in Western Pennsylvania!) provide lighting for EPIC's manufacturing facility along the Monongahela River near Pittsburgh. Electric

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vehicle charging stations have been installed at EPIC's main office and Rankin plant. Pervious pavers were installed in one of its parking lots to reduce stormwater runoff, reduce the use of salt to defrost ice and snow, and naturally brighten and reflect more light, increasing nighttime visibility. EPIC heats the majority of its home-office building with geothermal wells.

Beyond all of these efforts in its facilities, EPIC Metals enables designers to create unique visually open spaces with responsible materials and unmatched acoustics. EPIC Metals roof and floor deck ceiling panels are manufactured of steel, which has historically been one of the most recycled materials (in EPIC's case, between 25 and 61 percent of its steel is recycled).

Through many challenges during his tenure at EPIC, most notably the economic downturn during the great recession beginning in 2008 and the COVID-19 pandemic of 2020-21, David Landis is proud of EPIC Metals' commitment to success and commitment to sustainability. To date, EPIC Metals has participated in 27 LEED Platinum and 156 LEED Gold certified projects.

"Isn't it so powerful to know
the sun is creating the energy
that grows all the plants
and the food we eat? If we
had enough solar panels
to harness this energy, it
could create ALL the power
we use for driving our cars
and lighting our buildings.
We could do everything!"

– David Landis, EPIC Metals

A Local Solution to a Universal Problem: BRINC Building Products

A native of New Bethlehem, Pennsylvania, John Brooks was always passionate about building, construction, and working with his hands. After a fire claimed the home where he was raising his two children, John moved the family temporarily into a new house while he worked to rebuild with the help of his community. Then working as a territory sales representative for insulation systems, John spent a lot of time thinking about how he could make his own new home more efficient. He would rather invest in quality, sustainable, and healthy products for his home than spend a fortune on energy bills.

John began considering how he could stop air loss and avoid the thermal bridging he had grown accustomed to seeing around wood buck-mounted windows. He was looking for a solution to the condensation, warping, mold, and energy loss that often led to higher utility bills. Realizing there had to be a better way to install windows than with wood bucks, John experimented in his basement, and through trial and error, he developed a prototype for his now-premier product, ThermalBuck.

ThermalBuck is a high-performance mounting system for windows and doors for use with exterior insulation. It structurally supports the window while thermally breaking the mounting point. The product was launched at the Greenbuild International Conference and Expo in 2015 and was honored with the "Greenest of the Green" Energy Savings Product Award. After years of



Pennsylvania Made ThermalTight is Installed on a Project

prototypes, testing, and code compliance, and plenty of hurdles, John and his business partner now have a manufacturing plant in Western Pennsylvania, and in 2020, introduced a new complete high-performance wall system, ThermalTight. This new wall system is made of Neopor GPS semi-vapor permeable rigid insulation with a high-performance, self-gasketing weather resistant barrier that eliminates the "reverse shingle" issue common with panel systems that require taping on top of seams.

BRINC Building Products are now available across North America, including Alaska and Canada. While BRINC's business is currently most focused on the residential market, it has done work in multifamily buildings, schools, assisted living facilities, and some light commercial settings. BRINC products can be used in both new construction and renovation.

Fostering Sustainable Innovation: GBA's Green Building Products Initiative

Green Building Alliance (GBA) developed the Green Building Products Initiative (GBPI) in 2006 with Philadelphia University after recognizing the need for quality local green building products in Pennsylvania. At that time, GBA was one of only a handful of organizations nationally that realized the expanding market opportunity that green buildings represented for product manufacturers.

Funded by the Heinz Endowments, the Richard King Mellon Foundation, and the Commonwealth of Pennsylvania's Ben Franklin Technology Development Authority, GBPI distributed over \$1.2 million in innovation grants for regional sustainable product development.

Funding included proof of concept grants and full innovation grants for more than 20 products between 2007 and 2011, including daylight-matching LED luminaries from Drexel University and Appalachia Lighting, environmentally responsive building envelopes from Carnegie Mellon University, super-lattice solar cells from Drexel University, market development of thermo-treated hardwood at Babcock Lumber, next-generation heat pump systems at Thar Geothermal, and many more.

The impacts of the GBPI program – which sought to build upon our region's intellectual capital by bringing green products from the research and development phase to the market – are still being played out today. One of the products that was funded through the

program – Ductmate Industries' (DMI) Green Seam II – was designed to significantly reduce leakage from HVAC systems and therefore improve building energy efficiency. DMI went on to develop a full Green Seam product line in addition to being recognized for several other sustainability initiatives over the years.



Valerie Beichner and Aurora Sharrard Showcase the Green Building Products Initiative

A Journey to Zero Waste: Ductmate Industries

Since its founding in 1978, DMI has been manufacturing products focused on resource conservation and efficiency. But in 2005, when gasoline prices rose to over \$3 per gallon for the first time in the U.S., DMI decided it wanted to better understand energy cost savings and the benefits of sustainable manufacturing practices to create a culture change throughout the company. DMI began working with Green Building Alliance by participating in trainings, education, projects, and programs — including the Green Building Products Initiative grant program — and engaging with others in the industry and market. As it achieved cost savings through process improvements, DMI used these savings to invest in additional cost–saving initiatives within its buildings.

In 2011, DMI participated in Green Building Alliance's InterfaceRAISE program to learn the endless possibilities of a sustainable business and how to thrive by integrating a sustainable culture. It was during the InterfaceRAISE

program that DMI identified its goal of achieving zero waste to landfill. Over the course of the next seven years, the organization worked toward its zero-waste goal and achieved TRUE Zero certification in 2019.

DMI became the first TRUE Silver manufacturing plant in Pennsylvania. The TRUE certification program, sponsored through GBCI (Green Business Certification, Inc.), measures, improves, and recognizes zero-waste performance by encouraging the adoption of sustainable resource management and waste reduction practices that contribute to positive environmental, health, and economic outcomes. A TRUE-certified project's goal is to divert all solid waste away from landfills, incineration (waste-to-energy), and the environment. Green Building Alliance honored DMI at its 2019 Annual Emerald Evening Gala with the GBA Enterprise Award to celebrate the company's commitment to the transformation of manufacturing practices in Western Pennsylvania.

Since then, DMI has continued to reduce waste within operations through a combination of constant improvement, adoption of a Sustainable Procurement Policy, refined packaging strategies, and increased diversion rate, which has resulted in the achievement of TRUE Gold certification.

"DMI has always been focused on the development of innovative products to improve the indoor air quality and energy efficiency of commercial HVAC systems.

But what makes DMI so unique and successful is that we focus just as equally on the growth and development of our people, our region, and our corporate sustainability."

– Mark Smith, Director of Sales and Marketing, DMI Companies

A Hub for Living Products

The International Living Future Institute (ILFI) manages the Living Building Challenge and several certifications in pursuit of a society that is socially just, culturally rich, and ecologically restorative. After launching its Living Product Challenge – an aspirational framework for rethinking product design and manufacturing – ILFI announced in 2017 that it would open a Living Product Hub in Pittsburgh through a partnership with Green Building Alliance. Given Pittsburgh's reputation as a center for innovation, green manufacturing, and job creation – and its selection as the location for ILFI's first-ever Living Product Expo two years earlier – the partnership would help to further accelerate regenerative buildings and manufacturing. At the time of the announcement, then CEO of ILFI Amanda Sturgeon said, "Pittsburgh is already ahead of the curve. We are excited to build on that success." During the three years of the Hub's operation through 2020, Pittsburgh was host to more Living Product Expos, which attracted ILFI stakeholders from around the world. The two organizations continue to partner today on other initiatives, including the Beacon Community Working Group, which studies Pittsburgh as an example for other regions to prioritize and enable regenerative communities.

A Community's Quest for a Circular Economy

Ask sustainability experts what the key to a sustainable future is, and the mention of a circular economy will likely be the common denominator. In Western Pennsylvania, this is being explored across several industries, and construction is no exception. Mike Gable, executive director of Construction Junction, has long championed the reuse of building materials but is now pushing project teams even harder to consider reuse earlier in their designs. "To truly build for reuse, we have to change our approach," says Gable. "Rather than creating a specification list and then searching for reused versions of the products you want, you must design for the products that are currently available." Meanwhile, Andrew Ellsworth – who started Doors Unhinged as a resource for procuring and redistributing used commercial doors and is located in Construction Junction – scored a prestigious spot on BuildingGreen's Top 10 list of green building products in 2022, demonstrating the importance of circular solutions.

The principles of circular economy ask that materials be kept in use continuously by design, and these principles can be applied to any kind of consumer product. But how do we harness and implement a circular economy at scale? Covestro and the University of Pittsburgh recently launched an interdisciplinary graduate and Ph.D. program – the Covestro Circular Economy Program – to answer that question.

Bakery Square Demonstrates Green Reuse



Dr. Melissa Bilec from the University of Pittsburgh credits Jack Mascaro with the original idea. Mascaro, who was president of Mascaro Construction, a lifetime member of Green Building Alliance, and founder of Pitt's Mascaro Center for Sustainable Innovation, was a mentor to Bilec until he passed away, and she sees this program as one of his lasting legacies. "Jack Mascaro brought everyone together at Covestro to start a conversation about the partnership for this program. I want to honor him and how he had the insight to bring us all together prior to his passing."

According to Covestro's Richard Skorpenske, the program was a natural fit for the materials science company that is seeking to lead its entire value chain toward circularity.

"When we announced that we wanted to be fully circular as a company, we also set out four different areas of focus," says Skorpenske. "They were advanced recycling, alternative raw materials, renewable energy, and collaboration. The partnership with the University of Pittsburgh is a great example of that collaboration. This program fills a specific need: We're not just thinking about what to do with the product at the end, but how to design it so it's more usable over and over again."

When considering the students that will make up each cohort of the program, both Bilec and Skorpenske point to the importance of diversity, equity, and inclusion.

"Think about the word 'economy' in circular economy," says Bilec. "The economy is all about people, so this needs to be accessible."

"We really connect equity to innovation," says Skorpenske.
"Diversity of thought and inclusion of all perspectives really
give you the opportunity to come up with new things."

How do these two partners see Western Pennsylvania's role evolving in the global conversation of circular economy?

"This is another opportunity for Pittsburgh to show leadership as a scalable model for other regions to go from a linear to a circular economy," says Skorpenske.

"I'm committed to improving this region to the best of my ability through all the different sectors," says Bilec, who was born and raised in the area.

"I really believe that Pittsburgh can be THE circular economy hub in the United States."

All About Hemp: Pairing Agriculture and Human Services With High-Performing Buildings

In Pennsylvania and nearby states, farmers are being encouraged to grow industrial hemp. In 2023 alone, Pennsylvania Governor Josh Shapiro invited nearly \$400,000 in grant proposals to grow the state's hemp industry. One possible use of hemp is for building products, and a human services non-profit organization in New Castle – DON Services – is among the leaders that are exploring its uses and benefits.

DON (Disability Options Network) Services is working to support local jobs and healthy buildings by partnering with a variety of experts and stakeholders to grow, produce, test, and research hemp building products – specifically hempcrete – a nonstructural, biocomposite insulation material made from three natural, non-toxic ingredients: industrial hemp hurd (the inner woody core of the hemp stalk), lime binder, and water.

DON's entrepreneurial CEO, Chris Lloyd, had had his eye on hemp as an agricultural economic opportunity for a while, and the 2018 farm bill provided the chance he had been waiting for to give it a try, funding one farmer to test one cultivar on four acres of land. A Pennsylvania Department of Agriculture grant catalyzed the work as a way to build the regional hemp market and create new opportunities for farmers, and DON is now facilitating the work through its Hemp Test Acres Program and Project PA Hemp Home, a demonstration home using hemp building materials.

Project PA Hemp Home tested the use of these products in the renovation of a blighted property in New Castle. DON spearheads a neighborhood revitalization program by building accessible, affordable housing rehabs and new construction, so this was the perfect application to begin testing the product.

DON is partnering with the Parsons New School Healthy Materials Lab and the Pennsylvania Housing Research Center at Penn State University on the project. The Penn State team is analyzing the thermal, insulative, and performance properties of the material while the Parsons team designed the renovation and is conducting air–quality testing. Further research will compare the hemp product to traditional insulation materials and identify resulting utility savings.

This particular hemp project is intriguing because it has the potential to grow a regional economy and

demonstrate both health and climate benefits of an innovative building product, all while supporting a broader purpose to empower people with disabilities.

"Chris has seen a lot of needs and issues to be addressed and he always comes up with sustainable and inclusive business solutions," says Lori Daytner of DON Services. "Our original non-profit's mission was to assist people with disabilities to live as independently as they choose ... Everything that we do, no matter which sector we're working in, feeds back into that mission."

In the meantime, this appears to be just the beginning of our region's exploration of hemp as a building product as both supply and demand (or at the very least, curiosity) for this product continue to grow.

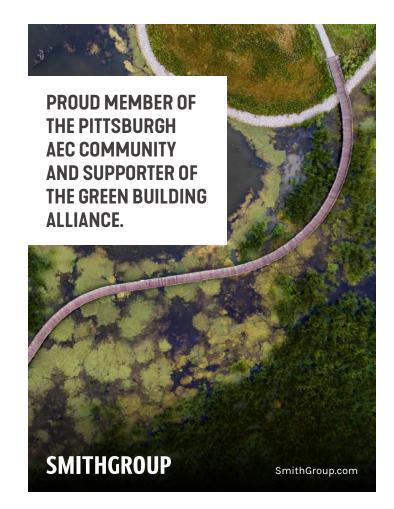
DON Services plans to remain heavily involved.

"We are doing this to help farmers learn how to grow, because eventually we want to invest in large-scale decortication — the equipment that is used to process the hemp stock into its two major components,"

says Daytner.

Natural Building Materials are a Central Focus at Sota Construction's Offices



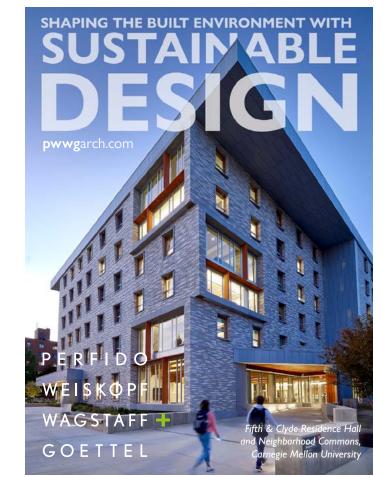




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Our Regional Firsts

2000

The Greater Pittsburgh
Community Food Bank
(LEED-NC Silver) and
architecture firm KSBA
(LEED-NC Bronze): Two
of the first LEED-certified
buildings in the country
under the LEED Pilot
program



PNC Firstside Center: The country's first green financial institution (LEED-NC Silver)



2003

Phipps Conservatory and Botanical Gardens Welcome Center: The country's first green welcome center in a public garden (LEED-NC Silver)



Carnegie Mellon University's Stever House: The country's first green college dormitory (LEED-NC Silver)

2005

Senator John Heinz Regional History Center, Smithsonian Wing: The country's first green Smithsonian property (LEED-NC Silver)



2006

WYEP radio station: The country's first green radio station (LEED-NC Silver)



Pittsburgh Glass Center: The country's first green public arts facility (LEED-NC Gold)

Western Pennsylvania has long been development and healthy, Here are some of our region's

2008

Point Park University Dance Complex: The country's first green university dance space (LEED-NC Gold)



2009

GBA's offices: The first LEED Platinum for Commercial Interior space in Western Pennsylvania (LEED-CI Platinum)



The Pittsburgh Penguins Arena: The first NHL arena to achieve LEED Gold (LEED-NC Gold)



2010

Riverside Mews: the region's first net-zero building



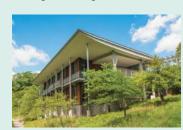
2012

David L. Lawrence
Convention Center:
The largest building in
the world to be LEEDcertified across its life
cycle at Gold or higher,
AND the first regional dual
LEED-certified building



2017

The Frick Environmental Center: The first free and open to the public certified Living Building in the world



2019

Etna: The first certified EcoDistrict in the United States (followed by Millvale as the second in 2020)



2020

Phipps Conservatory's
Center for Sustainable
Landscapes: The first
building in the world to
achieve seven of the
highest green building
standards including
LEED Platinum, WELL
Platinum, Living Building
Challenge, and BREEAM
Outstanding In-Use



Pittsburgh International Airport: The first airport in the world to commit to the 2030 Challenge Mill 19: The country's largest single-sloped solar array



2023

Erie Central Fire Station: The 3rd fire station in the country to be run entirely on solar power



a leader in sustainable high-performing buildings. proud leadership moments.

Resilient REGION, Resilient WORLD

If you would have asked a 19th-century resident of Western Pennsylvania what it was like to live in the region, you would have likely heard words of pride relating to the booming industry and center of innovation that provided the country's energy and infrastructure. But you'd have no doubt also heard of the exhaust stacks that painted the sky black in the middle of the day and stained white shirts with soot. Ask the same question to a modernday dweller and the answer would still reflect pride in industry and innovation but in many ways would sound quite different, perhaps speaking of riverfront trails, vibrant community events, or maybe – if they were a GBA member – noting that our region is home to some of the greenest buildings in the world.



A View of Downtown Pittsburgh from a GBA Kayak Tour

These sentiments would reveal an underlying theme of rebirth and renewal, one that has steadily evolved over decades, spearheaded in part by the early leadership shown in the region's adoption of green building practices.

"We have shown that you can grow jobs, you can grow an economy, and still reduce pollution," states Allegheny County Executive Rich Fitzgerald, of the region's transformation. "We never before were even [within reach]

of air-quality improvement, and finally now we have done it several years in a row, reaching [an] 80% reduction in hazardous air pollution."

There is certainly more work to be done before the region can call itself an area where all can thrive. But reflecting on the successes to date is one step in planning for future improvement and motivating practitioners to continue striving toward positive change.

How can Western
Pennsylvania continue on
its journey toward being
a sustainable, resilient,
and equitable place?

"Thirty years ago, [green building] wasn't even on anyone's radar, whether that be elected officials, developers, or universities," Fitzgerald shares. The green building movement

was viewed in many places as more trouble than it was worth, with fears of high up-front costs.

"Convincing owners that it was the right thing to do, and even had a return on investment beyond first-cost was very difficult," recounts Michael Kuhn, president of Jendoco Construction who is also a former GBA Board President and founder of the Green Builders Committee at the Master Builders' Association of Western Pennsylvania.

have shifted when considering the overall benefits of green buildings.

"Although cost is still a factor, it's more commonplace to talk about payback as much as the upfront cost," she remarks. "When our staff in facilities management completes repairs, we have to consider not just the cost of the repairs compared to the cost of full replacement, but whether or not the repair will be merely a short-term patch or if it can help extend the life of whatever item we are repairing."

Communication across industries is vital to the success of sustainable development, but so is cultivating strong and positive relationships among all stakeholders.

"I've found that in this field, you first need to have good relationships with not just the designers and decision—makers, but also the people on the ground who have to either implement recommendations or maintain whatever system we are trying to change," Prischak explains.
"I think it's one of the reasons we have been so successful within Allegheny County's operations; we have been able to build... trust and a willingness to implement change because all sides can see the benefits."

One of Pittsburgh's first WELL Gold certified buildings, the home of Desmone Architects would not have been possible without this spirit of collaboration. "Whether it was our onsite superintendent working out design details with the project architect or our director of sustainability working with Desmone's principals to develop policies and protocols ... the project allows Desmone's staff to work efficiently in a healthy space, while the building serves as a laboratory to experiment and to gain a deeper understanding of process and implementation." says Kuhn.

and implementation," says Kuhn.

The results of healthy collaboration can also be noticed on a communitywide scale. Veni Mittal, who began volunteering with the Etna Borough in 2018, has seen the impact of resident-driven community engagement.

When crafting its sustainability plan, the Borough ensured that each community member had a voice.

"We had all of these community meetings ... in which residents, business owners, community leaders, and partners were given opportunities to share their stories. ... These



Brittany Prischak Shows Off a Solar Array Helping Allegheny County Parks Achieve Net-Zero Energy

As Pittsburgh and other communities like Johnstown and Erie achieved more and more green buildings, including everything from LEED Pilot Projects to Living Buildings, awareness of the green building movement spread among practitioners.

Brittany Prischak, Deputy Director of Allegheny County's Department of Sustainability, and former Sustainability Coordinator for Erie County, observes that perspectives

This regional recognition of green building's benefits has led to more collaborations and partnerships across multiple industries. "Now we see the formation of consortia of building owners – government, non-profit, corporate – working in a collective and coordinated manner to adopt green building processes and products," notes

Jim Denova, former Vice President of the Benedum Foundation.

76 Building a Sustainable Future

insights we collected throughout the process culminated in the Etna EcoDistrict plan, which outlines 10 years of action," says Mittal, who now serves as the board secretary for the Etna Community Organization.

Making sure that all voices are heard and valued must be prioritized if true progress is to be made. "Collaboration can be very effective in helping people to understand what is healthy and sustainable if the collaboration includes the people who are the targets of economic and racial discrimination," emphasizes Tim Smith, pastor and leader of the Hazelwood neighborhood's Center of Life.

Christine & Marc Mondor, founders of green building consulting firm evolveEA, agree. "People embrace solutions that they themselves have created and will invest in their success. Solutions like this go beyond the project and transform the stakeholders in the process."

Another key to Western
Pennsylvania's green building
success was the influential figures
who laid the groundwork for
years of progress to come.

One of these changemakers is EPIC Metals, a local manufacturer looking toward a sustainable future. "EPIC Metals has participated in supplying roof and floor deck ceiling systems at 355 LEED certified projects located in 41 states," says David Landis, President of EPIC Metals. "EPIC's commitment is by 2030 to operate with only using electricity from the grid at its manufacturing and headquarters locations during the shortest sunlight months of the year and as a backup source of electricity. ... Through the installation of solar panels and three WindStax vertical axis wind turbines, EPIC Metals has generated in excess of 3,349,000 kWh of electricity."

Foundations and other entities with capacity for charitable giving can also create enormous positive impact in the sustainable development space. "Foundations, as private agents, have the ability and agility to convene representatives of these sectors around shared interests, and break down the walls of government silos," Denova shares. "The challenge is for the philanthropic community, given each one's programmatic and geographic mandates, to coordinate their grantmaking, act as a 'collective,' and lead as a sector that can raise issues and new ideas."

Progress made by the collective action of individual and organizational changemakers has done wonders for the region's sustainable development landscape. But Kuhn emphasizes that the initiatives championed by individuals and organizations must be met with support from elected leaders with legislative power: "It is encouraging that we have been so successful in our region because we want to and not because we have to," he notes, "but policies around sustainability can certainly benefit our region."

Those who can influence policy have the responsibility to uplift communities that have historically been overlooked. "It is imperative that adequate funding and resources are allocated toward underserved communities, and that oversight and accountability fueled by integrity at the highest level is in play in governments local, state, and federal," remarks Tim Smith.

Cultivating a resilient region necessitates collaboration and support from multiple stakeholders, from community members to policy shapers. But the history of Western Pennsylvania itself illuminates an important consideration when discussing resilience.

"People think
of resilience as
bouncing back,
but the solution
needs to look at
where the forces
are moving and of
the viability of the
current system,"

note the Mondors. "Consider the contrast between an image of Pittsburgh's downtown from 100 years ago and today. We could not bounce back given the industrial decline; rather we bounced forward and created a new condition that redefined our city."

"Resiliency can be big-picture resiliency," explains Prischak, "but it can also be on a smaller scale. I see resiliency as looking a little way into the future and thinking about the long-term life cycle of whatever decision I'm trying to make."

Resilience can also be used as a tool to fight for a better world. "When we look carefully, we discover resilience at work in the way people navigate systems of injustice," says Smith.

"[Resilience is] just taking proactive steps to address adverse conditions with innovative solutions," agrees Mittal. "We are resilient, we just want our community to thrive, we want our kids and elders to live here, and they just don't want to leave it now because it has its own history."

"In many ways," Kuhn notes,
"resilience IS our work."

Western Pennsylvania serves as an inspiring case study for positive transformation, demonstrating that a region can be altered through the innovative spirit of its inhabitants.

And the global community is taking notice. "The strength of the region and the inspiration around the transition from steel and heavy manufacturing toward a greener economy ... is a great example of leadership," says Barry McCarron, Head of Business Development at South West College in Northern Ireland.

McCarron is connected to the region through an international cohort with Green Building Alliance and other partners. Both GBA and South West College are designated Centers of Excellence on High Performance
Building with the United Nations, and
the school also works with Penn State
University through the Global Buildings
Network. The U.N. partnership allows
communities across the globe to
learn from one another and gain
best practices in data-driven building
decisions, workforce development
for a just energy transition, highperformance building codes, and
affordable housing, in an effort
to expedite achievement of the
Sustainable Development Goals.

"From my perspective having the relationship we have with GBA is very significant because the mandate we all have within the green building sector is to decarbonize construction ... and for me collaboration is vital to the cause," says McCarron.

Erie Art Museum Demonstrates Creativity in Sustainability



Given the region's trajectory, it's important to celebrate the progress made and prepare for the work still ahead. There is hope for Western Pennsylvania's youth to take up the task as they grow into future leadership roles.

"I'm seeing more and more students incorporating sustainability into their variety of degrees," observes Brittany Prischak. "I hope they all can keep that passion when they get into the world and start on their careers and in their home life, because I think they can be some of our greatest change makers."

Ultimately, the solutions to climate challenges at hand will require a collective sense of hope and perseverance. "The fight [against climate change], especially now, is too important, and we therefore need people willing to persevere, remain hopeful, and appreciate any change, big or small," urges Guy McUmber, former employee of the Pennsylvania Department of Natural Resources and GBA's former Northwest Director.

While overseeing the Northwest Branch at GBA, McUmber launched the Erie 2030 District, which now includes nearly 20 property partners working to halve their energy use and carbon emissions by 2030. Nearly all cities in the United States have grown warmer in the past 50 years, but Erie is among the country's top five fastest warming cities, at nearly five degrees warmer on average than it was in 1970. Given that distinction, any actions taken today are impactful.

Similar to other parts of the region, Erie's cultural institutions are working to build community awareness of sustainable development and lifestyles. For example, the Tom Ridge Environmental Center on Presque Isle and the Erie Art Museum are both green buildings.

"Our cultural institutions and recreational facilities are important venues for public sustainability education," says GBA's Chris Cieslak. "When they use sustainable practices, visitors start to gain a better understanding of how they can incorporate sustainability into their own lives at a smaller scale." In Pittsburgh, the Frick Environmental Center and Phipps Center for Sustainable Landscapes offer visitors the chance to experience some of the greenest buildings in the world, having both achieved Living Building Challenge certification. A LEED-certified visitor's center at Ohiopyle and a Passive Housecertified public library in Carrick serve the same purpose.

"I have seen that Pittsburgh has set an example of how the small city can contribute and can achieve so much," Mittal shares. "It's not just about green infrastructure ... but also more resilient, more vibrant and more sustainable communities ... setting an example for other future generations how to preserve your own city and how to make your own region more green, more sustainable, without making any compromises."

What Steps Are Next for Western Pennsylvania?

A Greener Workforce

"There is tremendous employment promise in green manufacturing, battery and EV production, hydrogen hubs, and construction projects that call for decarbonization. ... But students, counselors, school boards, and parents need to understand the growth of green in traditional industries." – Jim Denova, former Vice President of the Benedum Foundation

Increasing Robust Policy

"We miss the opportunity for equitable and broad adoption without the support of programs and agencies like NYSERDA in New York, Mass Saves in Massachusetts, energy incentives in California, or even Florida's mandated city Sustainability Action Plans." — Christine & Marc Mondor, evolveEA

Jason Wirick Shares the Green Roof at the Phipps Center for Sustainable Landscapes



Updating Infrastructure

"An area like ours with older infrastructure... we will need to continue to retrofit our older facilities."

Allegheny County ExecutiveRich Fitzgerald

Striving for Continued Improvement

"It can be very easy to keep doing what we are doing and not challenging ourselves to move boldly forward. ... It is important that we continue to expand our network and train future generations on how each of us can have an enormous impact when we work collaboratively together."

– Michael Kuhn, Jendoco Construction



CENTER FOR SUSTAINABLE LANDSCAPESNew construction, 2012 · Living Building Challenge, LEED Platinum,
WELL Building Platinum, Zero Energy Certification, SITES Platinum,
Fitwel 3 Star, BREEAM Outstanding In-Use



Modular construction, 2015 · Living Building Challenge Petal Certification



EXHIBIT STAGING CENTERAdaptive reuse, 2019 · Living Building Challenge, LEED Platinum,
WELL Building Platinum



Three of the world's greenest buildings, right here in Pittsburgh.

Thanks to the dedicated support and partnership of organizations like Green Building Alliance, Phipps Conservatory has put Pittsburgh on the map with three net-zero energy buildings representing three different construction types — new, modular and adaptive reuse. By generating all their own energy and treating all rain and sanitary water captured on-site, these three facilities show that buildings can go beyond sustainability to play a regenerative role for the world.

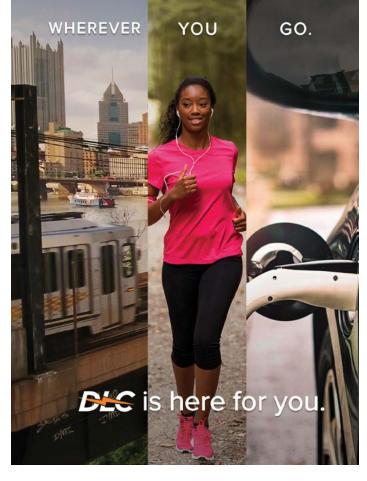


Learn more: phipps.conservatory.org/ CSL10







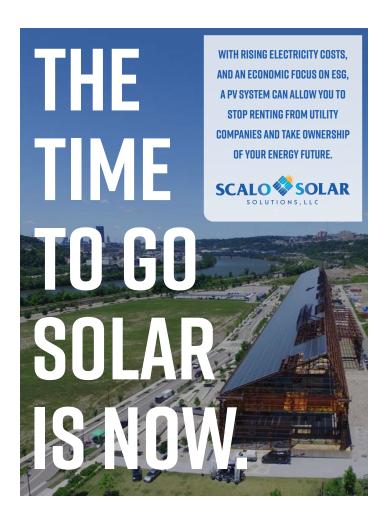




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Congratulations to the MBA Members whose projects have transformed our region's built environment!



Congratulations to the Green Building Alliance for three decades of healthy and high-performing spaces in Western Pennsylvania!



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by incorporating the Sustainable Development Goals
into our education, research, and practices.

Learn more: cmu.edu/sustainability







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Learn how Covestro is dedicated to making
Pittsburgh and the world a brighter place:
www.covestro.com/sustainability

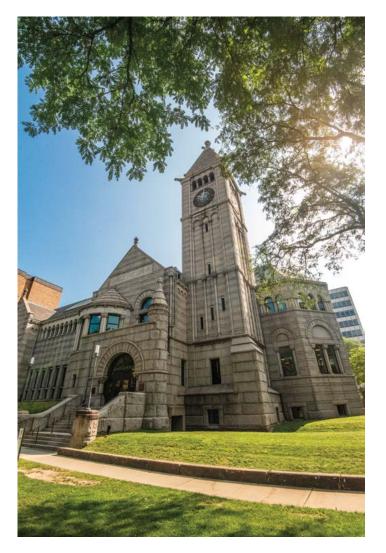


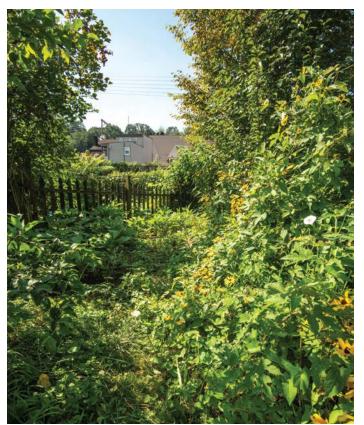


































Countless individuals have contributed to the region's sustainable development movement — and to GBA — throughout the last 30 years. This organization started with a few passionate volunteers and has since grown into thousands of stakeholders who challenge, motivate, and inspire one another across counties and industries. We are forever grateful to former staff and board members, volunteers, organizational members, sponsors, funders, mentors, partners, and champions who have each played a part in shaping this organization and this region into what it is today. We would also like to acknowledge the tireless work of our current staff and board.

Current GBA Staff Members:

Jenna Cramer, President & Chief Executive Officer

Tobias Chan, 2030 District Performance & Outreach Coordinator

Chris Cieslak, Chief Operating Officer & Vice President of Programs

Paige Colao, Director of Strategy & Analysis

Destiny Knetzer, Events & Content Manager

Ariel Levin-Antila, Communications Coordinator

Leslie Montgomery, Vice President of Education & Communications

Dionna Reynolds, Senior Director of Social Impact

Megan Zeigler, Vice President of Relationships & Development

2023 Interns and Fellows:

Zachary Calvert

Peyton Stuart

Christopher Tate

Lily Tibaldi

Current Board Members:

Jeffrey McDaniel, Chair (Innovation Works)

Dr. Erica Cochran Hameen, Vice Chair (Carnegie Mellon University)

Dr. Gretchen Givens Generett, Secretary (Duquesne University)

Don Morrison, Treasurer (Sustainable Composites)

Michael Barnard (Oxford Development Company)

Dr. Melissa Bilec (University of Pittsburgh)

Danny Cerrone, Jr. (Clark Hill PLC)

Darla Cravotta (Allegheny County)

Ken Doyno (Rothschild Doyno Collaborative)

Zach Huth (Huth Technologies)

Majestic Lane (Allegheny Conference on Community Development)

Vidya Patil (Consultant)

Noah Shaltes (PJ Dick and the Lindy Group)

Jeremy Snyder (BuroHappold)

Carolyn Sponza (Gensler)

Michael Walsh (Pennsylvania Department of Conservation and Natural Resources)

GBA's Lifetime Members:

Rebecca Flora

Zach Huth

Michael Kuhn

David Landis

Jack Mascaro (In Memoriam)

Christine Mondor

Dr. Aurora Sharrard

Alan Traugott

GBA's Organizational Leaders Through the Years:

Rebecca Flora, Founding Executive Director, 1997–2008

Holly Childs, Executive Director, 2008–2010

Mike Schiller, Executive Director, 2010–2016

Dr. Aurora Sharrard, Executive Director, 2016–2018

Jenna Cramer, CEO, 2018-Present



GBA Staff at March 2023 Inspire Speakers Series

With Thanks To Our Funders

It is not often that a foundation observes a need and launches a non-profit organization to fill that need, but that is exactly what happened in the case of Green Building Alliance. In 1993, the Heinz Family Foundation underwent an office renovation with legendary architect Bill McDonough. The sustainability focus of the project was so impactful that Teresa Heinz determined that the built environment was incredibly important for people and the planet, and thus Green Building Alliance was incubated. Conservation Consultants, Inc. served as our fiscal sponsor until we were able to incorporate ourselves as a non-profit organization and hire our first executive director.

As a non-profit organization, we are incredibly grateful to the philanthropic community that values and supports our work. Organizations like ours exist to fill the gaps between the government and private sectors, and Western Pennsylvania is incredibly lucky to have strong foundation commitments that prioritize the health and well-being of the region by supporting work like ours. Green Building Alliance has been funded by dozens of entities throughout the years, and here we thank our current funders:

Contributors

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LAUREL FOUNDATION

Land Acknowledgement

When reflecting on both history and use of space, we must acknowledge that our work is situated upon the traditional lands of the Adena, Hopewell, Lenape, Monongahela, Osage, Delaware, Shawnee, Seneca, and Susquehannock peoples. We are obliged to recognize and honor their culture, express our gratitude for this land, and commit to using our work to protect and conserve it.

OUR NEXT 30 YEARS: A Place Where Every Person Can Thrive



Board Chair Jeffrey McDaniel (far right) with board members Noah Shaltes, Mike Walsh, Majestic Lane, and Darla Cravotta along with GBA CEO Jenna Cramer (center) and COO Chris Cieslak (center left).



Sustainability Culture Program
Envisions the Perfect School

Celebrating a milestone such as this evokes feelings of reflection, gratitude, and pride. Acknowledging what has been accomplished helps us rebuild the energy and optimism we need to continue our work. But in the quiet moments that follow the celebration, an inevitable feeling of urgency and anticipation will seep into the body and mind: urgency because our work has become ever more critical and time sensitive, and anticipation because we know that with our community, we are ready for the challenges ahead. We will get where we need to go by doing what we know works: using the built environment as a lever to address climate change, advance human health, achieve social equity, and create thriving economies.

We go by the name Green Building Alliance, but you might be surprised that we most often use the word building as a verb. We are building healthier spaces. We are building upon each other's knowledge. We are building our own understanding of how all things are connected. We are building an innovative and regenerative region. We are building momentum for positive change. And we are building up people and communities.

Together with you, we are building a sustainable future where every person can thrive.

Zenna Cramer

Jenna Cramer, President and CEO

James Cancel

Jeffrey McDaniel, Board Chair



























