

GREEN BUILDING UNITED

2019

Impact Report



GREEN
BUILDING
UNITED

Letter from our Executive Director



Dear Friends,

In reflecting on 2019, I am encouraged by the growth in awareness, urgency, and action on the issue of climate change. Never before have we seen so many news clips, articles, and calls to action from a growing range of voices and perspectives. And I have never been more optimistic about what we as an organization can do to address the climate crisis locally. Improving building energy efficiency and sustainability is one of the most important and cost-effective climate solutions, and also presents significant local economic and environmental benefits.

The work that our members, volunteers, partners, and staff have accomplished together over this past year is something to celebrate. Whether it was the passage of the new Building Energy Performance Bill, our sold-out Groundbreakers awards highlighting the region's most impressive green building projects, or improving the efficiency of our Pathways schools, we continue to make great strides and see measurable results on sustainable buildings. We also wrapped up another year of our Passive House & Living Future Community-led Demonstration Projects, gaining insight into the challenge of transforming the iconic Philadelphia rowhouse into an efficient, resilient home in a changing climate.

Our growing membership remains a source of new ideas and inspiration; you'll see some of their voices featured throughout this report, highlighting unique perspectives and motivations for advancing green building. Their time, knowledge, and service to our mission is what drives Green Building United to achieve all that we have. We also recognize that, currently, not everyone's voices are at the table. With this in mind, we will continue to address the diversity gap in our field of work, and strive to ground our policy and programmatic work in equity and inclusiveness. I invite you to support, promote, and hold us accountable to these goals.

Looking ahead, we see tremendous potential in scaling our current efforts, and an enormous amount of solutions-based work that we are eager to take on with your support. Together we can transform our region's built environment to be sustainable, healthy, and resilient for all.



MISSION

Green Building United fosters transformative impact in our communities through green building education and advocacy.

VISION

A sustainable, healthy, and resilient built environment for all.



IMPACT



3,800+

People engaged



51

Events held



200+

Technical Property
Assistance



2,800+

Buildings participating
in programs



70,000+

Metric tons of carbon emissions
equivalent avoided



Our Members

Green Building United members are a hardworking and passionate group of professionals and stakeholders from various sustainability and green building industries, representing a broad spectrum of backgrounds from entry-level to expert. Whether serving on committees, going above and beyond as donors, participating at events, sharing their knowledge as speakers, or advocating with us on pressing issues, members bolster our education and policy efforts, magnifying impact throughout our 10-county footprint.

636
MEMBERS

2,322
HOURS
VOLUNTEERED

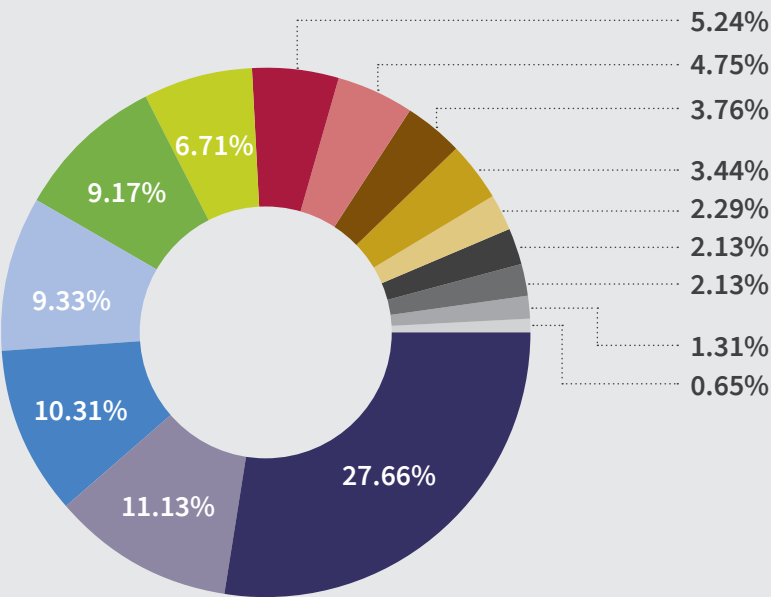
25%
MEMBERSHIP
GROWTH

“
MEMBER
SPOTLIGHT

JEREMY AVELLINO, AIA, CPHC, LEED AP
Principal & Design Director – Bright Common

“It’s essential for everyone to learn about climate change, understand the basic science, and talk about it in casual conversation relentlessly. Keep bringing it up, be persistent, expect awkwardness, and be ok with it. It’s important to normalize that kind of dialogue.”

MEMBER INDUSTRY BREAKDOWN



- Architecture/Interior Design
- Construction Management/General Contracting/Project Management
- Government/Nonprofit
- Student
- Other
- Landscape Design/Urban Design/Planning
- Recycling/Waste Services
- Public Relations and Media
- Education/Higher Education
- Sustainability Consulting/Corporate Consulting
- Professional Services (legal, financial, indoor air quality, etc)
- Energy and Resource Management/ Energy Efficiency Services/ Utilities
- Real Estate/ Property Management/ Development
- Engineering
- Products and Manufacturing



“

MEMBER
SPOTLIGHT

LAILA REILLY
Client Relations Manager – MaGrann Associates

“Buildings are significant contributors to carbon dioxide emissions, so in this line of work, we’re always trying to help builders and architects make better decisions for the occupants in those spaces, but also in terms of what’s happening with energy efficiency and our environment.”

VOLUNTEER COMMITTEES

Being a part of our community gives individuals the chance to deeply engage with our work by serving on the board, a Community Council, or a content specific committee.

- | | | |
|----------------------|---------------------------------------|---|
| • Executive* | • Delaware Community Council | • New Gravity Housing Conference Committee |
| • Finance* | | |
| • Governance* | • Lehigh Valley Community Council | • Sustainability Symposium Steering Committee |
| • Development | • Living Future Community Council | • Sustainability Symposium Tour Committee |
| • Education & Events | • Passive House Community Council | |
| • Policy & Advocacy | | |
| • Member Engagement | • Groundbreaker Awards Host Committee | |

*BOARD-ONLY COMMITTEES

COMMUNITY HIGHLIGHT

Understanding that the unique perspectives and new ideas coming from children and youth are our best opportunity to influence future generations of designers, builders, and clients, the Living Future (LF) Community began sharing the principles of the Living Building Challenge in classrooms. This led to an exciting partnership between Upper Dublin High School and our volunteers. In 2019, the LF Community wrapped up their first project-based learning environmental science course with a group of 10th – 12th graders at the high school. Through this course, students were able to implement a participatory planning and design process, engaging the community in their dreams for the Robbins Park Environmental Education Center. They ended the year by sharing their conceptual designs through presentations, games, and even virtual reality. Lead by Mrs. Erin Loch - the 2019 Groundbreaker Award winner - this successful course is now in its second academic year. The students are busy designing an outdoor learning experience for their friends in life-skills class.



“

MEMBER
SPOTLIGHT

AMY CORNELIUS
Founder, Sustainability Consultant– GreenBeams, LLC

“I really like the group of people at Green Building United. I have been a member since the organization started in 2002 and I’ve been very pleased with how the organization has continued to grow. There’s a lot of energy, excitement, and happiness in Green Building United!”



Education

For almost 20 years, Green Building United has served as the region's go-to resource for GBCI and AIA approved sustainability focused education, with topics ranging from indoor wellness to building performance, from transportation networks to green spaces. Our aim has been quality over quantity, and attendee participation only continues to grow. We offer a variety of access points and learning levels for the green building community, and those who live or work remotely can take advantage of our expansive Webinars on Demand library, which now features 40 unique courses.

58	52	51	1,583	3,033
AIA CEUs OFFERED	GBCI CEUs OFFERED	EVENTS	UNIQUE ATTENDEES	ATTENDEES

BUILDING STANDARDS



“

MEMBER SPOTLIGHT



NICOLE CAREY
Senior Staff Engineer at Langan Engineering & Environmental Services

“Green building and sustainable practices allow us to work with nature, instead of against it, and holistically integrate the built environment into the natural one.”

“

MEMBER SPOTLIGHT



DAVID SALAMON, CPHD, CPHC
Certified Passive House Designer – Re:Vision Architecture

“I think that one of the most sustainable things we can do is to build beautiful buildings. Build places that people love and want to preserve. Performance is still of paramount importance but if our buildings are not loved, they will not last.”



SIGNATURE EVENTS



Sustainability Symposium

The Symposium is a full day of educational sessions covering cutting edge green building and sustainability topics and industry best practices.

576 Attendees

102 Content Expert Presenters

44 Sponsors



New Gravity Housing Conference

The New Gravity Housing Conference focuses on climate change and the imperative for high performance affordable housing.

218 Attendees

48 Content Expert Presenters

21 Sponsors



Groundbreaker Awards

The Groundbreaker Awards recognizes and celebrates green building leadership, innovation, and impact in greater Philadelphia, Lehigh Valley, and Delaware.

305 Attendees

8 Finalists 5 Awardees

34 Sponsors

GREENING OUR EVENTS

Each event that we host has its own carbon impact and we work with our vendors, partners, and hosts to ensure we reduce our footprint. By looking at attendee numbers and records of past years' material usage, we purchase only what we think will be used. From our catering choices, to our travel emissions, we are continuously working to improve our events to align with our mission.

- When you register for our events, we require you to report your mode of transportation and miles traveled. We have partnered with WGL Energy who uses this and other information to offset the emissions from our events. Together, we have offset 115 metric tons of carbon emissions, equivalent to taking 24 cars off the road for one year.
- Our programs are printed on 100% recycled paper stock and can also be accessed online.
- The products we purchase are biobased, typically from corn. While they can not be composted now, due to our region's lack of appropriate processing facilities, by purchasing compostable products, we are demonstrating a demand for these items, and therefore a demand for facilities that can process them.
- We further limit the impact of our events by making catering choices that limit or eliminate carbon-intensive food and beverage options.

150

Metric tons offset emissions



Policy & Advocacy

Green Building United's policy and advocacy work remains central to shaping our educational content, strategic initiatives, and transforming our region. Our members drive this work with their industry expertise and we continue to grow our partnerships across sectors to expand our impact. In 2019, members participated in a lobby day in Harrisburg, informed legislative language around Philadelphia's Building Energy Performance Policy, helped launch C-PACE Programs in both Delaware and Pennsylvania, and much more.

City of Philadelphia

✓ Building Energy Performance Policy

✓ Commercial PACE (C-PACE) Program Launch

Commonwealth of Pennsylvania

✓ Climate Change and Energy Conservation Executive Order

✓ PA to Join Regional Green-house Gas Initiative (RGGI)

State of Delaware

✓ Commercial PACE (C-PACE) Program Launch

17

HARRISBURG
ADVOCACY DAY
PARTICIPANTS

29

REPRESENTATIVES
ENGAGED

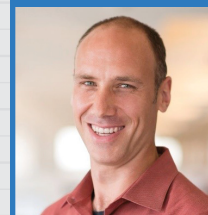
5

TESTIMONIES
DELIVERED



“

MEMBER SPOTLIGHT



WOLF ARENDT, LEED AP BD+C, AIA
Principal - LAYER Architecture

“By getting involved with Green Building United, I realized that if we are really going to address global warming and climate change, it’s not just a matter of creating sustainable buildings; it requires advocacy and getting the word out to our communities, to the building industry, and to politicians. This is our generation’s challenge, and we need to address it at all levels—including local, state, federal and international.”





ADVOCACY HIGHLIGHT

Building Energy Performance Policy

In November 2019, Philadelphia City Council passed the Building Energy Performance Policy—more commonly referred to as the Building Tune-Up bill—requiring owners of large buildings to conduct periodic tune-ups of their energy and water systems.

The legislation builds off the awareness of energy and water use in buildings fostered through the city’s benchmarking ordinance by requiring owners to complete low- and no-cost actions to make their buildings more efficient.

Per the City of Philadelphia’s *Powering Our Future* report, a building tune-up program has the potential to save \$55 million annually citywide and reduce carbon emissions by 183,380 metric tons, the equivalent of 21,959 homes’ energy use for one year.

Green Building United’s members were at the forefront of advocacy efforts to support the bill’s passage by providing in-person testimony and participating in stakeholder engagement sessions.

“

MEMBER
SPOTLIGHT



KRISTIN SULLIVAN, CEM
On Sabbatical – Through hiker of
the Continental Divide Trail

“Green Building United is like a turnkey solution to all things related to the built environment. The Philadelphia region is

lucky to have an organization such as Green Building United. They not only provide wide ranging tools and services for the public, but the advocacy for enacting smart legislation and better building and energy codes just aligns with my vision of a zero carbon future and steps to get there.”



Strategic Initiatives

We put into practice what we preach through our strategic initiatives. As leaders in our region, we work closely with design professionals, building owners and managers, schools, energy service providers, and government employees to ensure that the pathway from design to construction to evaluation are on track to ensuring efficient and resilient buildings. Understanding that policy is only effective when implemented well, our initiatives demonstrate the value of sustainable building practices in our region and beyond.



“

MEMBER SPOTLIGHT



MARIE NORTH, CSBA
Sustainability Consultant

“Addressing climate change is so important. It’s critical to survival. Being more efficient or the most efficient we can be with the resources available to us is the sustainability topic that’s most important to me. The 2030 District initiative led by Green Building United in Philadelphia which is encouraging commercial buildings to be more energy efficient is helping address this topic.”

“

MEMBER SPOTLIGHT



KIM ILARDI
Director of Practice Groups–
Whiting-Turner

“Ultimately the sustainability community wants to move the entire industry forward and work together no matter what. Organizations such as Green Building United help break down a lot of barriers to work towards that common goal and create an environment for great collaboration.”



PHILADELPHIA 2030 DISTRICT



In 2019, the Philadelphia 2030 District, grew in size and participation. Over a series of six partner meetings, owners, managers, and developers of the city's largest properties shared resources to achieve deep reductions in energy use, water use, and transportation emissions. Owners received individual property reports demonstrating their progress toward the 2030 District goals with invitations for one-on-one meetings to discuss ways to improve performance year after year.

Green Building United was thrilled to host the 2030 District Networks Summit in October 2019. 2030 District Network leaders from across North America traveled to Philadelphia to share resources, hear from content experts, and learn how Philadelphia is leading on energy use reduction and stormwater management.

PROGRAM SPONSOR

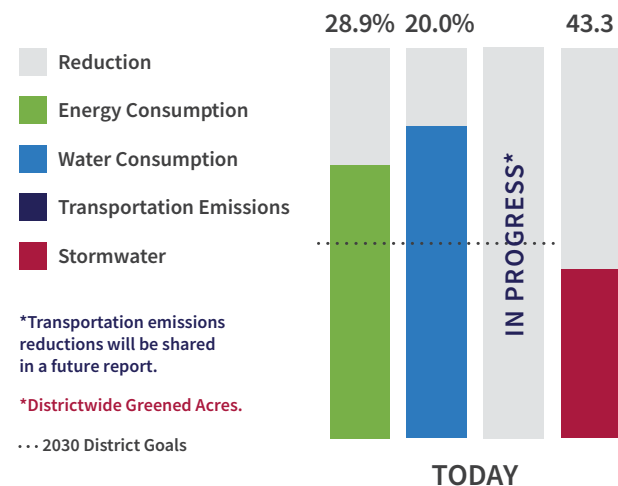


MEETING SPONSOR

Tozour Energy Systems



PROGRESS TOWARD 2030 DISTRICT GOALS



21.9 Million
SQUARE FEET COMMITTED

47
PROPERTIES

273
EVENT ATTENDEES



ENERGY BENCHMARKING



In 2019, Green Building United continued to administer the Philadelphia Building Energy Benchmarking Program on behalf of the City of Philadelphia's Office of Sustainability. The benchmarking program helps building owners gain control of their energy bills, focus on their building's energy needs, and measure progress overtime relative to others. We manage and track compliance for the city ordinance, provide technical assistance, update online resources, and work closely with partners to improve implementation and ensure building owners have the information and resources needed to report accurate building use information.



2,742

BUILDINGS
REPORTED



1,400

SUPPORT
TOUCHPOINTS



10%

BETTER THAN THE
MEDIAN ENERGY
STAR SCORE



5%

REDUCTION
IN ENERGY
WASTE

ENERGY CODE IMPLEMENTATION



Green Building United supports the adoption of 2018 International Codes, which represents an increase in energy efficiency of over 30 percent as compared to prior code. To ensure these savings are found, Green Building United, and our partners, provided live and recorded trainings on the pathways to code compliance. We worked closely with the City of Philadelphia's License and Inspections to improve enforcement of the new energy code for all new construction and renovations that trigger code compliance. Lastly, we developed a comparison of 2018 IECC to other above code standards for the design community to reference when pursuing high performance targets.



182

ATTENDEES



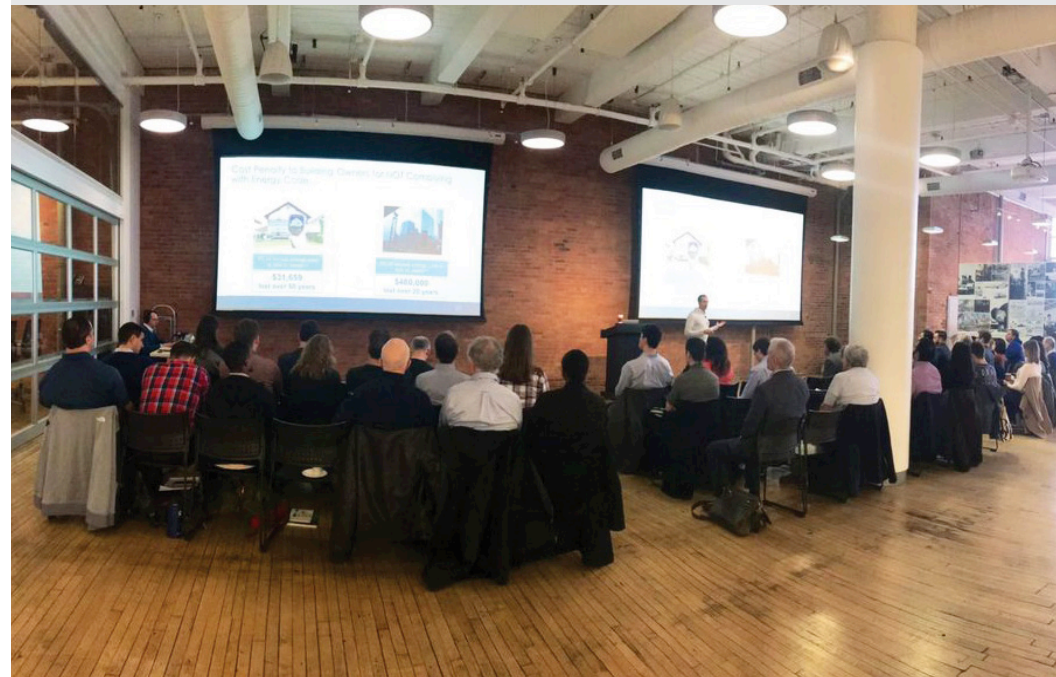
7

TRAININGS



27

TRAINING HOURS





CLIMATE RESILIENT COMMUNITIES

Green Building United collaborates with community groups to address climate injustice at the neighborhood scale by convening experts, stakeholders, local organizations, and citizens to share knowledge, experiences, and lessons learned about climate resilience in Philadelphia. For the second year in a row, we partnered with Philadelphia Association of Community Development Corporations (PACDC) to host an engaging Community Climate Resilience Workshop at the Discovery Center in Philadelphia's Strawberry Mansion neighborhood. This sold-out, interactive event featured speakers from Esperanza, City of Philadelphia's Office of Sustainability, and Enterprise Community Partners.

In addition to our educational partnerships, we have been expanding our resiliency work through our Demonstration Projects. In 2019, the Living Future and Passive House Communities wrapped up their work examining the feasibility of building a Philadelphia rowhome to these high performance standards. We're excited to continue this work through a Passive Rowhouse Design Manual, and improving energy resilience for home owners and buildings in the region.



10
EVENTS



350
ATTENDEES



158
ORGANIZATIONS

DELAWARE PATHWAYS TO GREEN SCHOOLS



In 2019, Green Building United continued its partnership with Energize Delaware to lead the Delaware Pathways to Green Schools program. Four new schools were eligible to receive free energy audits while eight new schools and seventeen returning schools benefited from opportunities for one-on-one support, mini grant awards, building operator trainings, and content expert workshops. Because of their sustainability leadership, three participating Pathways schools received the NWF's Green Flag or the U.S. Department of Education's Green Ribbon award!



29
SCHOOLS
PARTICIPATING



138
INDIVIDUAL
PARTICIPANTS



10,000
DOLLARS IN MINI-
GRANTS AWARDED



Media

In 2019, Green Building United expanded its communication to a broader audience through news stories, blogs, and social media. Green Building United has remained a voice of authority when it comes to advancing green building design in the region. Green Building United's policy work, volunteer initiatives, and major events appeared in over 20 news outlets.

HIGHLIGHTS



WHYY

Kenney signs law requiring green tune-ups for Philly's biggest buildings



CBS 3

Upper Dublin's Award-Winning Science Program Aspiring To Change Classroom Into Living Building



Resilient Housing

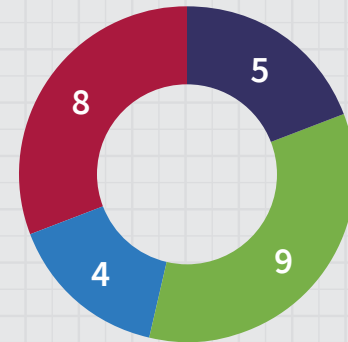
Planning Resilient Communities from the City Scale to the Neighborhood-Level



KYW

Project aimed at improving city's energy efficiency by 2030 already halfway to its goal

MEDIA TOPICS COVERED



- Community-led volunteer opportunities
- Signature Events
- Policy and Advocacy
- Strategic Initiatives



9.7 Million

VIEWS (SOCIAL, WEBSITE, MEDIA PLACEMENTS)



75,000

UNIQUE READERS



70%

MEDIA PLACEMENTS
FEATURING STAFF



Our Supporters

2019 FUNDERS



Anonymous
Donor



2019 SUSTAINING PARTNERS

LEGACY



PLATNIUM



KIERAN TIMBERLAKE



GOLD



SILVER



SMALL BUSINESS PARTNERS

Architectural Glass Institute

BluPath Design

Calfayan Construction Associates

Integrated Energy & Microgrid Solutions LLC

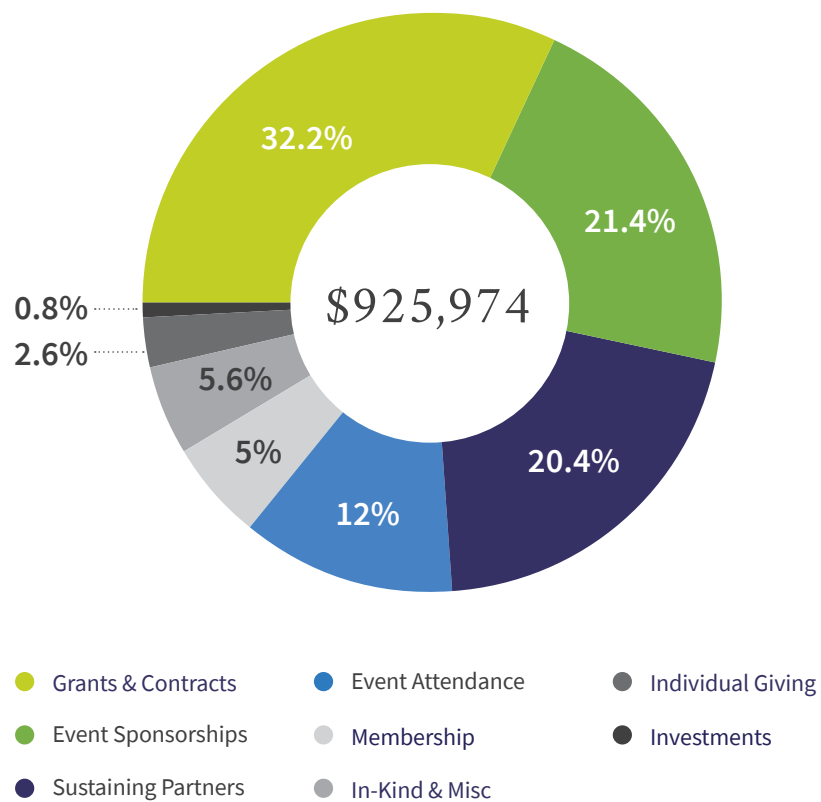
Loomis McAfee Architects

University Place Associates

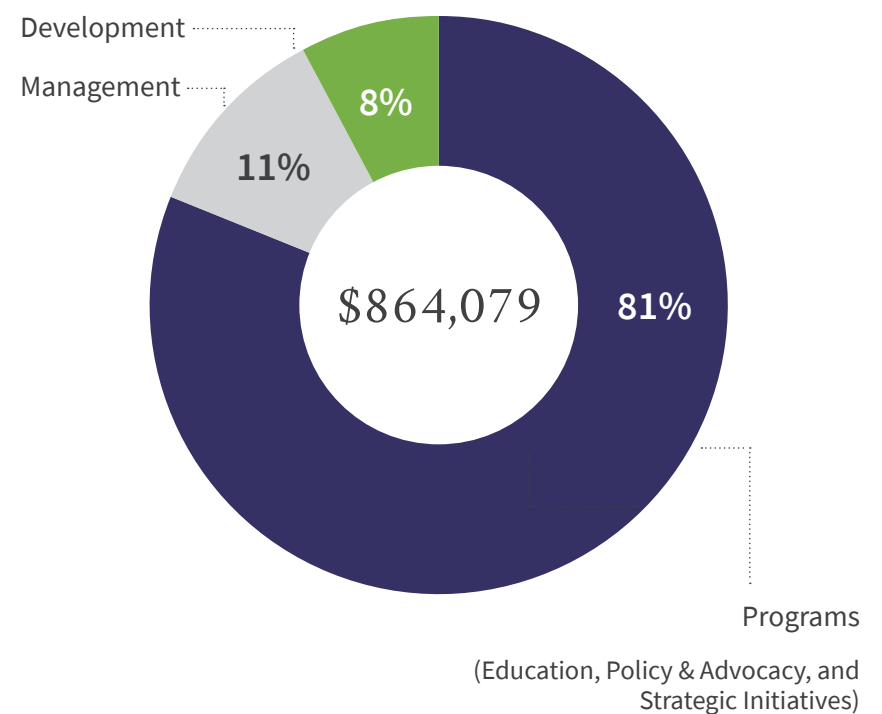


2019 Financial Summary

REVENUE REPORT



EXPENSE REPORT



Our Team

STAFF

EXECUTIVE DIRECTOR

Alex Dews, LEED AP

DEVELOPMENT DIRECTOR

Margaret Salamon, CFRE

POLICY AND PROGRAMS DIRECTOR

Katie Bartolotta

EDUCATION AND ENGAGEMENT DIRECTOR

Leah Wirgau, LEED Green
Associate

PROGRAMS AND COMMUNICATIONS MANAGER

LeAnne Harvey, LEED
Green Associate

BOOKKEEPER

Marcella Reis

PENN DESIGN MUSCOE MARTIN FELLOW

Ziao Wang

PHILADELPHIA 2030 DISTRICT INTERNS

Isabelle Coupet

Jay Dennis

PENN FELS DEVELOPMENT AND COMMUNICATIONS FELLOW

Mollie Williamson

NEW GRAVITY HOUSING CONFERENCE INTERN

Brandon Hassell

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Company*

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GREEN

BUILDING

UNITED

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