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<table>
<thead>
<tr>
<th>Session/Tour 1</th>
<th>Session/Tour 2</th>
<th>Session/Tour 3</th>
<th>Session/Tour 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30 - 11:30</td>
<td>11:45 - 12:45</td>
<td>2:15 - 3:15</td>
<td>3:30 - 4:30</td>
</tr>
<tr>
<td>Love Where You Live - Working with Communities on Green Strategies</td>
<td>“Decarbonization” Debunked</td>
<td>Decarbonization Now: Practical Tips to Efficiently &amp; Economically Use Deconstruction on Your Next Project</td>
<td>Lessons Learned from Former Chief Sustainability Officers</td>
</tr>
<tr>
<td>Building 7R Auditorium</td>
<td>Building 661 Room 202</td>
<td>Building 661 Room 201</td>
<td>Building 7R Room 209</td>
</tr>
<tr>
<td>Bringing Energy Equity to Every Corner of Philadelphia</td>
<td>Circular Solutions: Local, Innovative Approaches to Global Issues with Glass Recycling</td>
<td>Integrating Design to Build Resilient Communities Improving Health and Wellbeing</td>
<td>Beyond a Singular Solution - A Holistic Approach to Urban Agriculture</td>
</tr>
<tr>
<td>Building 661 Room 201</td>
<td>Building 661 Room 201</td>
<td>Building 7R Room 209</td>
<td>Building 661 Room 107</td>
</tr>
<tr>
<td>Building 7R Room 209</td>
<td>Building 661 Room 107</td>
<td>Building 661 Room 107</td>
<td>Walking Tour</td>
</tr>
<tr>
<td>Analysis Paralysis: Energy Modeling in an Age of Many Choices</td>
<td>Decarbonizing the City of Philadelphia with District Energy</td>
<td>USGBC Presents: New and Exciting Updates from LEED and Beyond</td>
<td>Green Infrastructure Tour</td>
</tr>
<tr>
<td>Building 661 Room 107</td>
<td>Walking Tour</td>
<td>Building 661 Room 107</td>
<td>Iovance Tour</td>
</tr>
<tr>
<td>Eastern Pennsylvania: The US Leader in Dynamic Glass Adoption</td>
<td>FS Investments Headquarters</td>
<td>Navy Yard Energy Strategies</td>
<td>Walking Tour</td>
</tr>
</tbody>
</table>
As a pioneer of the healthy building movement, Brandywine understands the impact buildings can have on health and wellness, and is deeply committed to establishing industry-leading sustainable practices that enable the health, wellness, and productivity of our tenants and employees. As such, we are proud to serve as the Founding Sponsor of Green Building United’s Annual Sustainability Symposium, as we work together in pursuit of a greener, more resilient world.
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APPLY NOW!
We are thrilled to be hosting Green Building United’s 2022 Sustainability Symposium in person again at Penn State at The Navy Yard. Welcome to all of our new attendees, sponsors, and returning friends again.

Now, in its 12th year, the Symposium brings together a broad community of stakeholders – representing architecture, design, construction, real estate, energy services, community development, climate advocacy, and many more – to share examples of their work and best ideas on how to advance sustainability in our region.

We are grateful to our Founding Sponsor, Brandywine Realty Trust, for their continuous support of the Sustainability Symposium, along with the many other organizations whose support makes this conference possible. Also, a special thanks to our Sustainability Symposium Planning Committee for conceiving of and orchestrating an exceptionally strong group of education sessions and EXPO Hall in this superb venue.

Sincerely,
Amy Cornelius, Interim Executive Director,
& the Green Building United Team

Steering Committee
Shannon Crooker | Adam Cutler | Bill Fisher | Kate Flint | Alex Grella | Angela Iraldi | Patrick Isaac | Bissy Larsson | David Lemons | Brendan McGrath | Dom McGraw | Amy Musanti | Nate Paist | Uma Pattarkine | Sangeetha Sambandam | Mark Sanderson | Kristin Sullivan | Matt Thomas | Rod Ward | Dennis Wilson

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Penn State has been the Navy Yard’s leading educational partner since 2005, supporting the Navy Yard’s commitment to smart energy innovations and sustainability. Our facilities were designed to be a living laboratory to explore and showcase clean energy technology and solutions for today’s building efficiency and energy grid challenges.

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Thank you to our 2022 Tour Guides
Juliana Bejleri, Emily Bittenbender, Margaret Burpee, Kim Cooper, Brooke Dexter, Michael Goldberg, Jewelle Kennedy, Dylan Langley, Jesse Mainwaring, Jim McNamara, Stan Newman, Jeremy Rigau, Joe Sikora, Andrew Stathos, Rudy Terry, & Janice Wong.

Special Thanks to our 2022 Tour Steering Committee
Bill Fisher, Jackie Hall, and Jen Tran

Each tour is capped at 25 participants.
Tours are worth 1 GBCI & AIA Credit
Pre-registration is required - see registration table for information or follow this link

*Tours will meet on the sidewalk next to Building 7R - or inside and to the left of the main entrance if there is inclement weather*
Green Stormwater Infrastructure at the Navy Yard

*1 GBCI, AIA, & LA CES Credit*

Explore the transformation of brownfield sites employing realistic green infrastructure practices. Storm water management plays a key role in the resilience of this rapidly expanding urban neighborhood. The multiple green open spaces serve as “outdoor living rooms” which increase pervious surfaces while encouraging physical activity and community engagement.

The tour will be led by landscape architects who designed League Island Park and the Central Green. Pennoni Engineers will discuss engineered solutions for bio-basins and curbside rain gardens. Bittenbender Construction, will discuss construction practices and value engineering that helped to realize these visions into a constructed reality.

Joe Sikora, Principal, Sikora, Wells Appel Landscape Architects
Kim Cooper & Brooke Dexter, James Corner Field Operations
Andrew Stathos, Pennoni Engineers
Emily Bittenbender & Rich Roesch, Bittenbender Construction
Bill Fisher, Retired Real Estate Executive, Green Building United Board Member

Tour 2 | 11:45 - 12:45 pm

High Performance Buildings & State-of-Art Bio-Tech Manufacturing

*1 GBCI & AIA Credit*

Tour this LEED Gold building where immunotherapies are produced to treat tumors and blood cancers. Iovance joins a growing hub of bio-medical companies, such as Adaptimmune and Wuxi, who are housed in high performance buildings at the Navy Yard. Digsau Architects, the designer of multiple Navy Yard buildings, will conduct the tour inside this 136,000 SF facility along with the Developer from Gattuso Development Partners and the User.

This building demonstrates that LEED buildings make financial and ethical sense for the building owners as well as the users who occupy them.

Michael Goldberg, Digsau Architects
Jesse Mainwaring, Digsau Architects
Stan Newman, Iovance Facilities Engineering
Janice Wong, Gattuso Development Partners, LLC
Bill Fisher, Retired Real Estate Executive, Green Building United Board Member
Together, we’re shaping the future.

We build sustainable solutions, resilient infrastructure and healthy, inclusive spaces for working, living and connecting.

Each tour is capped at 25 seats. 
Tours are worth 1 GBCI & 1 AIA Credit 
Pre-registration is required - see registration table for information or follow this link

SKANSKA
Making a Case for Employee Health, Wellness & Productivity

1 GBCI & AIA Credit

This tour of FS Investments Headquarters exemplifies a company’s vision, which prioritizes workplace health and wellness. Attendees will learn how this LEED Gold building encourages users to stay motivated, think creatively and work hard for their investors, clients and community in a supportive work environment. With a unique configuration, the building is owned by a commercial developer who accommodates this user’s needs, while creating a facility that will be financially competitive for years to come.

The tour will be led by Digsau, the Architects for the building, Turner, the Construction Manager, FS Investments, the Project Manager for the Developer and the User. The interiors are bathed with natural light, unique employee amenities and a world class art collection throughout the facility.

Michael Goldberg, Digsau Architects
Jesse Mainwaring, Digsau Architects
Jim McNamara, Turner Construction Company
Margaret Burpee, FS Investments
Bill Fisher, Retired Real Estate Executive, Green Building United Board Member
Powering the Navy Yard: One of the Region’s Largest Non-Municipal Systems

1 GBCI & AIA Credit

How does the Navy Yard ensure an ever-evolving 1930’s infrastructure can be a modern grid ready to serve this 1,200 acre site - the same size as Center City Philadelphia? Learn about the Navy Yard’s utility operations and management, tour the GridNOC (Network Operations Center), and see a demonstration of the power of electronic information systems that illustrate invisible and visible utility infrastructure, which is critical in keeping the lights on 24/7.

The presentation will also include glimpses into the next phases of the Navy Yard masterplan underscoring how strategic planning and the mustering of resources are essential to maintain services while accommodating reliable growth for this 148 year old campus. Hear from Ensemble/Mosaic about the rehab of an existing WWI &WWII Navy Receiving Station building into a 4.5 start hotel, while minimizing demolition of any existing structure and achieving LEED Silver for the project, as well as the development of Chapel Block, the first residential complex to be built at the Navy Yard with a pandemic informed design reflecting the new realities of how people work, value outdoor access, and are concerned about indoor ventilation.

Rudy Terry, PIDC
Jeremy Rigau, Dominion Energy
Juliana Bejleri, Ensemble/Mosaic
Jewelle Kennedy, Ensemble/Mosaic
Be sure to catch Michael Thompson, AIA, LEED AP, a presenter for the session, “Public Works Reimagined: Greening Delaware County”
Welcome & Keynote | 9:05 - 10:15 am

Keynote Speaker: Bill Browning - Building 7R, Auditorium

1 GBCI & AIA Credit

Bill Browning is one of the green building and real estate industry’s foremost thinkers and strategists, and an advocate for sustainable design solutions at all levels of business, government, and civil society. His expertise has been sought out by organizations as diverse as Fortune 500 companies, leading universities, non-profit organizations, the U.S. military, and foreign governments.

In this Keynote, Bill will address how
- Nature-based design blurs the distinction between the natural and built environments resulting in improved performance in humans and the ecosystem
- Reconnecting people with the environment will lead to a healthy, prosperous, and regenerative future for all
- Environmental strategies can solve complex real estate projects
- Biophilic solutions make economic and ecosystem sense

Click here to learn more about Bill.

Session 1 | 10:30 - 11:30 am

Love Where You Live - Working with Communities on Green Strategies
- Building 7R, Auditorium

Learning Level 100: Introductory | 1 GBCI, AIA, LFA CE, & LA CES Credit

The Pennsylvania Horticultural Society (PHS), Institute for Development of African American Youth (IDAAY), and Nicetown CDC are partners in using gardening to increase the health and well-being in neighborhoods across the Philadelphia region. Join us for a conversation on the power of community planning and partnerships to scale up the scientifically proven impacts of gardening on mental health, gun violence, and community well-being. Panelists will share insights on community-driven work to articulate a green vision and implement gardening projects that are rooted in neighbors’ aspirations that help improve the livable environment, increase economic opportunities, and foster social connections in neighborhoods with environmental and health injustices. Collaborations highlighted will include: The Love Where You Live greening plan for Nicetown and Tioga, Same Day Work and Pay, Workforce Development, Vacant Land Cleaning and Greening, Tree planting and stewardship

Matt Rader, President at Pennsylvania Horticultural Society
Samir Dalal, LandCare Program Manager at Pennsylvania Horticultural Society
Majeedah Rashid, Chief Operating Officer at Nicetown CDC
Gregory Thompson, Project Manager at Institute for Development for African American Youth
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GREEN BUILDING UNITED
2022 Sustainability Symposium

ROTHOBLAAS means energy efficiency and durability for buildings
Bringing Energy Equity to Every Corner of Philadelphia - Building 661, Room 202
Learning Level 200: Understanding/Comprehension | 1 GBCI, AIA, & LA CES Credit

As we plan for and realize our region’s clean energy future, organizations must think strategically about program design and incentive structures that encourage equitable access to clean energy across neighborhoods and income levels. The Philadelphia Green Capital Corp will discuss innovative financing products designed to make affordable, clean energy projects a reality for sectors that have struggled to access funding in the past. The Philadelphia Office of Sustainability will discuss the government’s role and the Environmental Justice Commission that works to ensure that all residents of Philadelphia, regardless of race, gender, income status or zip code, have a livable community, free of environmental toxins and hazards. And the Philadelphia Energy Authority will discuss purposeful workforce development programs that support a diverse workforce in the growing clean energy economy.

Rishika Ghosh, Senior Associate at Philadelphia Green Capital Corp
Shonique Banks, Director of Development and Workforce Initiatives Philadelphia Energy Authority
Matina Granieri, Program Manager of Place-Based Initiatives at Philadelphia Office of Sustainability

Designing Net Zero Energy Multifamily HVAC - Building 661, Room 201
Learning Level 300: Application/Implementation | 1 GBCI, AIA, LFA CE, & PHIUS Credit

This presentation will provide design professionals a basis for technical decision making in designing and achieving net zero energy multifamily buildings. We will cover the design process, energy modeling, equipment selection, and design strategies utilized in net zero energy multifamily properties. We will also share case studies of net zero energy projects and lessons learned for designing low energy buildings. As building codes and local policies in net zero energy buildings evolve and advance, understanding the proven strategies towards achieving these ambitious goals will be critical to delivering future buildings in a cost-effective manner.

Emma Raymont, P.E., Director of Engineering at MaGrann Associates
Scott Welch, Principal at Torti Gallas and Partners
Jon Jensen, Director of Sustainability at MaGrann Associates
Public Works Reimagined: Greening Delaware County - Building 7R, Room 209
Learning Level 200: Understanding/Comprehension | 1 GBCI, AIA, & LA CES Credit

Delaware County PA owns and operates 70 buildings and 16 parks. With a growing awareness of the impacts associated with this footprint, in 2021 an Office of Sustainability was established. One of its first actions was to engage a county-wide facilities assessment encompassing both a spatial efficiency analysis and Level 2 Energy Audit with carbon inventory. This session, led by representatives from the study team and county, will be in four parts. First, background information on the county’s infrastructure and project goals will be presented. Next, the team will review the process by which a study of this breadth and scale was undertaken. Third, findings will be shared through examples at the county-wide level and select campuses. Last, the county representative will review the ongoing process to analyze the data and develop a long-term action plan to curtail energy and water consumption and generally heighten the focus on resource stewardship.

Michael Thompson, Project Manager at KCBA Architects
Francine Locke, Chief Sustainability Officer at Delaware County, Pennsylvania
Kaustubh Chabukswar, Program Manager, Energy Sustainability & Capital Planning at Bureau Veritas Group

Analysis Paralysis: Energy Modeling in an Age of Many Choices - Building 661, Room 107
Learning Level 300: Application/Implementation | 1 GBCI & AIA Credit

Energy reduction goals, whether voluntary or mandated, are increasingly essential to achieve the goal of net-zero buildings by 2050 and energy models are critical tools for determining how to do so. Like any tool, teams need an understanding of how to use modeling correctly, and more options than ever are available – ASHRAE 90.1 modeling, Wufi, and REM/Rate, Shoebox models, Iterative models. And all of them are options through plugins, software, or subcontractors. So many choices! The right model will give you valuable information, but the wrong choices can cause expensive headaches that range from bad energy decisions to costly model re-runs. Join us as our panel deciphers the energy modeling options while you learn how to determine what kind of modeling is right for your project and goals. This discussion will explore when each kind of model works well by using several short case studies to illustrate costs, benefits, opportunities, and risks associated with energy modeling.

Heather Medlin, Architect at Re:Vision Architecture
Arvinder Dang, Associate Principal at dbHMS
Ahmad Mahmud, PE, LEED AP, Principal at BSEG
Nick Semon, Senior PM at Re:Vision Architecture
“Decarbonization” Debunked - Building 7R, Auditorium
Learning Level 200: Understanding/Comprehension | 1 GBCI, AIA, & LFA CE Credit

“Decarbonization” is a buzzword in the sustainability movement for eliminating fossil fuels from our energy streams - but it doesn’t tell the whole story. As we all learned in chemistry class, carbon is the stuff that all living things and environments are made of. And as our planet earth is a closed system, matter cannot be eliminated or destroyed – it can only be rearranged. We can’t simply get rid of carbon (especially with electrification) we just need to rebalance our relationship with it – which is currently out of whack and causing problems we all now know well. This session will unpack the misconceptions of operational and embodied carbon to lead us in the direction of a flourishing culture of “recarbonization” to restore our planet’s carbon balance.

Drew Lavine, AIA, LFA, CPHC, LEED AP BD+C, Partner & Director of Design at Re:Vision Architecture
Angela Iraldi, LEED AP BD+C, PHIUS+ Verifier, BECxP, Senior Project Manager at Re:Vision Architecture

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From Net-zero to Eco-positive: Buildings as Micro-Habitats - Building 661, Room 201
Learning Level 200: Understanding/Comprehension | 1 GBCI & AIA Credit

Each building – new and existing - offers the opportunity to support public health. There is a direct link between public health and urban biodiversity. This session will explore how buildings can transform into micro habitats that feed and shelter birds and pollinators, and in the process, enhance human life. We will discuss the design concept of ‘ecotonal building envelopes’ which function as micro-climates to alleviate urban heat, reduce cooling loads, filter fine particle pollution, and mitigate noise and light pollution. Our biology is essentially identical to the biology of birds: we are soft bodies forced to navigate in hard-edged cities of steel, glass and concrete. These hard edges kill 1 billion birds per year in North America alone. Micro-Habitat buildings re-align the places we inhabit with the innate biology of life. Given the challenges we face today, ecology & biodiversity must become intrinsic design aspects of every building envelope.

Helena van Vliet, RA Dipl. Ing. AIA, Principal at Helena van Vliet, LLC, President at bioPhilly, and Adjunct Faculty, at Thomas Jefferson University, and Pratt
Connie Sánchez, Program Coordinator: Bird-Friendly Buildings at National Audubon Society
Fredda Lippes, Design and Construction Manager at City of Philadelphia, and Vice President bioPhilly
Laura Hansplant, Principal | Director of Design, Studio Sustena

Circular Solutions: Local, Innovative Approaches to Global Issues with Glass Recycling - Building 661, Room 202
Learning Level 300: Application/Implementation | 1 GBCI, AIA, LFA CE. & LA CES Credit

Post-consumer glass is one of the most challenging recyclable materials to manage because there are almost no markets available. But, here in Philly, we may have hit on a hyper-local, replicable solution. Come to this session to find out why glass recycling is such a challenge and hear about the synergies between two companies working on building a market for glass sand. OLIN Labs and BottleUnderground will present their research partnership into using ground glass as an ingredient in Soilless Soil; a solution to the sand shortage. And Aero Aggregates will present how they transform ground glass into an aggregate substitute that has the properties of Riprap at a 10th of the weight! At the last survey of Philadelphia’s collected recyclables, glass represented 18.3% or 30,000+ tons of the total. That is an enormous potential savings in waste costs, volume in the landfill, and to make new products out of old. A perfect Circular Economy solution. And, as Aero Aggregates, can attest, it is a replicable solution for other cities. Is that a win-win-win-win?

Fern Gookin, LEED AP, Director of Sustainability at Revolution Recovery
Rebecca Popowsky, Research Associate at The OLIN Studio
Rebecca Davies, Founding Board Member at Bottle Underground
Theresa Loux, PH.D., PE, Technical Manager, AeroAggregates of NA, LLC
Lunch will be served after Session 2.

Lunch is available in Building 661 on the upper level mezzanine. Please take full advantage of all indoor and outdoor spaces for lunch. GBU Communities & ReVision Architecture will have seating areas available that are open to all attendees at seating areas 36, 37, 28, 29, & 40.

Happy Hour will be available from 5-7pm in Building 661.
Deconstruction Now: Practical Tips to Efficiently and Economically Use Deconstruction On Your Next Project - Building 7R, Auditorium
Learning Level 200: Understanding/Comprehension | 1 GBCI, AIA, & PHIUS 

Credit

The EPA has estimated that 40% of waste going to landfills is construction and demolition materials. Not only are many of these materials recyclable, but many are also appropriate for reuse if collected through the practice of deconstruction. In Philadelphia, there are existing organizations like Philly Reclaim and the Philadelphia Community Corps as well as a network of salvage companies that will do deconstruction and utilize deconstructed materials. However, the practice has still not become as widely adopted as it could be. In this session Greg Trainor, Executive Director of the deconstruction workforce program Philadelphia Community Corps and the deconstructed material sales outlet Philly Reclaim will be joined by Nic Esposito, Director of Policy and Engagement for the circular economy development non-profit Circular Philadelphia to explain streamlined permitting pathways for deconstruction as well as incentives you can take advantage of today to make your project sustainable, both environmentally and economically.

Nic Esposito, Director of Policy and Engagement at Circular Philadelphia
Greg Trainor, Executive Director at Philadelphia Community Corps and Philly Reclaim

Integrated Design to Build Resilient Communities Improving Health and Wellbeing - Building 661, Room 202
Learning Level 200: Understanding/Comprehension | 1 GBCI, AIA, & LA CES 

Credit

This panel will explore how NC Five, a resident-driven, sustainable, urban community encouragingly demonstrates the symbiotic relationship between the built and natural environments to make a positive impact on health and wellbeing. The design encourages a connection to the outdoors through siting the communal spaces at the perimeter of the building surrounding the multi-level landscaped courtyard. The integrated design team will discuss how green space, healthy materials, proper acoustics, and energy efficiency have made an impact on the health and wellbeing of residents since opening. We will explore how each space was created to address a hierarchy of human needs, allowing the opportunity for residents to interact, gather and engage, or to simply reflect and contemplate. Jonathan Rose Companies and WRT initially collaborated on Paseo Verde, the nation’s first triple LEED rated community in 2014, now completing NC Five, which is the final phase of the North Central Choice Neighborhood Implementation Grant WRT helped to secure in 2014. JRCO recently completed Sendero Verde, the largest fully affordable Passive House building in the world, located in East Harlem.

Sabrina Barker, Director of Development at Jonathan Rose Companies
Marissa Hebert, AIA, CPHC, Associate and Architect at WRT
David Gamba, CPHC, Senior Associate and Project Manager at WRT
Energy Efficient Design: The Prescription for Sustainable Development - Building 7R, Room 209
Learning Level 300: Application/Implementation | 1 GBCI & AIA Credit

With its world-renowned research hospitals and concentration of global pharmaceutical companies, the greater Philadelphia region is increasingly referred to as “Cellicon Valley.” In addition to more than $1B in grants allocated to the region’s universities and research institutions, nearly another $1B in venture capital is being invested to fund the development of lab spaces and manufacturing facilities to support the accelerating growth of the life sciences industry. To help promote sustainable growth, PECO offers solutions and financial incentives that encourage integrated, energy-efficient design to holistically address energy performance. Representatives will discuss how they are leveraging the Whole Building Design and New Construction incentives from PECO to build efficiency into their operations and achieve sustainability goals.

Shannon Christie, Sr. Energy Efficiency Program Manager at PECO
Randy Haines, Director of Energy Management at Thomas Jefferson University
Jason Kindt, Energy & Sustainability Program Manager at CBRE for Merck
Cathy Reed, System Energy Manager at JLL for Main Line Health
Miguel Feliciano, Energy Efficiency Account Manager at CMC Energy Services, Inc.
Decarbonizing the City of Philadelphia with District Energy - Building 661, Room 107
Learning Level 100: Introductory | 1 GBCI & AIA Credit

This session seeks to educate policy influencers, architects, engineers, developers, sustainability leaders, and building owners about the incredible value of district energy in achieving rapid and cost-effective building decarbonization in urban centers and meeting aggressive city and state carbon reduction targets. By leveraging renewable energy sources, new technologies, and existing robust underground infrastructure, district energy has the potential to directly impact and address the largest source of carbon emissions in Philadelphia—commercial buildings and industry represent 75% of Philadelphia's carbon emissions. Highlights include - details on Vicinity's multi-pronged Clean Energy Future strategy and execution plan, how this strategy is being applied in Philadelphia and how it can be leveraged across district systems nationwide, examples from other European and Canadian cities that are leading the way in district energy electrification and in driving carbon reductions, why public-private partnership is so critical to achieving expeditious and successful outcomes

Matt O'Malley, Chief Sustainability Officer at Vicinity Energy
William CiCroce, CEO at Vicinity Energy
Kathleen Fink, Energy Manager at Penn Medicine

Process Disruption: People Centered Project Teams - Building 661, Room 201
Learning Level 200: Understanding/Comprehension | 1 GBCI & AIA Credit

The events of the last 24 months, including the overnight departure from our shared spaces, the rise to prominence for the Black Lives Matter movement, and rapid advancements in sustainable energy production have shifted the central focus of sustainable design from creating sustainable spaces to sustaining people. Our metrics are shifting from watts per sq ft to wellness generated per user. Wellness can be sustainability’s Achilles heel or its springboard into new types of spaces and solutions. We must re-align our expectations for comfort, sustainability and efficiency with these new metrics for success. To integrate well-being into sustainable design we must alter policy, technology, form and function, cultural comfort norms and integrated project delivery. This presentation will explore how the intersection of health, equity and environmental sustainability creates a new project framework that is focused on the overall well-being of the users.

Andrew Horning, VP and Sustainability Leader, BALA Consulting Engineers
Matthew Ezold, VP and Director of Digital Planning, BALA Consulting Engineers
Elizabeth Larson, Sustainability Engineer, BALA Consulting Engineers
The building science community has shifted their primary focus from the reduction of operational carbon to include embodied carbon and the environmental impact of material selection on human health and the environment. Considerations include insulation materials, materiality of high-efficiency windows, and structural components and associated emissions from extraction, manufacturing, and transportation. Case studies will explore embodied carbon outcomes of various projects in construction, along with design alternatives. Our range of projects includes both deep energy retrofits and new construction. Advocating for foam-free and low-cost strategies is challenging, but an important, integral part of our mission and practice. R-410A has a global warming potential more than 2000x higher than CO2. Estimates are that half the refrigerant in today’s systems will leak into the atmosphere instead of being recovered, resulting in many thousands of tons of CO2 equivalent. We will explore upcoming replacement refrigerants, associated building and fire risks, and industry challenges.

Michael Hindle, Principal | MFA, CPHC at Passive to Positive
Christina Aßmann, Associate | Senior Architect | Sustainability Consultant | NCARB, LEED AP BD+C, CPHC, WELL AP at Passive to Positive
Ben Roush, Principal | PE-ME, FPE, LEED AP BD+C, CCP, ASHRAE BEMP and BEAP at FSi Engineers
A lot has been happening in the USGBC ecosystem. Come hear from USGBC’s Managing Director, U.S. Market Transformation & Development for an update briefing of new developments in the LEED program and the complementary programs that the organization supports and manages. Learning objectives include:

- Explain how LEED has evolved and future path ahead
- Discuss opportunities, challenges and needs to support green building practitioners
- Access new green building tools to address real world issues (Examples: Arc, LEED, Pilot Credits)
- Describe how LEED Zero verifies project excellence in carbon, energy, water, and waste
- How LEED is having impact at scale through LEED for Cities & Communities

**Rhiannon Jacobsen**, Managing Director, U.S. Market Transformation & Development
Lessons Learned from Former Chief Sustainability Officers - Building 7R, Auditorium
Learning Level 300: Application/Implementation | 1 GBCI & AIA Credit

ESG (Environmental Social and Governance) measurement and reporting is becoming increasingly important. This facilitated roundtable discussion will bring former heads of regional and international ESG & Sustainability focused organizations together to discuss how they created their ESG programs; what challenges they faced, what they did right, and what they did not. Attendees will come away understanding why ESG matters, understanding the challenges they will face in setting up and managing their ESG programs, understanding the evolution of ESG reporting, and how to infuse the effort throughout their organizations.

Brad Molotsky, Partner at Duane Morris, LLP and former head of and creator of the Brandywine Program
Cavarly Garrett, Former head of and creator of JP Morgan program
Sukanya Paciorek, Former head of and creator of Vornado Realty program
Eugenia Gregorio, Former Head of Tower Companies
Chrissa Pagitsas, Pagitsas Advisors
Beyond a Singular Solution - A Holistic Approach to Urban Agriculture  
- Building 661, Room 202  
Learning Level 200: Understanding/Comprehension | 1 GBCI, AIA, LFA CE, & LA CES Credit

Urban agriculture is touted as a panacea for various challenges that cities face today, conjuring to mind images of towering vertical farms and biophilic utopias of the future. Although these conceptual explorations and experimental projects demonstrate the potential of urban agriculture’s contribution to more resilient regional food systems, they represent one small component within a broader network of food infrastructure that must be addressed to resolve larger issues of equitable food supply and distribution. Accompany us on a holistic exploration of the complexity of urban agriculture, dispelling pervasive misperceptions while envisioning a sustainable, future urban food system grounded in a multidisciplinary and multi-scalar approach. A discussion led by KSS and Sasaki, two architecture firms deeply involved in urban food production and distribution research, which aims to initiate a conversation about how to make real change and bring an awareness to the broader system that influences and shapes the nature of food.

Michael Grove, Chair of Landscape Architecture, Civil Engineering, and Ecology at Sasaki  
Scot Murdoch, Partner at KSS  
Eugenia Ellis, Director at dLUX light lab  
Christina Drexel, Designer I at BCV Architects and Interiors

CLF Philly presents: Opportunities for Stakeholders in Embodied Carbon Reduction on Projects  
- Building 661, Room 201  
Learning Level 200: Understanding/Comprehension | 1 GBCI & AIA Credit

Don’t just think - oh no, not more concrete! Although there has been a fair amount of discussion about embodied carbon over the last couple years, this session will help us dig down and really understand what embodied carbon is, why it matters, and how designers, contractors, and suppliers can collaborate to reduce embodied carbon on projects. One of the biggest opportunities to reduce embodied carbon lies in structural materials. Using concrete as a case study: we will hear from a structural engineer, general contractor, and local concrete supplier on ways to measure embodied carbon; strategies to lower the material’s carbon footprint; and how to advocate for transparency documentation from suppliers.

Denise Richards, Partner, PE at Keast & Hood  
Tim Hurtack, Director of Quality at Silvi  
Myrrh Caplan, Senior Sustainability Director at Skanska  
Lisa Conway, VP Sustainability - Americas at CLF Philly/Interface
Beyond Resiliency: NYCDEP’s Approach to Green Roof/Hybrid Solar Projects in Partnership with NYC Public Schools - Building 7R, Room 209

Learning Level 200: Understanding/Comprehension | 1 GBCI, AIA, & LA CES Credit

NYCDEP, recognizing that green infrastructure (GI) provides more than just stormwater management benefits, is reducing combined sewer overflow into the New York Harbor using GI alongside grants, incentives, regulatory action, and capital investments. With over 1,500 schools and 1.1 million students, the New York City public education system is the biggest and oldest in the country. The NYC School Construction Authority is responsible for the construction and renovation of all public schools in the City. Under Local Laws 92 and 94 (2019), all new buildings and alterations of existing buildings where the entire roof deck or roof assembly is being replaced must include a solar photovoltaic system, a green roof system or a combination of the two. This session will describe how NYCDEP is working in partnership with NYCDOE on rooftop retrofit projects, that achieve mutually beneficial goals for rooftop replacement, stormwater management, and solar PV installation.

Rebecca Peet, Project Manager at NYC Environmental Protection
Courtney Finneran, Project Manager at Jacobs Civil Consultants, Inc.
Christina Guerrero, Senior Architect at Jacobs Civil Consultants, Inc.
Ryan Mierzwa, Structural Engineer at Jacobs Civil Consultants, Inc.
Eastern Pennsylvania: The US Leader in Dynamic Glass Adoption - Building 661, Room 107
Learning Level 200: Understanding/Comprehension | 1 GBCI, AIA, & PHIUS Credit

Eastern Pennsylvania has emerged as the national leader in adoption of Dynamic Glass, with more projects than any other region of the country. In this moderated Q&A session, you will hear different perspectives on this technology from adopters in Higher Education, Passive House and Multi-Tenant Office. They will share their experience with it, why they chose it and what the impacts have been. The session will also seek to understand why Eastern PA has emerged as a leader in adoption and what lessons can be applied to foster broader adoption of this sustainable technology across the rest of the state and beyond.

Whitney Crull, Director of the Bowers Center at Elizabethtown College
Rich Gottlieb, President and COO at Keystone Property Group
Benedict Dubbs, Principal at Murray Associates
Tamara Alvarez, Manager, Partnerships and Business Development at Saint-Gobain
INDIVIDUAL MEMBERSHIP

When you become an individual member of Green Building United, you invest in our mission to create a just, verdant, high performing built environment, and have the opportunity to engage at the local level in green building and sustainability issues that have community, regional, and global impacts.

- Free admission to all Green Building United events (excluding major events)
- Discounted tickets to the annual Sustainability Symposium, New Gravity Housing Conference & Groundbreaker Awards events
- Free access to 50+ webinars in the Webinars on Demand library**
- Access to continuing education for GBCI, AIA, PHIUS, LACES, and LFA credential maintenance with the members only option to request a certificate of attendance
- Networking opportunities with Greater Philadelphia, Lehigh Valley, and Delaware green building and sustainability professionals
- Opportunity to influence local and state green building policies
- Eligibility to run for a seat on the Board of Directors & participate in volunteer opportunities
- PHIUS member rate for PHIUS trainings & 20 percent off ILFI membership
- Ongoing discounts for select partner events (shared in newsletters)
- Potential to be featured in the GBU Member Spotlight blog & Case Study Showcase

*If your employer is a USGBC Member, and/or if you have individual membership with one of our partners - LFI, PHIUS, or NAPHN - you are eligible for a discounted rate of $110.

** Does not include access to Sustainability Symposium, New Gravity, or Groundbreaker Awards recorded sessions

"GBU was a great way to become involved with the local sustainable building community and stay abreast of the latest developments in the field from the perspective of the experts."

-Uma Pattarkine, Global ESG Lead & Investment Strategy Analyst, CenterSquare, GBU Board of Directors
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Breakfast & Coffee will be served in Building 661 and coffee will be available in both buildings throughout the event.

Lunch is available in Buildings 661 on the upper level mezzanine. Please take full advantage of all indoor and outdoor spaces for lunch. GBU Communities will have seating areas available that are open to all attendees.

Happy Hour will be available from 5-7pm in Building 661.
<table>
<thead>
<tr>
<th>Company</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expo Hall</td>
<td></td>
</tr>
<tr>
<td>Penn State University</td>
<td>2</td>
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<tr>
<td>Horn Williamson</td>
<td>3</td>
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<td>4</td>
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<td>5</td>
</tr>
<tr>
<td>ESPA-USA</td>
<td>6</td>
</tr>
<tr>
<td>Jacobs</td>
<td>7</td>
</tr>
<tr>
<td>Saint-Gobain</td>
<td>8</td>
</tr>
<tr>
<td>SKANSKA</td>
<td>9</td>
</tr>
<tr>
<td>Thomas Jefferson University</td>
<td>10</td>
</tr>
<tr>
<td>Energy Transfer Solutions</td>
<td>12</td>
</tr>
<tr>
<td>AeroAggregates, LLC</td>
<td>13</td>
</tr>
<tr>
<td>KCBA Architects</td>
<td>14</td>
</tr>
<tr>
<td>Rothoblaas</td>
<td>15</td>
</tr>
<tr>
<td>Amtrak</td>
<td>16</td>
</tr>
<tr>
<td>JLL</td>
<td>17</td>
</tr>
<tr>
<td>MaGrann Associates</td>
<td>18</td>
</tr>
<tr>
<td>CBG South Inc</td>
<td>19</td>
</tr>
<tr>
<td>WRT</td>
<td>20</td>
</tr>
<tr>
<td>ABM Industries</td>
<td>21</td>
</tr>
<tr>
<td>Vicinity</td>
<td>22</td>
</tr>
<tr>
<td>Hugh Lofting Timber Framing &amp; High Performance Building</td>
<td>23</td>
</tr>
<tr>
<td>Ventacity</td>
<td>25</td>
</tr>
<tr>
<td>World Class Supply</td>
<td>26</td>
</tr>
<tr>
<td>Sustainable Energy Fund</td>
<td>27</td>
</tr>
<tr>
<td>PECO Energy Company</td>
<td>28</td>
</tr>
<tr>
<td>Mezzanine</td>
<td></td>
</tr>
<tr>
<td>PhilaNOMA</td>
<td>32</td>
</tr>
<tr>
<td>Philadelphia Energy Authority</td>
<td>33</td>
</tr>
<tr>
<td>Office of Sustainability</td>
<td>34</td>
</tr>
<tr>
<td>Grid Magazine</td>
<td>35</td>
</tr>
<tr>
<td>ReVision Architecture</td>
<td>36</td>
</tr>
<tr>
<td>Living Future Community</td>
<td>37</td>
</tr>
<tr>
<td>Passive House Community</td>
<td>38</td>
</tr>
<tr>
<td>Lehigh Valley Community</td>
<td>39</td>
</tr>
<tr>
<td>Delaware Community</td>
<td>40</td>
</tr>
<tr>
<td>BottleUnderground</td>
<td>41</td>
</tr>
<tr>
<td>Circular Philadelphia</td>
<td>42</td>
</tr>
</tbody>
</table>
Thank you to our Educational Partners

Thank you to our Small Business Partners
What is the Philadelphia 2030 District?

Convened by Green Building United, it is a voluntary effort by the owners, managers, and developers of the city’s largest buildings to achieve deep reductions in energy use, water use, transportation emissions, and to improve stormwater management.

Why is this initiative important to Philadelphia?

With buildings and industry accounting for 70% percent of carbon emissions in Philadelphia, the 2030 District presents a great opportunity to reduce the region’s impact on climate change.

In addition, Philadelphia’s benchmarking and disclosure law requirement that buildings of 50,000 square feet report their energy and water use has created a wealth of data and awareness as to how the city’s largest buildings are performing. The Philadelphia 2030 District seeks to turn this awareness into action by supporting some of the city’s largest buildings in voluntary efforts to reduce their environmental impact while saving money.

What are the goals?

**Energy use:** 50% reduction from 2003 CBECS baseline by 2030  
**Water use:** 50% reduction from baseline* by 2030  
**Transportation use:** 50% reduction from baseline* by 2030  
**Stormwater:** 100 Greened Acres Districtwide

*Working groups calculated local water, stormwater, and transportation baselines.

What are the benefits to participants?

- Invitations to bi-monthly, member-only district partner meetings with the opportunity to present at the meetings.  
- Recognition of properties in all publicized property partner lists and maps.  
- Education and training opportunities from Green Building United.  
- Confidential building-level performance reports.  
- Marketing tool to attract tenants and demonstrate a commitment to sustainability.
Who are participating property partners?

Brandywine Realty Trust | Drexel University | SEPTA | Philadelphia Ronald McDonald House
School District of Philadelphia | 2101 Cooperative | Independence Blue Cross | City of Philadelphia
CBRE | Bedrock Group LLC | Pennrose | Two Liberty Place | The Philadelphian

The District’s property partners have committed over 49 million square feet of building space to meet the goals of the district.

How will property partners reach their goals?

Property partners will reach their goals through sophisticated operations, robust tenant engagement, as well as strategic investments in conservation and efficiency strategies.

Do you have to be a property owner or manager to participate?

Utilities, government, non-profits, design professionals, energy services companies and civic organizations can join the district as well, should they have resources or expertise to help property partners reach the goals of the district.

Participation is limited for these participant types, as the district seeks to maintain its share of representation from the owner-manager community.

What are the district boundaries?

(Approximate boundaries: N – Spring Garden Street and Powelton Ave, S – Walnut Street, W – 40th Street, E – Interstate 95. Committed properties in green. Multiple properties go beyond our traditional boundary.)

Do 2030 Districts exist elsewhere?

We are part of a network of twenty-four 2030 Districts throughout the United States and Canada. A total of 494 million square feet of building space has committed to meeting the goals worldwide.


To learn more, please contact Sophia Winston, Program Manager, at swinston@greenbuildingunited.org.
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