



11TH ANNUAL
SMART AND
SUSTAINABLE
CAMPUSES
CONFERENCE



April 4-5, 2016

Hyatt Regency Baltimore
on the Inner Harbor



UNIVERSITY OF
MARYLAND

THE CENTER
FOR GREEN SCHOOLS



SECOND NATURE
Education for Sustainability

APPA
LEADERSHIP IN EDUCATIONAL FACILITIES



Proposal Review Committee

A special thanks to the following people who volunteered to review the proposal submissions. Our diverse concurrent session schedule is thanks to their time and energy.

Rob Andrejewski, University of Richmond
Blaine Collison, Altenex
Sally DeLeon, University of Maryland
Ann Erhardt, Michigan State University
Claudia Frere-Anderson, University of Washington
Steve Glazner, APPA (Leadership in Educational Facilities)
Michael Gulich, Purdue University
Trina Innes, University of Alberta
Tacy Lambiase, University of Maryland
Michele Madia, Second Nature
Ashley Pennington, Johns Hopkins University
Kate Richard, University of Maryland
Bob Salvatelli, Sustainable Water
Alison Shea, Siemens Industry, Inc.
Mark Stewart, University of Maryland
Jaime Van Mourik, U.S. Green Building Council (USGBC)
Aurora Winslade, Swarthmore College

A big thank you to our 2016 Smart and Sustainable sponsors!

This conference is a success
because of their support.

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SILVER LEVEL SPONSORS

Altenex	OZZI
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Sustainable Water

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Welcome from the Conference Planning Committee



2016 Conference Planning Committee

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Scott Lupin, University of Maryland

Michele Madia, Second Nature

Jaime Van Mourik, U.S. Green
Building Council (USGBC)

Aurora Winslade, Swarthmore
College


Welcome to the 11th annual Smart and Sustainable Campuses Conference! The University of Maryland is again proud to host this event with the ongoing support of key partners.

It is fitting that we return to Baltimore for a third year. The city's Office of Sustainability has created, supported, and enhanced urban sustainability since the Baltimore Sustainability Plan was finalized in 2009. Over the past seven years, Baltimore's progress has been recognized by the U.S. Green Building Council and given the highest possible rating (one of only three cities to earn the designation) by Star Communities.

The Baltimore Sustainability Plan embraces environmental, social, and economic sustainability, with 29 goals that range from supporting local businesses to keeping the streets litter-free. While some goals have measurable and quantifiable results (reducing energy use 15% by 2015 or doubling the city's tree canopy by 2037), others do not. How can Baltimore measure the impact of accessible environmental stewardship programs on its students? What are the metrics for transforming a vacant lot into a space promoting environmental and social wellness? The sum of all of Baltimore's goals and results cannot be wrapped up into one number or chart.

This year's conference theme, "Measure Our Impact," explores how we quantify and record our sustainability work. Just like the city of Baltimore, we work towards achieving sustainability goals on our campuses every day, some with tangible outcomes and some without. But it is imperative to include the accomplishments that can be more difficult to measure – without them, we aren't painting the full picture. As goals are achieved, and as many campuses move closer to carbon neutrality goals in 2020 and 2025, we must seek new ways to move the benchmarks and measure our successes.

In sessions, workshops, and keynotes, we will examine our current means of tracking progress, and learn from each other's steps in creating new metrics. Our program represents the vast spectrum of sustainability projects being done on our campuses. Certainly such a range of initiatives necessitates flexible and equally broad measurements.

The Planning Committee thanks you for your contributions to the conference. We seek to improve our program each year, adding new voices and components as sustainability in higher education continues to grow and change. This year, based on feedback from previous conferences, we have modified the schedule so that 80-minute workshops and 50-minute presentations receive dedicated time blocks. The updated schedule will allow you to more easily attend these different types of sessions. Additionally, we have encouraged presenters to incorporate unique and new interactive elements into their sessions; these sessions are highlighted with a  in the program.

2016 is also the first year hosting, in partnership with American University, the Student Summit. On Sunday, students will gather and share their experiences of working toward sustainability on their campuses. We are excited to provide an avenue for student voices and presentations, and to bring together students, faculty, and staff in a new way.

We thank you for your joining us and look forward to your active participation in conference events. We hope you have a quality experience, make new connections, learn valuable lessons and share ideas with colleagues at your schools and organizations so we may enjoy a more sustainable future.



The Association for the Advancement
of Sustainability in Higher Education

AASHE 2016 Conference & Expo *Beyond the Campus* October 9 – 12, 2016 Baltimore, Maryland



Top Five Reasons to Attend:

- 1. Learn.** Top rated educational sessions at the AASHE Conference & Expo are the foremost professional development opportunity for campus sustainability professionals.
- 2. Be Inspired.** Dynamic general session speakers will help you discover how your leadership abilities can inspire change, innovation and growth on your campus and beyond.
- 3. Connect.** Meet and mingle with the people who "speak your language" and face the same challenges day-to-day that you do. You will come away with the experiences of real lessons learned, dozens of ideas and innovative solutions that you can use immediately.
- 4. Discover.** AASHE's Exhibit Hall houses 90+ businesses with innovative products and services to make your job easier.
- 5. Celebrate.** Join us in recognizing institutions that are addressing major challenges to advance sustainability on their campuses and surrounding communities.

Register today at
conference.aashe.org



Got Solar?

Join us in the **President Room** on **Tuesday, April 5th** for three **Higher Education Solar Mini Workshop Sessions:**

- 8:30-9:50am: Policy Issues
- 10:00-11:20am: Financial Issues
- 2:30-3:50pm: RFPs and Contract Issues

Learn from experts about the common solar deployment barriers as well as a host of solutions and available resources to help you overcome the challenges your university is facing.

Be sure to visit us at the EPA Green Power Partnership booth!



*Brought to you by the EPA Solar Utilization in Higher Education Networking and Information Sharing Group, a collaboration among the **EPA**, **DOE**, and **NREL**.*

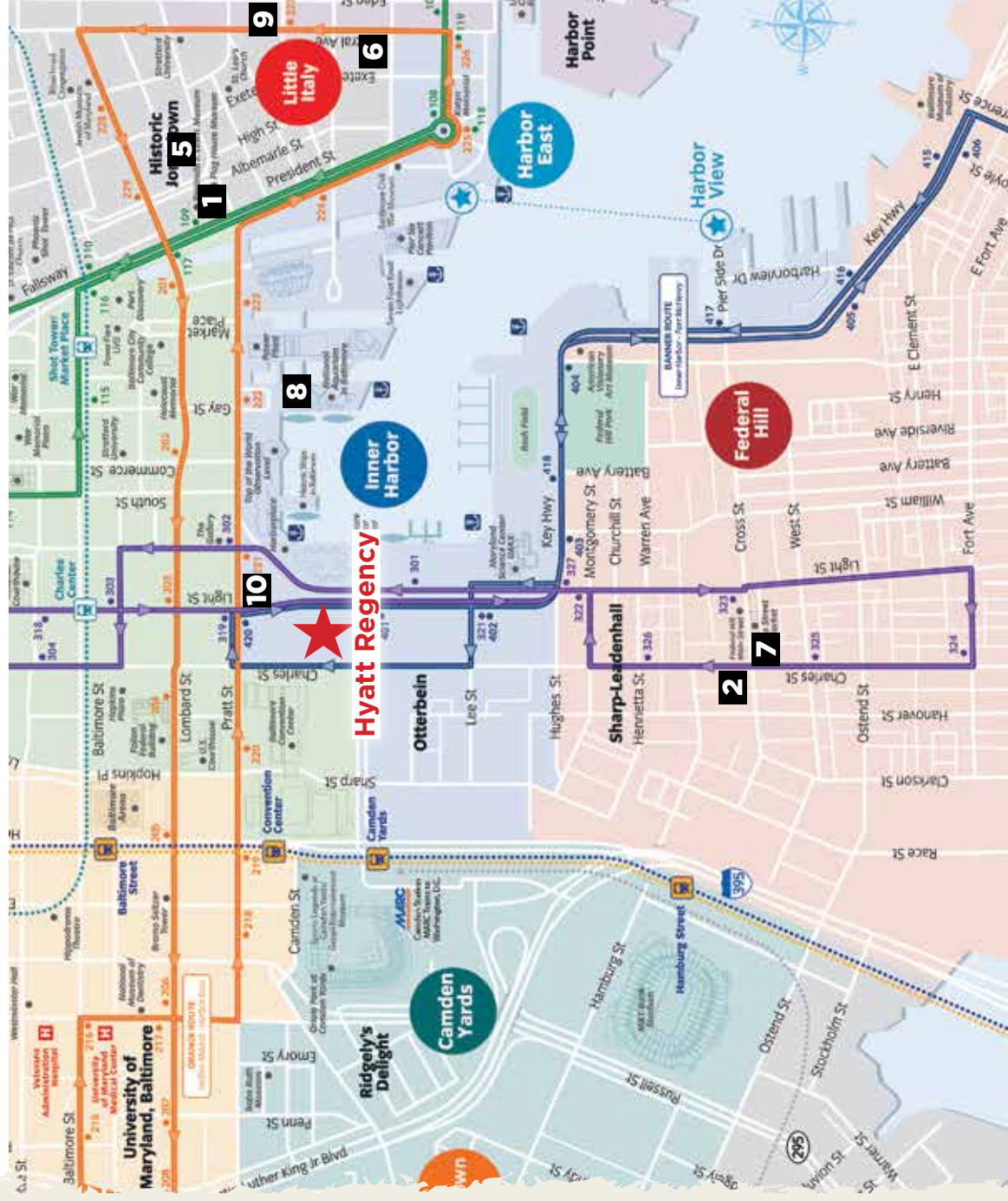
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Inner Harbor Map and Circulator Routes

Charm City Circulator

This FREE Baltimore City shuttle consists of four separate routes but the Banner Route services much of the Inner Harbor to Fort McHenry. The busses are DesignLine 2009 EcoSaver IV LF Hybrid Electric vehicles—the first fleet of this type in a major metropolitan area.



RESTAURANTS

- 1 Vacarro's Italian Pastry Shop • 222 Albermarle St**
A small café with sandwiches, salads, gelato, and famous cannolis.
- 2 Sobo Café • 6 W Cross St.**
American-style comfort food with vegetarian and vegan options.
- 3 Liquid Earth • 1626 Aliceanna St.**
Vegan and vegetarian meals made with locally-sourced, organic ingredients.
- 4 Riptide by the Bay • 1718 Thames St.**
A crab house overlooking the harbor that serves local Chesapeake Bay seafood.
- 5 Isabella's Brick Oven Pizza and Panini • 221 S High St.**
Italian sandwiches, pizzas, and salads in Little Italy.
- 6 Fleet Street Kitchen • 1012 Fleet St.**
Restaurant in Harbor East dedicated to locally sourced, ethically raised, and sustainable ingredients.
- 7 Matsuri • 1105 S Charles St.**
Sushi and Japanese food, with some vegetarian options.
- 8 Family Meal • 621 E Pratt St.**
A modern American diner, open for breakfast, lunch and dinner.
- 9 Heavy Seas Alehouse • 1300 Bank St.**
A local Baltimore brewery and restaurant.
- 10 Felici Café • 1035 Light St.**
Health conscious café with fresh juices, vegan and vegetarian options, and locally sourced, organic ingredients.
- OFF MAP:**
- 11 Faidley Seafood • 200 N Paca St**
Enjoy some of Baltimore's best crab cakes.



SUSTAINABILITY

Carbon Neutral Conference

The Smart and Sustainable Campuses Conference continues its long-standing tradition of carbon neutrality. Thanks to a generous contribution from conference sponsor WGL Energy, estimated greenhouse gas emissions from air travel, vehicle travel, long-distance bus and train travel, hotel stays, energy use, landfilled waste and paper use have been balanced to zero with Green-e® Climate certified Carbon Offsets from WGL Energy.

In partnership with WGL Energy, one of the largest energy suppliers in the Mid-Atlantic region, the conference is offsetting 105 tons of greenhouse gas emissions and contributing funds for new clean air and water projects managed by the Chesapeake Bay Foundation, an independent organization that works to restore and protect the ecological health of the Chesapeake Bay and its tributary rivers. Carbon Offsets from WGL Energy have a global environmental impact by reducing greenhouse gas emissions, a local environmental impact by contributing to the health of the Chesapeake Bay Watershed through activities such as tree plantings, and a local economic impact by supporting offset projects in the Mid-Atlantic region. This year's offsets were generated by preventing the release of methane from a landfill near Winchester, Virginia. To put the conference's carbon offsets in perspective, reducing 105 tons of greenhouse gas emissions is equivalent to:

- Taking 22 passenger vehicles off the road for a year, or
- Converting 14 average homes to renewable power for a year, or
- Planting 438 trees in a typical Maryland forest, or
- Removing 118 tons of organic waste from the landfill and composting it.

Supporting the Local Farming Community

Working to ensure our meals are sourced from the local farming community can sometimes be a challenge. Our hats are off to the Hyatt Regency Baltimore for making our jobs easier. Our menus feature produce and meat from the following local producers:

- **KCC Natural Farms Organic Chicken** - Harford, Maryland
- **Blue Ridge Hydro Lettuces** - Elkwood, Virginia
- **Hummingbird Farms Tomatoes** - Ridgeley, Maryland
- **McDowell's Mushrooms** - Kennet Square, Pennsylvania
- **Firefly Farms Cheeses** - Bittering, Maryland
- **Crown Orchard Apples** - Batesville, Virginia
- **Muzzarelli Farms Potatoes** - Vineland, New Jersey
- **Arc Greenhouse Micro Greens** - Vineland, New Jersey

Food Recovery

Food is the number one item in the American waste stream yet one in six Americans is food insecure. The Food Recovery Network, founded at the University of Maryland, is fighting food waste and feeding people on over 100 campus communities across the country. For the third year in a row the Food Recovery Network will be recovering our leftover perishable food that would otherwise go to waste and donating it to hunger-fighting agencies in Baltimore.



EXHIBIT HALL

14 **AGreenOzzi, LLC**

13 Aircuity, Inc.

6 Bruner/Cott

5 Cupanion

12 Empower Energies

8 Entech Engineering, Inc.

9 Green Contracting
Company, Inc.

4 GW University Sustainable
Landscape Design & Sustainable
Urban Planning Programs

10 Huper Optik Window Films

2 Siemens Industry, Inc.

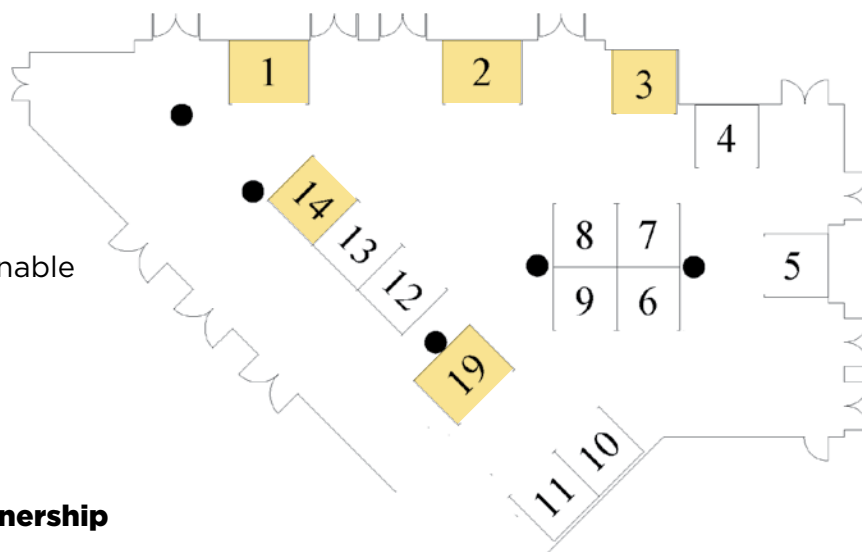
3 SunPower

11 Sustainable Water

1 U.S. EPA Green Power Partnership

19 WGL Energy

Please visit our exhibitors and sponsors.



conference notes

Student Scholarships

Thanks to scholarships provided by the Sustainable Water and University of Maryland, more than 20 students are able to participate in this year's conference!

Twitter

Join the conversation on Twitter! Follow @SmartandSustain and share your conference experience. Tweet about presentations and workshops you attend, share your photos or videos, and connect with other attendees. Don't forget our hashtag: #SSCC2016.

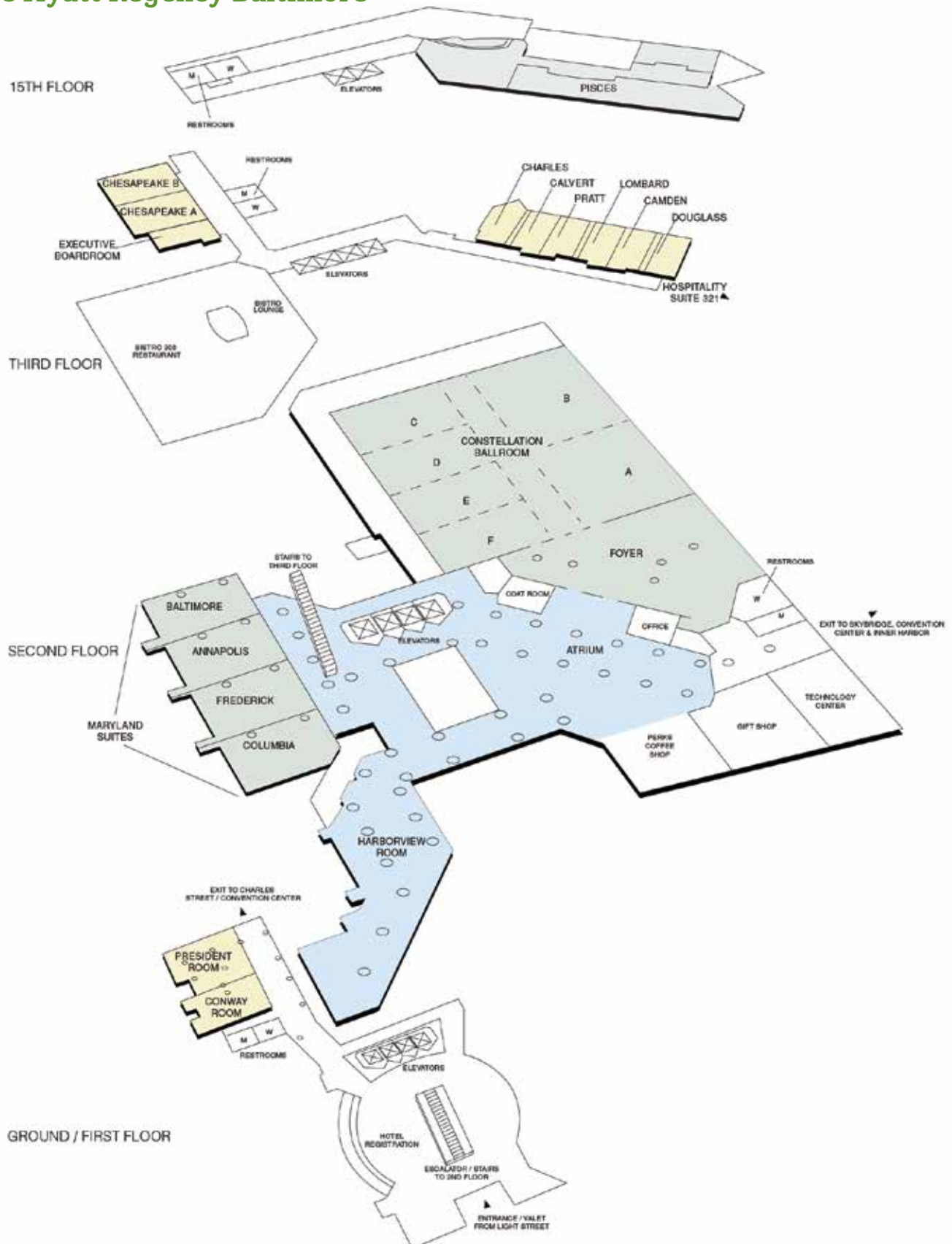
Free WiFi

In an effort to improve our visitor experience, the Hyatt Regency Baltimore is providing high-speed wireless Internet connectivity:

- Turn on your Wireless LAN (Wi-Fi) enabled device
- Search for the wireless network "Hyatt_Meeting". Or, in the network settings for your WLAN card, set the SSID to "Hyatt_Meeting".
- Open your Internet browser and go to a public website.
- Enter the access code "SSCC2016" and press "Continue."

FLOORPLAN

The Hyatt Regency Baltimore



Keynote and Plenary Speakers



OPENING KEYNOTE

Monday, 9:00 AM – Constellation Ballrooms AB

Just Sustainabilities: Re-Imagining E/Quality, Living within Limits

Julian Agyeman, Ph.D., Professor of Urban and Environmental Policy and Planning, Tufts University

What are “just sustainabilities”? Julian Agyeman defines them as the need to ensure a better quality of life for all, now and into

the future, in a just and equitable manner, whilst living within the limits of supporting ecosystems. Integrating social needs and welfare offers us a more “just,” rounded, and equity-focused definition of sustainability and sustainable development, while not negating the very real environmental threats we face. This keynote will explore examples of just sustainabilities in practice, focusing on “fair shares” global resource distribution; planning for intercultural cities; achieving wellbeing and happiness; the potential in the new sharing economy; and finally the concept of “spatial justice” and how it complements the more established concept of social justice.

Julian Agyeman Ph.D. FRSA, a Professor of Urban and Environmental Policy and Planning at Tufts University, originated the concept of “just sustainabilities:” the full integration of social justice and sustainability. As an ecologist/biogeographer turned environmental social scientist, he thrives at the borders and intersections of a wide range of knowledges, disciplines and methodologies which he utilizes in creative and original ways in his research. Julian is the co-founder and six-year chair of the Black Environment Network (BEN), as well as the co-founder and current Editor-in-Chief of *Local Environment: The International Journal of Justice and Sustainability*. In 1996, he was elected to the Fellowship of the Royal Society of the Arts. Julian has ties to many publications and educational institutions, and has edited and authored several books, most recently *Sharing Cities: A Case for Truly Smart and Sustainable Cities*. He is currently working on a book about food trucks.



MONDAY AFTERNOON PLENARY

Monday, 12:45 PM – Constellation Ballrooms AB

Harvesting the Lessons of a Decade to Unleash Idea Flow

Leith Sharp, Director of Executive Education for Sustainability Leadership, Harvard's Center for Health and the Global Environment

Why, despite heroic efforts to measure and report on increasingly complex

environmental metrics, are our collective efforts adding up to little more than “doing less bad” instead of actually doing good? Why is sustainability still treated as an add-on by most organizations? Perhaps our predominant organizational model is structurally incapable of undertaking the depth and pace of change necessary for driving sustainability into its core mission. In this address, Leith Sharp discuss a tipping point of experiential evidence, which has both revealed the structural limitations of our current organization model while also birthing a powerful new one for the 21st century. We now stand at the threshold of a powerful movement to reinvent our organizations to unleash radical new levels of engagement and idea flow necessary to tackle our global social, economic, and environmental imperatives.

Leith Sharp, Director of Executive Education for Sustainability Leadership with Harvard's Center for Health and the Global Environment, has spent 20 years driving sustainability into the core business of higher education, establishing one of world's first campus sustainability programs in 1995 at the University of New South Wales in Australia. In 2009, Ms. Sharp became the founding executive director for the Illinois Green Economy Network and was also invited to chair the Sustainability Futures Leadership Academy. As founding director of Harvard's Office for Sustainability, she was involved in pioneering Harvard's revolving loan fund, financing and training a team of 24 professional staff from savings, and mastering the art of achieving LEED platinum projects at no added cost. Ms. Sharp has taught change leadership for sustainability at Harvard University for the last 12 years, earning numerous commendations for distinguished teaching performance.

CLOSING PLENARY PANEL

Tuesday, 1:15 PM – Constellation Ballrooms AB

Things We Don't Measure but Should

MODERATOR: **Leith Sharp**

PANELISTS: **Erin Meezan, Mary Spilde, and James Ritchie-Dunham**

We often quantify sustainability progress with numbers: tons of CO₂ emitted, pounds of waste recycled, gallons of water conserved. These statistics seem like an easy, clear snapshot of an institution's sustainability record. However, they are an incomplete representation: social dynamics, emotional intelligence, engagement and idea flow, along with other metrics that address the "softer" side of organizational change capability, must be embraced as a necessary part of the complete metric picture. Getting this right will be the difference between making our organizations aware of environmental problems, and making sure our organizations are actually capable of and engaged in solving them.

Our closing plenary will be a TED-style panel featuring leaders who measure innovation, emotional intelligence and vibrancy.

Erin Meezan is Vice President of Sustainability at Interface, giving voice to the company's conscience, ensuring that strategy and goals are in sync with the aggressive sustainability vision established almost 20 years ago; and leading a team that provides technical assistance and support to the company's global business, addressing sustainability at all levels. Erin is a frequent lecturer on sustainable business to senior management teams, universities and the growing green consumer sector. She has spoken at a variety of conferences and forums including: Bioneers, Greenbuild, SXSW, Businesses for Social Responsibility and others. Erin is a magna cum laude graduate of the Vermont Law School, where she earned her Master's Degree in Studies in Environmental Law and her Juris Doctor degree.



Dr. Mary Spilde, President of Lane Community College in Eugene, Oregon, has 35 years of experience in higher education, community colleges, workforce development, and sustainability. She

has bachelor's and law degrees from the University of Edinburgh, and a master's and doctorate from Oregon State University. She has served on numerous boards and commissions including the American Association of Colleges and Universities, the American Presidents' Commitment to Climate Control, and the Oregon Post Secondary Quality Education Commission. Dr. Spilde has received many honors, most recently the U.S. Green Building Council's 2013 Center for Green Schools President's Award for a two-year institution. Dr. Spilde is often quoted in media outlets including the *Chronicle of Higher Education*, *Community College Times*, *Washington Post*, *New York Times*, *PBS Newshour*, and other media.

Jim Ritchie-Dunham is the President of the Institute for Strategic Clarity; President of Vibrancy, LLC; President of the Academy for Self-Discovery Leadership; an adjunct faculty member in Harvard's program in sustainability leadership; and an Adjunct Professor of Business Economics in the ITAM Business School in Mexico City. Jim has authored *Ecosynomics: The Science of Abundance*, *Managing from Clarity: Identifying, Aligning and Leveraging Strategic Resources*, and has written many articles on systemic strategy. He holds a B.S. in Petroleum Engineering from UTulsa, an MIM from Thunderbird, an MBA from ESADE, a PhD in Decision Sciences from UTAustin, a postdoc in system dynamics and organizational studies from MIT, and a postdoc in psychology and Langer mindfulness from Harvard.

KEY TO CONFERENCE TRACKS

Expanding the Sustainability
Community

Community

Education for Sustainability

	Baltimore	Annapolis	Columbia	Frederick	Chesapeake A/B	Pratt/Calvert	Camden/Lombard	President Room	Charles
10:30	Resilience Assessment and Planning Workshop	Inclusion for Impact: Discourse on Diversifying the Sustainability Movement	Building Norms to Reduce Cup Waste	The Metrics of Designing for Healthy Buildings and People	Sustaining the Sustainability Movement- Moving Towards Sustainability 3.0 (Integration)	Using Creative Destruction and Peer Consulting to Facilitate Progress	green light: Third party Certification for Campus and Community	Aligning Sustainability with Executive Leadership Priorities	
10:40									
10:50									
11:00									
11:10									
11:20									
11:30									
11:40									
2:00	The Spartan Treasure Hunt: Measuring Building Energy Efficiency and Occupant Engagement	Sustainability Building Design as a Core Tenet for Global Learning	Creating, Evaluating, and Improving a Campus Pantry	Revitalizing Student Outreach	CAP Revisited: Lessons Learned and New Strategies Discovered	A Sustainable Future through Curricular Innovation	Growing Green: Serving Greens Grown on Mason's Campus Within its Dining Halls	Working with Zero: Maximizing Partnerships to Meet Big Sustainability Goals	Incorporating Energy Conservation Strategies into University Research Lab Facilities
2:10									
2:20									
2:30									
2:40									
2:50									
3:00									
3:10	Rivalry to Partnership: Virginia Tech and University of Virginia	InTeGrate: Interdisciplinary Teaching about Earth for a Sustainable Future	Gaining Traction: Tales from Two Big Ten Bike Share Launches	Incorporating Sustainability Competencies into the Classroom	The Role of Behavior Change in Sustainability Planning and Programming	Profitable Carbon Sequestration from Your Campus Power Plant	Better Buildings: FREE DOE Resources for Your Trek Towards Sustainability	Measuring the Urban Heat Island Effect in Louisville	
3:20									
3:30									
3:40									
3:50									
4:00									
4:10									
4:20	Careers in Sustainability: Empowering the Next Generation with UVA's Power and NWF's Ecoladers Programs	Developing a Roadmap to Invest in Solar On and Off Campus	Beyond LEED – Are Sustainability Codes Ready for Primetime?	Embedding Sustainability into the DNA of the Campus	Dining Waste Audits at Brown University and University of Northern British Columbia	Making an Impact with STARS Benchmarking	Creating a Benchmark for Water Conservation through Reclamation and Reuse	Relieving Food Insecurity Through Engagement, Education and Eggplants: A Case Study	
4:30									
4:40									
4:50									
5:00									

TUESDAY, April 5, 2016

	Baltimore	Annapolis	Columbia	Frederick	Chesapeake A/B	Pratt/Calvert	Camden/Lombard	President Room	Charles
8:30									
8:40	Essential Skills for the Change Agent: Opportunities and Needs for the Campus Sustainability Community	Incorporating Carbon Offset Strategies into Campus Climate Action Plans	Achieving the Vision: 20 Million Global Sustainability Citizens by 2025	Explore a Model for Addressing Climate Justice in Your Community	Finance 101 for Sustainability Professionals	Video Storytelling: Creating Compelling Campus and Community Case Studies	How Louisville Expands Sustainability into the Community	Higher Education Solar Development: Policy Issues	
8:50									
9:00									
9:10									
9:20									
9:30									
9:40									
9:50									
10:00									
10:10	Meaningful Reporting: Waste Diversion Measurements That Tell the Whole Story	Engaging an Interdisciplinary Student Population with Renewable Energy Concepts	Funding Your Central Utility Projects: Your Path to Sustainability	Yale University Town-Gown Collaboration on Sustainability	Are We There Yet? Beginning with the End in Mind	Accessing Savings and Successes through Waste Management	Attainable Solutions for Sustainable Campuses: Energy Efficiency and Daylighting Strategies	Higher Education Solar Development: Financial Issues	
10:20									
10:30									
10:40									
10:50									
11:00									
11:10									
11:20									
11:30	Measuring Our Impact Via the Sustainability Literacy Assessment	Transforming Campus Spaces with Solar Technology and Design Thinking	Parking Woes and Sustainable Solutions	Creating a Sustainable Sustainability Network in Higher Education	Too Hot to Handle? Managing Space Heaters on Campus	Making Sustainability Metrics Meaningful	Microgrids and Leveraging Campus Utility Infrastructure		UMD's Partnership for Action Learning in Sustainability
11:40									
11:50									
12:00									
12:10									
2:30									
2:40	Developing Best Practices for Evaluating Campus Green Funds	Living Lab Key Elements: A PSU Case Study	Campus Open Spaces as Microcosms of Sustainability and Ecology	Eating Our Words: Food Sustainability at Southern Illinois University Edwardsville	Climate Action Planning: Making Plans that Are Ambitious and Implementable	Kick Carbon to the Curb: Maximizing Renewable Energy Project Value	Creating a Campus Landscape that Enhances Environment and Community	Higher Education Solar Development: RFPs and Contract Issues	Things We Don't Measure but Should: Post-plenary Discussion with Panelists
2:50									
3:00									
3:10									
3:20									
3:40									
3:50									

Monday, April 4

80-Minute Interactive Workshops

MONDAY
10:30 AM

Track: Expanding the Sustainability Community 

Annapolis Room

Inclusion for Impact: Discourse on Diversifying the Sustainability Movement

Ashley Pennington, Johns Hopkins University

How can each of us answer the call toward a more inclusive and integrative approach to sustainability at our institutions, within our communities, and beyond? This workshop will explore the intersections of diversity and sustainability, and illuminate what is to be gained from expansion not just of, but within, the environmental movement. When sustainability more successfully integrates a variety of voices and viewpoints, environmental justice and social equity will work in stronger compliment to foster more resilient workplaces and communities, with lasting, transformative outcomes across the board.

Track: Change Management: Towards Transformation 

Baltimore Room

Resilience Assessment and Planning Workshop

Anne Waple, Second Nature

This 80-minute interactive workshop will engage in a climate resilience planning activity. Using the resilience planning framework available through Second Nature, the participants will discuss in plenary and break into groups to explore the indicators of resilience capacity and progress. Attendee input will be sought on how to develop key resiliency indicators.

Track: Education for Sustainability: Innovating Curriculum and Research 

Camden/Lombard Room

green I light: Third Party Certification for Campus and Community

Lisa Darger, The University of Tennessee at Chattanooga

In Spring 2015, the University of Tennessee at Chattanooga (UTC) piloted the Innovations in Honors program to immerse students in a problem-based, community-embedded learning experience that challenged students to develop critical thinking, design thinking, applied creativity, and collaborative leadership. In Fall 2015, the common theme of the three two-semester courses was sustainability. Students worked closely with faculty members and civic partners in a two-semester course to tackle authentic, real-world problems and benefit the larger shared community to explore sustainable initiatives, specifically a third-party certification program — green I light — sponsored by a local not-for-profit.

Track: Change Management: Towards Transformation 

Chesapeake A/B Room

Sustaining the Sustainability Movement — Moving Towards Sustainability 3.0 (Integration)

Mieko Ozeki, Aaron Witham, University of Vermont

This action-oriented session focuses on how changemakers can move sustainability in higher education to the next level. Despite a rise in the number of institutions signing external commitments like ACUPCC, STARS, Real Food Challenge, and Billion Dollar Challenge, change appears only to be incremental, with limited resources and internal support. Sustainability 3.0 requires more external support to match the existing external challenges. Participants will identify a means of communicating their institutional commitments and what their resource needs are from external parties in order to integrate sustainability at their institutions.

80-Minute Interactive Workshop *continued*

MONDAY
10:30 AM

Track: Change Management: Towards Transformation 

Columbia Room

Building Norms to Reduce Cup Waste

Sonia Marcus, University of North Carolina Asheville

Sakib Ahmed, University of Virginia

Matt Wittek, Cupanion

As campuses continue their journeys toward sustainability, individual waste remains a significant challenge. In this session, the University of Virginia and the University of North Carolina Asheville will present experiences of establishing a new app-based reusable mug program on campus to stimulate a conversation among participants on ways to address entrenched social norms among faculty, staff and students. The Cupanion product and tracking service will be presented as one mechanism for engaging users in the tracking and assessment of their personal impacts on our campuses as well as the larger communities.

Track: Measuring Our Impact 

Frederick Room

The Metrics of Designing for Healthy Buildings and People

Betsy del Monte, Transform Global/Southern Methodist University

Jim Newman, Linnean Solutions

Susan Mims, Mission Children's Hospital

As practitioners, we are familiar with many different metrics of environmental performance. What we don't know is how these apply across the country, in different climates, in different community types. We also want to consider whether what we are measuring really matters. Do our metrics capture issues like health, environmental quality, and economic equality? This session uses innovative, even disruptive, methods to involve the attendees in examining their own priorities for environmental metrics and how to get the most effective metrics possible.

Track: Change Management: Towards Transformation 

Pratt/Calvert Room

Using Creative Destruction and Peer Consulting to Facilitate Progress

Anton Triner, Kathryn Lonczewski, Rutgers University - Camden

In this workshop, participants are encouraged to reflect on what limits sustainability from transforming their campus community. Come prepared to identify the structures and behaviors that are keeping your campus from achieving its next steps. Whether you are seeking to build student action, lead your department to greener pastures, or oversee a campus-wide transformation, we are looking to identify barriers and leave you with actions to move your campus forward.

Track: Expanding the Sustainability Community

President Room

Aligning Sustainability with Executive Leadership Priorities

Moderator: Leith Sharp, Harvard's Center for Health and the Global Environment

Michael Gulich, Purdue University

Emilie Rex, Sustainability/Resilience Consultant

Denice Heller Wardrop, Pennsylvania State University

Faced with ongoing budget cuts, cost reduction campaigns, and top to bottom reviews of programs and policies, public research universities have approached a critical juncture. As sustainability professionals, we must make a case for sustainability's role in addressing the core challenges facing higher education. In 2013, the Big Ten and Friends Sustainability Group began discussing how to identify common executive leadership priorities, how sustainability contributes to those priorities, and how to measure these contributions. The resulting Big Ten Prospectus project has developed a new language for articulating sustainability's value in higher education. This panel will address this project's evolution.

Monday, April 4

50-Minute Concurrent Presentations

MONDAY
2:00 PM

Track: Education for Sustainability: Innovating Curriculum and Research

Annapolis Room

Sustainability Building Design as a Core Tenet for Global Learning

Sheila Anders, Tia Noell Truss, David Miller, Northern Arizona University
Beau Dromiack, RSP Architects

Northern Arizona University's core global learning themes of sustainability, diversity, and global engagement were intentionally integrated into the design elements of the new International Pavilion. The an initial goal was to simply provide appropriate programming space, but the concept and construction evolved. The intentional space was designed to provide multiple opportunities for student encounters with global perspectives, interactive environmental and building use education, a focus for campus-community engagement, and cultural exchange and dialogue. The end result, opened in August 2015, is a regionally recognized and iconic learning space with net-zero and LEED-NC Platinum design.

Track: Measuring Our Impact

Baltimore Room

The Spartan Treasure Hunt: Measuring Building Energy Efficiency and Occupant Engagement

Sean Barton, Michigan State University

The Spartan Treasure Hunt is an innovative building inspection program. Staff from Michigan State University Infrastructure Planning and Facilities team up with subject-matter experts, faculty, staff, and students to scour campus buildings for energy saving opportunities and increased efficiencies — the treasure they seek! Teams of participants tour a building, identifying ways to increase efficiencies and reduce energy consumption. Through observation, measurement, and inquiry, teams produce a list of resource-saving and behavior-related solutions. Viable solutions are strategically implemented, and results are monitored and measured through energy data and surveys before and after the treasure hunt.

Track: The Built Environment

Camden/Lombard Room

Growing Green: Serving Greens Grown on Mason's Campus Within its Dining Halls

Danielle Wyman Castellano, George Mason University

This presentation will cover the ins and outs of initiating and maintaining a successful hydroponic greenhouse on George Mason University's Fairfax campus. All of the produce grown in this greenhouse is grown for and served in Mason's dining facilities. Topics that will be discussed include building interdepartmental buy-in and support; academic integration; food production for space-constrained and urban areas; outreach, programming and management; and student support and involvement.

Track: Change Management: Towards Transformation

Chesapeake A/B Room

CAP Revisited: Lessons Learned and New Strategies Discovered

Mark Stewart, Sally DeLeon, University of Maryland

Hundreds of colleges and universities are in the process of updating their climate action plans to reflect the latest GHG reduction strategies and renew stakeholder engagement. The University of Maryland's CAP, now seven years old, will be re-released this year to specify the actions, costs, and people associated with implementing strategies that will allow the university to meet its 2020 and 2025 goals. Carbon neutral new construction, renewable energy development, carbon sequestration/offsetting, and stakeholder buy-in are among the topics for discussion.

Track: The Built Environment

Charles Room

Incorporating Energy Conservation Strategies into University Research Lab Facilities

Jim Johnson, University of Maryland

Research Lab Facilities are traditionally heavy resource users. The fact that they are also occupied at all times of the day and throughout the year makes implementation of energy consumption reduction measures extremely complicated and difficult. This presentation will outline strategies that the University of Maryland, Institute for Bioscience and Biotechnology Research (IBBR) incorporated to reduce their overall energy consumption. Discussion will include specific considerations for reliability and safety as well as implementation strategies to secure faculty and staff buy-in and to complete installation of equipment, devices etc., while minimizing disruption to operating labs.

50-Minute Concurrent Presentations *continued*

MONDAY
2:00 PM

Track: Measuring Our Impact

Columbia Room

Creating, Evaluating, and Improving a Campus Pantry

Allison Lilly, Kate Richard, University of Maryland

This social sustainability oriented presentation focuses on food insecurity among college students, and the University of Maryland's efforts to address this problem with a campus food pantry. In a campfire session, attendees and presenters will discuss questions such as: how is student food insecurity connected to sustainability; how do you address an often understudied, poorly quantified problem; can a campus pantry be a solution to that problem; and how do you measure or determine the impact of a campus pantry? This session is aimed at campuses with existing pantry programs and campuses looking to start a program.

Track: Expanding the Sustainability Community

Frederick Room

Revitalizing Student Outreach

Greg Richmond, Megan McDaniels, University of Virginia

Student outreach bridges the gap between sustainability administration and the student body, yet communication between the two sides can be ineffective. The University of Virginia welcomes audience members to learn how to rework, revitalize, and revolutionize their student outreach. The University's Outreach Team will help participants reflect on their own outreach groups and recognize weak spots that need improvement. After learning how UVA reworked its Sustainability Advocates program, participants will walk away with concrete objectives and ideas they can use to immediately improve their own outreach groups, revolutionizing what it means to be an environmental steward.

Track: Education for Sustainability: Innovating Curriculum and Research

Pratt/Calvert Room

A Sustainable Future through Curricular Innovation

Jessie Phillips, Katie Leone, Florida Gulf Coast University

Florida Gulf Coast University ensures that all undergraduate students gain an understanding of sustainability through its signature course, the University Colloquium. Students gain a sense of place through a series of experiential learning projects, assignments, readings, and field trips. The course addresses social, ecological, and economic challenges and opportunities for a sustainable future. A service-learning partnership between students and community organizations provides lasting positive impacts. This session will include a brief introduction to Colloquium, a model for developing effective community partnerships, and an overview of evaluation processes helping to solidify Colloquium as an innovative sustainability focused graduate requirement.

Track: Expanding the Sustainability Community

President Room

Working with Zero: Maximizing Partnerships to Meet Big Sustainability Goals

Jennifer Hobson, Alyssa Halle-Schramm, University of Texas at Austin

Campus sustainability practitioners are often tasked with implementing lofty goals with little funding, inadequate staffing, and no clear path forward. Faced with a tight timeline and little resources, the zero waste coordinator at UT Austin, with support from the Office of Sustainability and other campus entities, created a network of students to put the campus zero waste plan into action. By connecting campus resources and maximizing networks both within and outside the traditional sustainability lens, over 100 students have worked in various capacities, using applied learning and reinforcing feedback loops, to shape Zero Waste at UT.

Monday, April 4

50-Minute Concurrent Presentations

MONDAY
3:10 PM

Track: Education for Sustainability: Innovating Curriculum and Research 

Annapolis Room

InTeGrate: Interdisciplinary Teaching about Earth for a Sustainable Future

Kim Kastens, Columbia University

InTeGrate is a nationwide effort to improve undergraduate teaching and learning about the earth by teaching in the context of societally important challenges and using a more student-centered pedagogical approach. All InTeGrate instructional materials are required to connect geoscience to grand challenges facing society, develop students' ability to address interdisciplinary problems, improve students' understanding of the nature and methods of geoscience, make use of authentic geoscience data, and foster systems thinking. Attendees will learn about pedagogical strategies used by InTeGrate instructional modules to help students engage with grand challenges, and how InTeGrate measures impact.

Track: Expanding the Sustainability Community 

Baltimore Room

Rivalry to Partnership: Virginia Tech and University of Virginia

Emily Schosid, Virginia Tech

Nina Morris, University of Virginia

Annual conferences such as AASHE and SSCC give sustainability coordinators from different schools an excellent opportunity to share ideas, lessons learned, and valuable advice about advancing our various sustainability goals. However, partnering with a local peer institution, especially a school that is considered a rival, can allow for more sustained information-sharing and program enhancement. Virginia Tech and the University of Virginia, bitter rivals on the football field and in the academic arena, have found a sustainability partnership to be fruitful to both programs. Presenters will help participants explore potential partnerships in their own regions.

Track: The Built Environment

Camden/Lombard Room

Better Buildings: FREE DOE Resources for your Trek Towards Sustainability

Sultan Latif, United States Department of Energy

Susan Corry, University of Maryland

The broad commercial building sector — including colleges and universities — consumes nearly 20% of all energy used nationally and costs nearly \$200 billion to power. Meanwhile, a typical commercial building could save 20% on energy simply by commissioning existing systems to operate as intended. Through the Better Buildings Alliance, schools work with the U.S. Department of Energy's (DOE) network of research and technical experts to develop and deploy energy savings technologies. DOE and University of Maryland will share technical resources available at no cost, plus experiences, results, and best practices, and let others know how they can get involved.

Track: Change Management: Towards Transformation 

Chesapeake A/B Room

The Role of Behavior Change in Sustainability Planning and Programming

Tess Phinney, Northern Kentucky University

Is behavior change the "icing on the cake" or the foundation of a sustainability program? This workshop will review the findings from a recent study that examined the role of behavior change at five universities in Ohio. The subjects of this study represent small and large, public and private universities. Using the perspective of sustainability practitioners and institutional planning documents, this study presents a snapshot of current behavior change strategies in higher education. Attendees will learn how to critically evaluate the impact of their behavior change efforts on individuals as well as the institution as a whole.

50-Minute Concurrent Presentations *continued*

MONDAY
3:10 PM

Track: The Built Environment

Columbia Room

Gaining Traction: Tales from Two Big Ten Bike Share Launches

Michael Gulich, Purdue University

Beth Snoke, The Ohio State University

Holly Parker, Nelson\Nygaard Consulting Associates

Bike sharing programs are gaining traction in campus environments. The reasons for the increase in adoption include providing a convenient means of transportation; reducing vehicle usage on campus; reducing demand on bicycle parking; and reducing abandoned bicycles. But where do you start? Do you develop a feasibility study? How do you secure funding? Who is responsible for developing and operating the program? What are the key factors to ensure the success of a bike share program? This session will present case studies of the recent launch of bike share at both Purdue University and the Ohio State University.

Track: Education for Sustainability: Innovating Curriculum and Research

Frederick Room

Incorporating Sustainability Competencies into the Classroom

Daniel Forget, Université Laval

At Université Laval in Québec City, individuals have been incorporating sustainability into classes, but it is now articulated with a vision. An evaluation grid facilitated a campus-wide inventory of courses and programs related to sustainability. More than merely producing a list of courses in sustainability, Laval's unique and global approach helped to better understand the scope of sustainability and allow a wider implementation of sustainability competencies in the classroom.

Track: The Built Environment

Pratt/Calvert Room

Profitable Carbon Sequestration From Your Campus Power Plant

Robert Mroz, HY-TEK Bio

Mark Stewart, University of Maryland

HY-TEK Bio mitigates greenhouse gases through optimized photosynthesis, using a proprietary range of associated patent-pending technologies to accelerate the process. Their ability to reduce airborne toxins and produce biomass and oxygen could eliminate much of UMD's carbon footprint through numerous scalable applications. Associated technologies developed include innovative grow lighting, and nutrient developed from chicken litter. These technologies can inform new curriculum, provide savings on power consumption, and engage faculty and students in a scientific process that will grow quickly. They also provide the basis for a campus presence that easily integrates into, and enhances, the university's built environment.

Track: Measuring Our Impact

President Room

Measuring the Urban Heat Island Effect in Louisville

Brent Fryrear, Partnership for a Green City

Pamela Dumm, Jefferson Community & Technical College

Find out how large public organizations tackle an urgent local issue, using students as citizen scientists. Working with University of Louisville, students monitor and collect urban heat island data from meteorological stations installed at their schools and collaborate on an urban heat island research or mitigation project. Participating students blog about their project experiences, compare their data with other schools, and hopefully present their projects to Louisville audiences. Through this program, students have an opportunity to see potential fields of study and potential career tracks, and to meet with college students and professors.

Monday, April 4

50-Minute Concurrent Presentations

MONDAY
4:20 PM

Track: Expanding the Sustainability Community 

Baltimore Room

Careers in Sustainability: Empowering the Next Generation with UVA's Power and NWF's Ecoleaders Programs

Sakib Ahmed, UVA Office for Sustainability

David Corsar, National Wildlife Federation

Interest in sustainability in government, industry, and higher education has led to a rapid expansion of employment opportunities for sustainability professionals. Yet many young people, who may be considering their career path for the first time, do not know about options in this field. The University of Virginia Office for Sustainability and the National Wildlife Federation have each developed interactive programs providing information about careers in sustainability — including needed education, certifications, and skills — to young people. The UVA POWER program focuses on K-12 students, while the NWF Career Center reaches out to higher education students and young professionals.

Track: The Built Environment

Camden/Lombard Room

Creating a Benchmark for Water Conservation through Reclamation and Reuse

Ciannat Howett, Savannah Miller, Emory University

Bob Salvatelli, Sustainable Water

Water is a critical resource for campus energy and cooling systems. Optimization of utilities through environmentally conscious measures can address risks associated with rising rates, water scarcity, environmental pressure, and aging infrastructure. This session will focus on the strategic incorporation of campus-wide water reclamation and reuse to alleviate these challenges while achieving campus water conservation goals. Serving as a model to other institutions, Emory University implemented an innovative new project, called the WaterHub. Collaboration and partnership between Emory University, Dekalb County, and Sustainable Water played an integral role in developing a benchmark for water conservation and sustainable water management.

Track: Measuring Our Impact

Chesapeake A/B Room

Dining Waste Audits at Brown University and the University of Northern British Columbia

Catherine Willett, Brown University

Jessy Rajan, University of Northern British Columbia

Brown University needed to improve the sustainability of its dining services, but lacked data regarding dining waste. A process was designed to gather waste metrics for every eatery on campus. This data is now helping to pursue programs to reduce campus dining waste. At the University of Northern British Columbia, a waste audit focused on food waste minimization, as well as characterization and measurement, in order to provide information that might help close the loop on campus food waste. The presenters will discuss key strategies for quantitative and qualitative metric-gathering, interdepartmental cooperation, student involvement, and dining waste reduction.

Track: The Built Environment

Columbia Room

Beyond LEED – Are Sustainability Codes Ready for Primetime?

Martha Shrader, University of Maryland

Lisa Ferretto, Hord Coplan Macht

LEED? IgCC? ASHRAE 189.1? How is your campus quantifying sustainable building? Join us for a discussion on sustainable building in education. The presentation will cover a basic overview of the International Green Construction Code and comparisons to LEED v3 and v4. We will also give a summary of the Maryland High Performance Building Program and how the IgCC has been implemented for state facilities. Lessons learned will also be shared from a University of Maryland project following the IgCC compliance path.

50-Minute Concurrent Presentations *continued*

MONDAY
4:20 PM

Track: Change Management: Towards Transformation 

Frederick Room

Embedding Sustainability into the DNA of the Campus

Cindy Shea, University of North Carolina Chapel Hill

Steven Baumgartner, BuroHappold Engineering

Elliot Felix, brightspot

Universities need to break down silos to build upon existing successes. Transforming campus culture calls for collaborative, pan-campus engagement, innovative systems thinking, and new policies and investment priorities. The Strategic Sustainability Plan at the University of North Carolina at Chapel Hill was developed with sustained input from a full range of campus stakeholders. The UNC vision to embed sustainability into the campus's DNA aligns the academy, the administration, athletics, and student affairs. The UNC Plan is a "call to action" to scale our impact from individual behaviors, to creating a living laboratory for sustainability, to world changing research.

Track: Measuring Our Impact

Pratt/Calvert Room

Making an Impact with STARS Benchmarking

Monika Urbanski, AASHE

STARS is more than just a rating system — STARS data can be used for benchmarking, gap analysis, and celebrating progress. This session explores features and tools from the STARS website, highlighting strategies and examples from institutions. It will discuss the upcoming release of STARS 2.1 and features that will streamline participation and data collection. This presentation is particularly useful for attendees considering STARS or those already participating that want to maximize their benefits. Due to the public nature of STARS, anyone with an interest in analyzing sustainability data can benefit from this session.

Track: Expanding the Sustainability Community

President Room

Relieving Food Insecurity through Engagement, Education and Eggplants: A Case Study

Erin Stanforth, Virginia Commonwealth University

Interested in food deserts (and more importantly, how to combat them with limited resources and maximum need)? Virginia Commonwealth University has partnered with academic departments and local community service organizations to build high-production learning gardens and applicable curricula. Join us to learn how a large urban university works with internal and external stakeholders to combat food insecurity and educate our community on healthy living.

Track: Education for Sustainability

Annapolis Room

Developing a Roadmap to Invest in Solar On and Off Campus

Janna Cohen-Rosenthal, Second Nature

Nick Hylla, Midwest Renewable Energy Association

With support from the U.S. Department of Energy SunShot Initiative and in partnership with four universities and a national team of experts, the Midwest Renewable Energy Association (MREA) has developed resources and a technical assistance process to help colleges and universities create Solar Photovoltaic (PV) Development Roadmaps that define investment opportunities both on and off campus. Participants will receive resources and case studies that outline strategies for student and stakeholder engagement, site prioritization and assessment, legal and regulatory analysis, and project finance. With a combination of lecture, facilitated discussion, and small group work participants will access resources and define opportunities.

Poster Presentation

Monday, 5 pm, Atrium

Quality of Life for All: The University of Tulsa Yellow Bike Program

Megan O'Neal, University of Tulsa
Sasha West, University of Tulsa

Key Facilities Metrics — Memorable Data to Move Leadership to Sustainability

Sally Grans Korsh, National Association of College and University Business Officers

National Wildlife Federation EcoLeaders Program

Courtney Cochran, National Wildlife Federation

Biowalls Reducing Atmospheric Toxins in Environments

Morgan Sulzbach, University of Maryland, College Park
Jill Smith, University of Maryland, College Park

"Together We're Building Sustainability" — An Outreach Framework for LEED Retrofits

Dana Schroeder, University of Virginia

Games that Change: Residential Hall Energy Consumption

Hannah Marshall, Ursinus College

Smart Building Management

Carl Obermiller, Seattle University
Stan Price, Putnam Price Group, Inc.
April Atwood, Seattle University



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Tuesday, April 5

80-Minute Interactive Workshops

TUESDAY
8:30 AM

Track: Change Management: Towards Transformation 

Annapolis Room

Incorporating Carbon Offset Strategies into Campus Climate Action Plans

Sally DeLeon, University of Maryland

Brett Pasinella, Second Nature

Robert Koester, Ball State University

For campuses with active Climate Action Plans, dates for carbon reduction targets and eventual carbon neutrality are drawing ever closer. Participants in this panel will speak to how they are using carbon offsets to help finance carbon-saving strategies on campus, evaluating opportunities to acquire carbon offsets to help meet carbon reduction goals, and organizing resources to help with these challenges. Participants will get into small groups organized by region to consider what carbon offset opportunities may make sense for their campuses.

Track: Change Management: Towards Transformation 

Baltimore Room

Essential Skills for the Change Agent: Opportunities and Needs for the Campus Sustainability Community

Aurora Winslade, Swarthmore College

Daita Serghi, Association for the Advancement of Sustainability in Higher Education

Join the conversation about advancing the careers and building the skills of those of us engaged in sustainability in higher education. Through an interactive, facilitated session that taps into the group's expertise, discuss the current opportunities for building the competencies required of multi-faceted change agents. Focus is on organizational transformation rather than technical analysis. We will build on current research and strategic planning from AASHE, the "dual operating system" from Leith Sharp, and experience from practitioners. How do we co-design and simultaneously implement change within our institutions? This discussion will explore the frontiers of this emerging field.

Track: Expanding the Sustainability Community

Camden/Lombard Room

How Louisville Expands Sustainability into the Community

Brent Fryrear, Partnership for a Green City

Pamela Dumm, Jefferson Community & Technical College

How do public institutions expand sustainability in a community? Louisville has a model — the Partnership for a Green City — which increases partners' sustainability capacity through sharing experiences, best practices, behavior change, collaborative projects, and joint purchasing. Kentucky's largest community college, city, and school district, and second largest university work together to lead by example and effect sustainable change in a variety of ways. We want to be more sustainable organizations, increase the green profile of our community, and be good stewards of the taxpayers' money.

Track: Measuring Our Impact

Chesapeake A/B Room

Finance 101 for Sustainability Professionals

Janna Cohen-Rosenthal, Second Nature

Campus sustainability professionals must frequently build the business case for their work. While they are well versed in environmental issues, communication strategy, and other planning skills, greater knowledge of financial management terms may be necessary to mature a campus sustainability program, write a detailed climate action plan, and secure funding for large projects. The session will start those unfamiliar on a path of greater financial planning literacy. It will help build a financial picture of an institution and analysis tools to include in a CAP. It will showcase schools who are creating strong relationships between between sustainability and business officers.

80-Minute Interactive Workshops *continued*

TUESDAY
8:30 AM

Track: Change Management: Towards Transformation 

Columbia Room

Achieving the Vision: 20 Million Global Sustainability Citizens by 2025

Julian Keniry, National Wildlife Federation
Jaime Van Mourik, U.S. Green Building Council
Michele Madia, Second Nature
Julian Dautremont-Smith, AASHE

In this workshop, you will learn about a national and global collaboration aimed to ensure that a minimum of 1 in 5 (approximately 20 million) college graduates are equipped with sustainability knowledge and career skills by 2025. As a higher education leader in sustainability, you will create new and identify existing pathways to adapt and track teaching and learning for sustainability (such as AASHE STARS, etc.) and help create a multi-faceted campaign to support the goal. The partnering organizations coordinating with many other key campuses and groups to support this vision are AASHE, NWF, Second Nature, and USGBC.

Track: Expanding the Sustainability Community 

Frederick Room

Explore a Model for Addressing Climate Justice in Your Community

Meghan Chapple, The George Washington University

Universities as anchor institutions have an important role to play in their surrounding communities. Students often bring their innovative ideas to solve social problems to university leaders for support. This 80-minute workshop will provide an opportunity for students, community members, staff, and faculty to explore a model for addressing climate justice in your community. It will be based on one university's attempt to marry student energy and ingenuity with community partners' assets and relationships, the GW Eco-Equity Challenge. The goal will be to form a network partnership that can collaborate for funding, learning, and action in the future.

Track: Education for Sustainability: Innovating Curriculum and Research

Pratt/Calvert Room

Video Storytelling: Creating Compelling Campus and Community Case Studies

Kelly Grant Purvis, Michelle Horhota, Furman University

Video is a powerful and increasingly accessible medium for sharing sustainability stories. The format — both producing and consuming video content — can be used to educate in and out of the classroom, or to change attitudes on certain topics. The David E. Shi Center for Sustainability recently engaged students and professional videographers to create an online learning module with video case studies. In this session, Center staff will tell the honest story of the production process and guide participants through a visioning exercise which will result in a detailed, actionable plan to develop and use one video case study.

Track: Change Management: Towards Transformation 

President Room

Higher Education Solar Development: Policy Issues

James Critchfield, Environmental Protection Agency's Green Power Partnership
Lori Bird, National Renewable Energy Laboratory

This mini-workshop session will explore the policy issues and opportunities that influence a higher education institution's approach to solar deployment. Participants will learn from a National Renewable Energy Laboratory technical expert in this field and leave with a better understanding of the policy landscape. Participants will also have the opportunity to engage in a discussion with other colleges and universities about the policy issues and opportunities associated with solar development in the higher education sector and provide feedback to the U.S. Environmental Protection Agency (EPA) about what support is needed to better navigate the policy landscape related to solar energy.

50-Minute Concurrent Presentations

TUESDAY
10:10 AM

Track: Education for Sustainability: Innovating Curriculum and Research

Annapolis Room

Engaging an Interdisciplinary Student Population with Renewable Energy Concepts

Kayla Iansiti, Michigan State University

In 2016, Michigan State University will install a 10 MW solar array on its campus. To support the university's mission of student engagement within the context of a large technological and operational advancement, MSU's Sustainability department launched a statewide student solar design competition. The competition integrates solar energy concepts into the curriculum and creates hands-on opportunities for student innovation. This session will offer practical advice for developing a competition that engages a diverse student body in sustainability concepts and how to creatively leverage operational advancements as learning opportunities.

Track: Measuring Our Impact 

Baltimore Room

Meaningful Reporting: Waste Diversion Measurements That Tell the Whole Story

Liz Storn, University of Florida Office of Sustainability

As campuses strive towards zero waste, sometimes the reported numbers seem more important than having meaningful outcomes. Many places are looking for new streams to measure, but do these represent real areas for improvement? In this interactive session, we will consider a variety of challenging questions and seek to develop consensus around meaningful reporting for campus recycling and diversion rates. Are the metrics that we report the ones that directly engage students, faculty, and staff? Be prepared to understand, question, and learn about what processes are reflected in your campus diversion rate.

Track: The Built Environment 

Camden/Lombard Room

Attainable Solutions for Sustainable Campuses: Energy Efficiency and Daylighting Strategies

Elizabeth Lewis, Mahsan Mohsenin, Florida A&M University

In a global context where environmental concerns are omnipresent, universities are expected to be among leading institutions in terms of sustainable practices. This panel will discuss how innovative design solutions such as energy efficient building envelopes and daylighting strategies can create significant cost savings and contribute to an improved learning environment. Presenters will discuss exemplary building case studies and identify sustainable practices on the basis of their economic feasibility and their ability to create an environment conducive to learning.

Track: Measuring Our Impact

Chesapeake A/B Room

Are We There Yet? Beginning with the End in Mind

Rebecca Lanter, Northern Kentucky University

We've all been there: you just wrapped up an event or initiative and someone asks, "How did it go?" On its surface, the question seems straightforward, but answering well can be challenging. Often this challenge arises because the goal wasn't clear at the outset, or there wasn't a way to tell whether the goal was met. This presentation will detail a process for defining and measuring success. After reviewing this process, participants will be invited to apply this process while developing a plan for measuring the success of an event or program on their campus.

50-Minute Concurrent Presentations *continued*

TUESDAY
10:10 AM

Track: The Built Environment

Columbia Room

Funding Your Central Utility Projects: Your Path to Sustainability

Bryan Haag, Entech Engineering, Inc.

Chris Bailey, Susquehanna University

Weak paybacks and intangible returns can make funding most sustainability projects a challenge, and the path to sustainability an arduous one. Starting or propelling your sustainability journey, by funding central utility projects that have dramatic emissions and energy reductions, might not always be the most obvious action to staff, students, and stakeholders, but the savings can fund other noticeable sustainability projects that would otherwise struggle to get off the ground. We'll look at three ways to fund central utility projects and how they fueled other sustainability projects on-site.

Track: Expanding the Sustainability Community

Frederick Room

Yale University Town-Gown Collaboration on Sustainability

Brianne Mullen, Yale University

Yale University has embarked on its third sustainability strategic planning process with a fresh emphasis on connecting with the City of New Haven community, among additional priorities. Three distinct programs have provided valuable information on barriers to and opportunities for engaging the New Haven community in the university's sustainability efforts in the transportation, energy, and urban forestry sectors, respectively. Participants will learn about each program's particular successes and challenges related to building a positive relationship with the urban community and creating models for replication in other academic and municipal settings.

Track: Measuring Our Impact

Pratt/Calvert Room

Accessing Savings and Successes through Waste Management

Amanda King, Natalie Berland, Bentley University

Through a critical campus stakeholder engagement process, the Bentley University Office of Sustainability was able to completely overhaul the campus' waste management program during the summer of 2014. The start of a new contract brought opportunities to launch a compost program and increase engagement in campus recycling efforts, resulting in an 18% increase in waste diversion over a 12-month period. The presenters will share valuable lessons learned through a process that took the campus's diversion rate from 34% to 52% and saved \$170,000 with a less than one year pay back.

80-Minute Interactive Workshop

TUESDAY
10:10AM

Track: The Built Environment 

President Room

Higher Education Solar Development: Financial Issues

James Critchfield, Environmental Protection Agency's Green Power Partnership

Robert Margolis, National Renewable Energy Laboratory

Meghan Chapple, The George Washington University

This mini-workshop session will explore the financial barriers and opportunities for solar deployment at institutions of higher education. Participants will learn from a National Renewable Energy Laboratory technical expert in this field and take away a foundation for understanding basic financial models for developing solar. Participants will also have the opportunity to engage in a discussion with other colleges and universities about the financial issues associated with solar development in the higher education sector and provide feedback to the U.S. Environmental Protection Agency (EPA) about what support is needed to overcome these financial barriers.

50-Minute Concurrent Presentations

TUESDAY
11:30AM

Track: Education for Sustainability: Innovating Curriculum and Research

Annapolis Room

Transforming Campus Spaces with Solar Technology and Design Thinking

Beth Ferguson, Director, Sol Design Lab

Karen Blaney, The University of Texas at Austin

Creative partnerships between climate science and design thinking are yielding adaptive and visionary solutions for resilient campuses and cities. How do we train and empower youth to participate in this process, and become innovative thinkers within a broad network of climate actors? This presentation will introduce participants to a hands-on, collaborative experience to design a solar based product or service, using a human-centered design process. We will discuss how an original student project attracted new funding from a LIFT Innovation Grant, a new University/Austin Energy utility partnership, and the next steps in educational solar software.

Track: Measuring Our Impact 

Baltimore Room

Measuring Our Impact Via the Sustainability Literacy Assessment

Connie Frey Spurlock, Kevin Adkins, Southern Illinois University Edwardsville

In Summer 2015, Southern Illinois University Edwardsville conducted its first Sustainability Literacy Assessment (SLA) of first year students. In Spring 2016, we administered the SLA to all students enrolled in senior assignment seminars. Findings from each phase will be presented, as well as a comparison of the two groups. Following a brief presentation of findings, this dynamic presentation will utilize the 1-2-4-all Liberating Structure, whereby session participants will engage in a conversation on the connections between data and questions about educating students to flourish, the relevance of love to measurement, and the role of capitalism and consumption in sustainability efforts.

Track: The Built Environment

Camden/Lombard Room

Microgrids and Leveraging Campus Utility Infrastructure

Ben Toby, FuelCell Energy, Inc.

David Cote, University of Bridgeport

Campuses throughout the country are realizing the benefits of utilizing a modern micro-grid, a concept that has evolved from simple generator backup systems into sophisticated smart grids, to enhance their power infrastructure. FuelCell Energy power plants operate as the power source in micro-grid configurations to ensure reliability, resiliency, and energy independence in one ultra-clean, efficient, and affordable solution ideal for colleges and universities committed to environmental sustainability.

Track: Change Management: Towards Transformation

Chesapeake A/B Room

Too Hot to Handle? Managing Space Heaters on Campus

Catherine Huddy, Sean Barton, Michigan State University

What do staff do when they feel cold at work? Some call facilities for help, while others grab a sweater. However, some chose to solve the problem themselves with space heaters. This often has unintended consequences, including increased energy use, HVAC system imbalances, and overloaded circuits. Comfortable work conditions are important, but so are energy efficiency and safety. How do we find a balance that works?

50-Minute Concurrent Presentations *continued*

TUESDAY
11:30 AM

Track: The Built Environment

Columbia Room

Parking Woes and Sustainable Solutions

Megan Litke, American University

Erin Stanforth, Virginia Commonwealth University

Anna McLaughlin, University of Maryland

Many universities in urban and rural settings have had to decrease parking availability on campuses in response to city regulations, to make room for new buildings, or to create more green space on campus. This loss of parking can cause headaches for transportation offices who are trying to accommodate commuters, residents, and guests, but innovative solutions exist! Learn about several new programs designed to decrease vehicles on campus through innovative occasional parking programs, expanded bike access, and more car sharing programs. Providing easy alternatives to the campus community can make alternative transportation a preferred option rather than a last resort.

Track: Expanding the Sustainability Community



Frederick Room

Creating a Sustainable Sustainability Network in Higher Education

Erin Case, Food Recovery Network

The US wastes forty percent of all food produced while one in six Americans goes hungry. Food Recovery Network (FRN) helps solve both of these problems by connecting college students who want to fight food waste on their campus with hunger-fighting agencies in their communities. Through these efforts, FRN has helped student groups on over 150 college campuses shift cultural norms around food waste and hunger, and connect them with real-life experience with diverse groups of individuals. Join FRN staff for a lively discussion on collaborative efforts between diverse groups and the best ways to serve our communities!

Track: Measuring Our Impact



Pratt/Calvert

Making Sustainability Metrics Meaningful

Claudia Frere-Anderson, Ruth Johnston, University of Washington

Managing institutional performance requires cross-functional collaboration and vertical cooperation from line managers and leadership. An organized network of sustainability practitioners are responsible for metrics and information used in the UW Sustainability Dashboard and university-wide reporting to organizations such as the Sierra Club, Princeton Review, STARS, and Climate Action Planning. Measuring sustainability performance ensures the UW is on target for greenhouse gas reduction goals, while identifying opportunities to improve performance and determine where to invest financial resources. Metrics have helped embed campus sustainability into UW's organizational planning and engage student learning.

Track: Education for Sustainability: Innovating Curriculum and Research

Charles Room

UMD's Partnership for Action Learning in Sustainability

Uri Avin, Derek Lombardi, National Center for Smart Growth

The Partnership for Action Learning in Sustainability (PALS) at the University of Maryland (UMD) is part of a national network of 23 similarly-focused action learning initiatives that enlist faculty expertise and student ingenuity to offer fresh solutions to sustainability challenges facing neighboring communities. Other institutions can benefit from the establishment of a similar program, and this session will explain how it can be initiated, operated and funded. This innovative approach to learning not only infuses sustainability into existing courses and creates valuable real-world learning experience for UMD students, it also helps to strengthen the sustainable practices of the partnering community.

50-Minute Concurrent Presentations

TUESDAY
2:30 PM

Track: Education for Sustainability: Innovating Curriculum and Research

Annapolis Room

Living Lab Key Elements: A PSU Case Study

Peter Buckland, Penn State's Sustainability Institute

Thirty-three Living Lab projects supported by the Pennsylvania State University Reinvention Fund have shown what makes sustainability living labs successful. Dr. Peter Buckland conducted a program evaluation to answer the question, "What are the multiple capital returns for multiple stakeholders from the Reinvention Fund Living Labs for Sustainability?" He used a nested case study methodology to determine what the human, social, financial, produced and natural capital returns were from the project. In so doing, he also learned what made projects succeed at achieving their goals. He will share the characteristics he discovered, provide examples and share a rubric.

Track: Measuring Our Impact

Baltimore Room

Developing Best Practices for Evaluating Campus Green Funds

Karen Blaney, The University of Texas at Austin

Micah Kenfield, University of Illinois at Urbana-Champaign

Inspired by the Campus Green Fund Collaborative and its AASHE Publication, "How-To Guide: Campus Green Fund Implementation," the University of Texas at Austin and the University of Illinois at Urbana-Champaign initiated class-led efforts to audit and evaluate their internal green funds. This session will report on those findings, as well as provide an overview of data from thirty-two institutions that responded to a survey on project implementation and tracking. We will encourage discussion and feedback on our conclusions.

Track: The Built Environment 

Camden/Lombard Room

Creating a Campus Landscape that Enhances Environment and Community

Adele Ashkar, Meghan Chapple, Noel Gasparin, George Washington University

Linette Straus, American Society of Landscape Architects

The George Washington University envisions a future with resource systems that are healthy and thriving for all. In 2009, the GW Office of Sustainability published the GW Ecosystems Enhancement Strategy based on input from internal and external stakeholders to integrate sustainability into academics, research, practice, and outreach. In five short presentations, George Washington University's approach to developing a sustainable campus landscape will be described by faculty, staff, designers, and stakeholders. Attendees will be invited to consider how GW's approach can inspire their own institution's efforts, and how their own methods can help advance GW's.

Track: Change Management: Towards Transformation

Chesapeake A/B Room

Climate Action Planning: Making Plans That Are Ambitious AND Implementable

Erin Stanforth, Virginia Commonwealth University

Laura Draucker, Amherst College

As sustainability professionals, we all know that writing a climate action or sustainability plan is only the beginning. Yet, so often after the initial buzz of publishing wears off, our plans begin to gather dust on a shelf. So what makes a plan truly implementable? Who needs to be involved, what metrics need to be tracked, what goals need to be set? Led by two sustainability directors at different stages of climate action planning, this interactive session will address these questions through audience participation and discussion. The session is open to participants at any stage in climate action planning.

Track: The Built Environment

Columbia Room

Campus Open Spaces as Microcosms of Sustainability and Ecology

Arijit De, Rowan University

Sara Pevaroff Schuh, SALT Design Studio

Jan Saltiel Rafel, Edgewater design, llc

Want to hear a story about a rapid-fire, heart-of-campus transformation? Ready to sketch ideas about connecting a stream corridor into the campus experience? It's a true tale about reclaimed materials, ground-nesting habitat and designing on a dime. Robinson Circle at Rowan University was once a place to be avoided. Today, students and faculty are amazed at the transformation as they stroll through or linger. Hear from client and designers about the challenges, pitfalls and collaborative solutions that emerged through the five-month concept through construction process. Then take your turn at design for the project's second phase with your creative input!

Tuesday, April 5

50-Minute Concurrent Presentations *continued*

TUESDAY

2:30 PM

Track: Expanding the Sustainability Community

Frederick Room

Eating Our Words: Food Sustainability at Southern Illinois University Edwardsville

Jared Deputy, Krista Sheets, Wolf Mark Veverka, Dana Wynn, Southern Illinois University Edwardsville

Food sustainability is an important part of campus sustainability, campus well-being, and quality of life for students. These concepts are just as important in the off-campus community where food deserts and food insecurity are major social issues. Sharing projects and building relationships in the community will enhance on-campus projects and programs as well as improve the local community, as well as spread sustainable food practices in both. A combination of student organizations, administrative offices, and community organizations working together benefits all stakeholders involved, including the local community, and creates a learning experience that students cannot receive in the classroom.

Track: The Built Environment

Pratt/Calvert Room

Kick Carbon to the Curb: Maximizing Renewable Energy Project Value

Chris O'Brien, American University; Altenex

Dennis Carlberg, Boston University

Brendan Biddlecom, Tanya Khatani, Noble Americas

Many colleges and universities are committed to large reductions in greenhouse gasses. Electricity is the single largest source of emissions for most campuses. While energy efficiency is a critical in GHG reduction plans, the only way to reduce emissions on the scale needed to achieve neutrality is to source renewable energy. This panel will pull back the curtain on strategies for developing comprehensive renewable energy plans that reduce costs and cut price risks. Topics addressed will include integrating renewable solutions with retail load and employing large-scale, offsite, renewable energy power purchase agreements.

Track: Measuring Our Impact

Charles Room

Things We Don't Measure But Should

Erin Meezan, Interface

Mary Spilde, Lane Community College

Jim Ritchie-Dunham, Institute for Strategic Clarity

Join our moderator and three panelists for a continued discussion from the Closing Plenary. This session will feature a round table discussion and give you a chance to get up close and personal with our panelists and the unique metrics they measure.

80-Minute Interactive Workshop

TUESDAY

2:30 PM

Track: The Built Environment

President Room

Higher Education Solar Development: RFPs and Contract Issues

James Critchfield, Environmental Protection Agency's Green Power Partnership

Jonathan Whelan, Optony, Inc.

Dennis Carlsberg, Boston University

Merrill Kramer, Sullivan & Worcester

This mini-workshop session will explore the complexities of issuing Request for Proposals (RFPs) and developing contracts, as well as identifying institutional administrative issues and opportunities for solar deployment. Participants will learn from an expert in this field regarding best practices, innovative approaches and potential pitfalls. Participants will have the opportunity to engage in a discussion with other colleges and universities about administrative issues associated with solar development in the higher education sector, and provide feedback to the U.S. Environmental Protection Agency (EPA) about what support is needed to overcome these administrative barriers.



RAMPING UP RENEWABLES IN HIGHER EDUCATION

Colleges and universities are positioned to lead the fight against climate change by demonstrating effective policies and best practices to their students, faculty, alumni and staff.

Altenex provides institutions with renewable energy advisory and procurement services. We identify, analyze and execute renewable energy transactions that reduce emissions and save energy costs.

Altenex is extremely proud to be a sponsor of the 2016 Smart & Sustainable Campuses Conference and is a founding partner of the Green Gigawatt Partnership.

For more information about how Altenex can help your institution ramp up renewable energy, please contact:

Chris O'Brien
Director of Higher Education Programs
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Conference At-A-Glance

SUNDAY, April 3

9:00 am – 5:00 pm	Washington D.C. Sustainability Tour <i>(Pre-registration required)</i>	Bus departs from Charles Street entrance
9:00 am – 12:00 pm	Pre-conference Workshop #1: Create a PV Deployment Roadmap for your Campus <i>(Pre-registration required)</i>	Frederick/Columbia Room
10:00 am – 4:00 pm	Student Summit <i>(Pre-registration required)</i>	Constellation Ballrooms C, D, E, and F
10:00 am – 5:30 pm	Pre-conference Workshop #2: Accelerating Change with Leith Sharp <i>(Pre-registration required)</i>	Baltimore/Annapolis Room
12:00 pm	Workshop Lunch	Maryland Suites Foyer
12:00 pm	Student Summit Lunch	Constellation Ballroom Hallway
12:30 – 4:30 pm	Pre-conference Workshop #3: Ramping Up Renewables <i>(Pre-registration required)</i>	Frederick/Columbia Room
3:00 pm	Workshop Break	Maryland Suites Foyer
4:00 – 6:00 pm	Student Summit Reception How One Student Government Convinced the School to Launch a Bikesharing Program	Harborview Room
4:30 – 6:00 pm	Renewables Workshop Happy Hour	Bistro 300
5:00 – 7:00 pm	Big Ten & Friends Sustainability Group Meeting	Frederick/Columbia Room

MONDAY, April 4

8:00 am	Breakfast, Registration and Exhibit Hall Open	2nd Floor Atrium and Constellation Foyer
9:00 am	Keynote Address: Re-imagining E/quality, Living Within Limits	Constellation Ballrooms AB
10:15 – 10:45 am	Break <i>Please visit our Exhibitors</i>	Constellation Foyer
10:30 – 10:45 am	Concurrent Workshops	1st, 2nd, and 3rd Floor Breakout Rooms
12:00 pm	Lunch <i>Please visit our Exhibitors</i>	2nd Floor Atrium and Constellation Foyer
12:45 pm	Afternoon Plenary: Harvesting the Lessons of a Decade to Unleash Idea Flow	Constellation Ballrooms AB
2:00 pm	Concurrent Sessions	1st, 2nd, and 3rd Floor Breakout Rooms
2:45 – 3:15 pm	Break <i>Please visit our Exhibitors</i>	Constellation Foyer
5:00 – 6:30 pm	Networking Reception and Poster Presentation	2nd Floor Atrium and Constellation Foyer

TUESDAY, April 5

7:30 am	Breakfast and Registration Open	2nd Floor Atrium and Constellation Foyer
8:30 am	Concurrent Sessions and Workshops	1st, 2nd, and 3rd Floor Breakout Rooms
9:45 – 10:15 am	Break <i>Please visit our Exhibitors</i>	Constellation Foyer
12:30 pm	Lunch <i>Please visit our Exhibitors</i>	2nd Floor Atrium and Constellation Foyer
1:15 pm	Closing Plenary Panel: Things We Don't Measure but Should	Constellation Ballrooms AB
2:30 pm	Concurrent Sessions	1st, 2nd, and 3rd Floor Breakout Rooms
3:00 pm – 3:30 pm	Break <i>Last chance to visit our Exhibitors</i>	Constellation Foyer
4:00 pm	Conference closes — See you next year!	