Honoring our Past, Charting our Future
March 30 & 31, 2015
Hyatt Regency Baltimore on the Inner Harbor

Pre-conference Workshops – March 29
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 Virginia
Blaine Collison, Altenex
Sally DeLeon, University of Maryland
Claudia Frere, University of Washington
Steve Glazner, APPA (Leadership in Educational Facilities)
Michael Gulich, Purdue University
Trina Innes, University of Alberta
Tacy Lambiase, University of Maryland
Scott Lupin, University of Maryland
Andrew Muir, University of Maryland
Mieko Ozeki, University of Vermont
Ashley Pennington, Johns Hopkins University
Mark Stewart, University of Maryland
Jaime Van Mourik, U.S. Green Building Council (USGBC)
Aurora Winslade, University of Hawaii

A big thank you to our 2015 Smart and Sustainable sponsors!

This conference is a success because of their support.

Gold level sponsor

Silver level sponsors
AGREENOZZI
Niagara Conservation
WGL Energy Services
Welcome to the 10th annual Smart and Sustainable Campuses Conference! The University of Maryland is again proud to host this event with the ongoing support of several partners.

This year, we return to Baltimore’s Inner Harbor where we will focus on the conference theme: “Honoring Our Past, Charting Our Future”. The Inner Harbor is an excellent symbol for this year’s theme as this world class destination represents a great and historic past while also representing the outcome of sound stewardship.

When the idea of a Smart and Sustainable Campuses Conference was first considered, few colleges and universities had organized sustainability efforts. The focus at that time was environmental compliance and moving beyond compliance through collaborative stewardship. Climate change was a rising issue, but few if any institutions were measuring their greenhouse gas emissions. At that time, the American College and University President’s Climate Commitment and the Association for the Advancement of Sustainability in Higher Education were unknown. The organizers of the first conference wished to create a new focus and energy that largely centered on smart growth and operational sustainability.

The President’s Climate Commitment facilitated rapid change within many colleges and universities, and today, 680 schools are signatories, and many more have established sustainability as a critical institutional goal. Students have become organized, educational opportunities have grown, and we are increasingly expanding sustainability knowledge and skills within our communities. But we also take great pride in the cultural changes we have witnessed at our institutions and the large networks of faculty, students and staff who are planning and collaborating together.

The Program Committee thanks you for your attendance and seeks to continuously improve the conference each year. Your opinions are highly valued and we incorporate new ideas and program elements each year to meet our community’s needs. We view the conference as an important opportunity to further our individual and collective skills, expand shared knowledge and discuss innovative ideas.

We thank you for joining us and look forward to your active participation in conference events. We hope you enjoy the experience as we reflect on the work of the past 10 years, the challenges that lie ahead, and how we may continue to chart a more sustainable future.
Clean Energy That Works For You

Off-Campus Solar Power Breaks New Ground

- No Roofs or Campus Land Required
- Leadership in Sustainability
- Fixed-Price, Clean Electricity
- Educational Opportunities for Students

In 2014, Clarkson University partnered with Community Energy Solar to implement a groundbreaking off-site 2.5 MW solar project on leased land, one mile from campus. The project delivers 3 million kWh of clean electricity each year, and offsets more than 4.5 million lbs of CO₂ annually.

Jay Carlis, Vice President  |  M: 484.868.3699
Learn more @ SSCC, 3/30, 4:00 PM Session “Meeting Carbon Goals While Saving Money with Renewable Energy”
A 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 76 tons of greenhouse gas emissions and contributing funds to 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 Richmond, Virginia. To put the conference’s carbon offsets in perspective, reducing 76 tons of greenhouse gas emissions is equivalent to:

- Taking 16 passenger vehicles off the road for a year, or
- Converting 7 average homes to renewable power for a year, or
- Planting 300 trees in a typical Maryland forest, or
- Removing 80 tons of organic waste from the landfill and composting it.

Table of Contents

- Baltimore Inner Harbor Map .......... 2
- Sustainability .............. 3
- Exhibit Hall Map ........ 4
- Conference Notes ....... 4
- Hotel Floorplan ........ 5
- Keynote and Plenary Speakers. ... 6-7
- Conference At-A-Glance ........ 8
- For Our 10th Anniversary ....... 9
- Concurrent Sessions At-A-Glance .... 10-11
- Monday Session Descriptions .... 12
- Poster Session ........ 20
- Tuesday Session Descriptions .... 21
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 buses 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
   Gelato, famous cannolis, and a small café with sandwiches and salads.

2. Fleet Street Kitchen • 1012 Fleet St
   Restaurant in Harbor East dedicated to locally sourced, ethically raised, and sustainable ingredients.

3. Sobo Café • 6 W Cross St
   Breakfast and brunch with vegetarian options.

4. Riptide by the Bay • 1718 Thames St
   A crab house right on the harbor that uses local Chesapeake Bay seafood.

5. Isabella’s Brick Oven Pizza and Panini • 221 S High St
   Italian sandwiches, pizzas, and salads, including a meatless menu, in Little Italy.

6. Liquid Earth • 1626 Aliceanna St
   Vegan and vegetarian made of locally-sourced, organic ingredients.

7. Matsuri • 1105 S Charles St
   Sushi and Japanese food, with some vegetarian options.

8. Family Meal • 400 W Lexington St
   A modern American diner, open for breakfast, lunch and dinner.

9. Heavy Seas AleHouse • 1300 Bank St
   A local Baltimore brewery-restaurant.

OFF MAP:

10. Faidley Seafood • 200 N Paca St
    Some of Baltimore’s best crab cakes.
Sustainability

Supporting the Local Farming Community

Working to ensure our meals are sourced from the local farming community can sometimes be a challenge. Our smart and sustainable hats are off to the Hyatt Regency Baltimore for making our jobs easier.

The Chef has been working with local suppliers to ensure that our nourishment during the conference is locally sourced as often as possible. 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** – Bittinger, Maryland
- **Crown Orchard Apples** – Batesville, Virginia
- **Muzzarelli Farms Potatoes** – Vineland, New Jersey
- **Arc Greenhouse Micro Greens** – Vineland, New Jersey

We hope you enjoy your meals and we encourage you to work with your caterers, hotels, or convention centers to make sure the local farming community is your source for food and beverage.

Food Recovery at Smart and Sustainable

Food is the number-one item in the American waste stream. At the same time, one in six Americans is food insecure. Food Recovery Network (FRN) is fighting food waste and feeding people in over 100 campus communities across the country. At SSCC 2014, the Network recovered 110 pounds of food that was prepared but not consumed by conference attendees. This amounts to nearly 90 meals worth of food that would have ended up in the landfill, but instead went to Project Plase. Project Plase is the hunger-fighting partner agency of FRN at Goucher College; it addresses homelessness in Baltimore by providing housing and other services for adults in need, and conducts important advocacy work to change and improve current policies. FRN is looking forward to collaborating with SSCC, the Hyatt Regency and our Baltimore-area chapters to further reduce SSCC’s environmental impact in 2015!

The Food Recovery Network unites students at colleges and universities across the country to fight food waste and hunger by recovering perishable food that would otherwise go to waste and donating it to hunger-fighting agencies in their communities. Founded in 2011 at the University of Maryland, FRN has grown to include more than 100 chapters in 30 states and the District of Columbia that have recovered over half a million pounds of food.

Find more information at www.foodrecoverynetwork.org, and connect with us @FoodRecovery on Twitter and Instagram, and on Facebook by searching for Food Recovery Network.
Exhibit Hall

Please visit our exhibitors and sponsors.

1 WGL Energy Services
2 Aquitas Solutions
3 Ernest Maier
4 Food Recovery Network
5 ZinCo-USA and Flex Membranes
6 ERG, on behalf of EPA’s Green Power Partnership
7 Busch Systems Int. Inc.
8 Corning-Zhone / Accu-Tech
9 Huper Optik Window Films
10 Sustainable Water
11 Budderfly LLC
12 Penn Globe
13 AGREENOZZI
14 Fuel Cell Energy, Inc.
15 FOR Solutions
16 Green Seal
17 Building Wellness Institute
18 Niagara Conservation

Conference Extras

Badges
Please wear your name badge at all times during the conference. It is your admission ticket to sessions, meals and other conference programming. We will have drop boxes available to recycle your name badge at the end of the conference.

Student Scholarships
Thanks to scholarships provided by the 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 2015 conference experience with the world. Tweet about the presentations and workshops you attend, share your photos and videos, and connect with other attendees. Don’t forget our hashtag: #SSCC2015

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
• Connect your device to the network by searching and selecting 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 “SSCC2015” and press “Continue.”
OPENING KEYNOTE

Generation Food: Breaking Rules to Feed the World

Raj Patel

Everyone knows that the food system is broken, but it’s hard to think about how to fix it systemically. Looking at how the food industry has operated over the past few decades helps us to understand what to expect, in terms of policy and response, from unsustainable enterprise. Luckily, around the world, groups of concerned citizens are pointing the way to a better future, by breaking the rules of the current food system. Their examples offer some inspiration, and tactics, for anyone concerned with a sustainable 21st century.

Raj Patel is an award-winning writer, activist and academic. He is a Research Professor in the Lyndon B Johnson School of Public Affairs at the University of Texas, Austin and a Visiting Professor at the Unit for the Humanities at Rhodes University (UHURU), South Africa. He has degrees from the University of Oxford, the London School of Economics and Cornell University, has worked for the World Bank and WTO, and protested against them around the world. He regularly writes for The Guardian, and has contributed to the Financial Times, LA Times, NYTimes.com, The San Francisco Chronicle, The Mail on Sunday, and The Observer. His first book was Stuffed and Starved: The Hidden Battle for the World Food System (10 editions, 8 languages) and his latest, The Value of Nothing, is a New York Times best-seller available in 19 editions and 14 languages. He is currently working on a ground-breaking documentary project about the global food system with award-winning director Steve James.
Our closing plenary, in the spirit of TED talks, is a historic opportunity to hear from leaders in multiple sectors as they honor our past and chart our future. Denice Heller Wardrop from Penn State’s Sustainability Institute, Yalmaz Siddiqui from Office Depot, and Jane Henley from the World Green Building Council will be sharing insights on successes, barriers and lessons learned about how our organizations work and how we can change them. They will speak from the heart on big ideas that can transform our organizations to become agile, innovative and change-capable with the fitness to drive sustainability into their core mission and business. Their messages of gratitude and hope will inspire you as you prepare to return to your own sustainability programs.

This panel was curated by Leith Sharp in her capacity as Director, Executive Education for Sustainability, Harvard Center for Health and the Global Environment.
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
</table>
| SUNDAY, March 29 | Pre-conference Workshop #1: *(Pre-registration required)*  
*Sustainability Planning: From Making the Case to Measuring the Results*  
Erik Foley and Jeremy Bean, Pennsylvania State University;  
Rob Andrejewski, University of Virginia | Baltimore / Annapolis Rooms                      |
| 10:00 am   | Pre-conference Workshop #2: *(Pre-registration required)*  
*Living Your Own Triple Bottom Line*  
Bonny Bentzin, Spirit Bay Developments Trust for Sustainable Development Shoal Point Management;  
Jaime Van Mourik, Center for Green Schools at USGBC;  
Jennifer Andrews, University of New Hampshire | Frederick / Columbia Rooms                       |
| 12:00 pm   | Lunch                                                                 | Maryland Suites Foyer                           |
| 3:00 pm    | Coffee Break                                                          | Maryland Suites Foyer                           |
| 7:00 - 9:00 pm | Conference Registration Open                                           | 2nd Floor Atrium – next to escalators          |
| 5:30 - 9:00 pm | Big Ten and Friends Meeting and Dinner                                | Bistro 300, 3rd Floor                           |
| MONDAY, March 30 | Breakfast, Registration and Exhibit Hall Open                         | 2nd Floor Atrium and Constellation Foyer       |
| 8:00 am    | Keynote Address: *Generation Food: Breaking Rules to Feed the World*  
Praj Patel | Constellation Ballrooms AB                                         |
| 9:00 am    | Concurrent Sessions and Workshops                                      | Constellation Foyer                             |
| 10:15 – 11:15 am | Break, sponsored by *Niagara Conservation*  
*Please visit our Exhibitors* | Constellation Foyer                             |
| 10:30 am   | Concurrent Sessions and Workshops                                      | 2nd Floor Breakout Rooms                        |
| 12:00 pm   | Lunch, sponsored by *Aquitas Solutions*  
*Please visit our Exhibitors* | 2nd Floor Atrium and Constellation Foyer       |
| 1:30 pm    | Afternoon Plenary: *Sustainability: The Next Education Revolution*  
George Bandy, VP of Sustainability, Interface | Constellation Ballrooms AB                      |
| 2:50 pm    | Concurrent Sessions and Workshops                                      | 2nd and 3rd Floor Breakout Rooms                |
| 3:30 – 4:30 pm | Break, sponsored by *AGREENOZZI*  
*Please visit our Exhibitors* | Constellation Foyer                             |
| 6:00 pm    | Networking Reception and Poster Presentation                          | 2nd Floor Atrium and Constellation Foyer       |
| 9:00 – 11:00 pm | City Lights Cocktail Night                                            | Pisces Room, 15th Floor                        |
| TUESDAY, March 31 | Yoga for Sustainable Bodies                                          | Conway Room (lobby level)                      |
| 7:30 am    | Breakfast and Registration Open                                        | 2nd Floor Atrium and Constellation Foyer       |
| 8:30 am    | Roundtable Discussion Forum                                            | Constellation Ballrooms AB                     |
| 9:50 am    | Concurrent Sessions and Workshops                                      | 2nd and 3rd Floor Breakout Rooms                |
| 10:30 – 11:30 am | Break, sponsored by *WGL Energy Services*  
*Please visit our Exhibitors* | Constellation Foyer                             |
| 12:30 pm   | Lunch  
*Please visit our Exhibitors* | 2nd Floor Atrium and Constellation Foyer       |
| 1:30 pm    | Closing Plenary: *Is There a Sustainability 2.0 Ahead?*  
Jane Henley, CEO, World Green Building Council;  
Yalmaz Siddiqui, Senior Director, Office Depot;  
Denice Heller Wardrop, Director, Penn State’s Sustainability Institute | Constellation Ballrooms AB                     |
| 2:30 – 3:30 pm | Break  
*Last chance to visit our Exhibitors* | Constellation Foyer                             |
| 2:40 pm    | Concurrent Sessions and Workshops                                      | 2nd and 3rd Floor Breakout Rooms                |
| 3:30 pm    | Johns Hopkins Center for a Livable Future Tour  
*(Pre-registration required)* | Shuttle departs from Charles Street Main Entrance |
For Our 10th Anniversary...

**Tuesday Morning Round Table Discussions**

Our attendees love Smart and Sustainable for the valuable networking opportunities and the deeper dives into sustainability topics. This year, we are giving you more of what you love! Participate in our Tuesday morning Roundtable Discussion Forum.

**How to participate:**
1. Arrive in Ballroom AB at 8:30am with your coffee and an open mind.
2. Wander through the ballroom and select a table with the discussion topic of your choice.
3. Ask questions, find resources, share experiences and have a more organic discussion of sustainability challenges and opportunities.

Facilitators will guide the conversation and take notes.

**The 10th anniversary gift is tin but...**

To celebrate our 10th year, each attendee will receive an upcycled glass tumbler from the Green Glass Company. These tumblers are made from recycled wine bottles. Happy Anniversary!

**Honoring our Past, Charting our Future**

Visit our Story Boards in the 2nd Floor Atrium and share your thoughts, goals, experiences and dreams. Whether this is your first or tenth conference, we want to know what inspires you and what motivates you to be the change.
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30</td>
<td>Closing the Loop Between Campus Food Waste and Community Hunger</td>
</tr>
<tr>
<td>10:40</td>
<td>Fostering Behavior Change Routines to Reduce Waste</td>
</tr>
<tr>
<td>10:50</td>
<td>Building Your Sustainability Alliance</td>
</tr>
<tr>
<td>11:00</td>
<td>Visualizing Sustainability: Graphic Design Strategies for Communicating Metrics</td>
</tr>
<tr>
<td>11:10</td>
<td>Turning Offsets to Onsets: Crowdfunding Local Solutions to Climate Change</td>
</tr>
<tr>
<td>11:20</td>
<td>General Education for Sustainability: Mitigation, Adaptation, or Salvation?</td>
</tr>
<tr>
<td>11:30</td>
<td>Lesson Learned: A Review of Recycled Water Systems at Yale</td>
</tr>
<tr>
<td>11:40</td>
<td>Climate Change: Compete to Reduce</td>
</tr>
<tr>
<td>11:50</td>
<td>Integrating Sustainability Practicum into the Business Curriculum</td>
</tr>
<tr>
<td>12:00</td>
<td>Planning, not Purchasing: Significant Sustainability Solutions Using Existing Infrastructure</td>
</tr>
<tr>
<td>12:10</td>
<td>Taking it to the Streets: Long-term Partnerships for Neighborhood Sustainability</td>
</tr>
<tr>
<td>12:20</td>
<td>Leadership and Capacity Building Workshop for Under-Resourced Institutions</td>
</tr>
<tr>
<td>12:30</td>
<td>The Partnership for Action Learning in Sustainability (PALS) at UMD</td>
</tr>
<tr>
<td></td>
<td>Serendipity Crossed with Persistence: A ‘STARS’ Studied Transformation</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>Ballroom C</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>9:50</td>
<td>Growing Food For Your Campus</td>
</tr>
<tr>
<td>10:00</td>
<td></td>
</tr>
<tr>
<td>10:10</td>
<td></td>
</tr>
<tr>
<td>10:20</td>
<td></td>
</tr>
<tr>
<td>10:30</td>
<td></td>
</tr>
<tr>
<td>10:40</td>
<td></td>
</tr>
<tr>
<td>10:50</td>
<td></td>
</tr>
<tr>
<td>11:00</td>
<td></td>
</tr>
<tr>
<td>11:10</td>
<td></td>
</tr>
<tr>
<td>11:20</td>
<td></td>
</tr>
<tr>
<td>11:30</td>
<td></td>
</tr>
<tr>
<td>11:40</td>
<td></td>
</tr>
<tr>
<td>11:50</td>
<td></td>
</tr>
<tr>
<td>12:00</td>
<td></td>
</tr>
<tr>
<td>12:10</td>
<td></td>
</tr>
<tr>
<td>12:20</td>
<td></td>
</tr>
<tr>
<td>12:30</td>
<td></td>
</tr>
<tr>
<td>12:40</td>
<td></td>
</tr>
<tr>
<td>12:50</td>
<td></td>
</tr>
<tr>
<td>1:00</td>
<td></td>
</tr>
<tr>
<td>1:10</td>
<td></td>
</tr>
<tr>
<td>1:20</td>
<td></td>
</tr>
<tr>
<td>1:30</td>
<td></td>
</tr>
<tr>
<td>1:40</td>
<td></td>
</tr>
<tr>
<td>1:50</td>
<td></td>
</tr>
<tr>
<td>2:00</td>
<td></td>
</tr>
<tr>
<td>2:10</td>
<td></td>
</tr>
<tr>
<td>2:20</td>
<td></td>
</tr>
<tr>
<td>2:30</td>
<td></td>
</tr>
<tr>
<td>2:40</td>
<td></td>
</tr>
<tr>
<td>2:50</td>
<td></td>
</tr>
<tr>
<td>3:00</td>
<td></td>
</tr>
<tr>
<td>3:10</td>
<td></td>
</tr>
<tr>
<td>3:20</td>
<td></td>
</tr>
<tr>
<td>3:30</td>
<td></td>
</tr>
</tbody>
</table>
**Monday, March 30**

### 50-minute Concurrent Presentations

**Track: The Campus as a Learning Laboratory**

**Fostering Behavior Change: Compete to Reduce**

Annapolis Room

Hannah Debelius, Center for Green Schools at the U.S. Green Building Council
Erin Stanforth, Virginia Commonwealth University

Campus Conservation Nationals (CCN) is the largest nationwide electricity and water reduction competition on college campuses. For the last three years, Virginia Commonwealth University (VCU) has participated in CCN. Representatives from CCN and VCU will discuss the competition, the benefits and challenges of participating, the short and long-term impacts that the competition can have, and how increased student engagement has influenced behavior change on participating campuses. This session will incorporate data and anecdotes from participating schools, conclusions from the CCN Marketing and Behavior Change Guide, and a summary of research related to long-term behavior change post-competition.

**Track: Community-Campus Partnerships**

**Closing the Loop Between Campus Food Waste and Community Hunger**

Baltimore Room

Sara Gassman and James Souder, Food Recovery Network

Did you know that forty percent of all food produced in the United States ends up in a landfill, while one in six Americans faces food insecurity? Campus food recovery programs can close the gap in this loop, creating mutually beneficial partnerships that help reduce hunger in the community while providing valuable leadership opportunities for students. Food Recovery Network (FRN) mentors students to implement recovery programs on their campuses; over 100 chapters have started since 2011. Using on-campus food recovery programs as a case study, join FRN staff in a lively discussion about creating strong, sustainable relationships between campus and community partners.

**Track: Change Management: Towards Transformation**

**Creating Consensus: Lessons from JHU’s Green Events Task Force**

Columbia Room

Kelly Collingsworth, Johns Hopkins University

This presentation will explore Johns Hopkins’ Green Events Task Force: an initiative to bring together event planners and operational services staff to collaboratively define sustainable events, set goals for programming, and outline a shared implementation plan. Attendees will assess their role in event planning and learn new skills for kick-starting a comparable process at their own institution. Through discussion of event objectives, logistics, stakeholder needs, and cost challenges, participants will be ready to create their own Task Force that will enable them to define a clear path toward consistently sustainable event planning across various departments.

**Track: The Campus as a Learning Laboratory**

**Johns Hopkins University and Georgia Tech: Leading the Way to Sustainability through Comprehensive Water Management**

Frederick Room

Ed Kirk, Johns Hopkins University
Bob Salvatelli, Sustainable Water

Universities regularly implement advanced strategies to decrease and optimize energy and water use. In a region riddled with issues such as drought, legal disputes over water supply, and EPA consent decrees, Georgia Institute of Technology has taken significant strides to better understand and improve its water footprint. From its Stormwater Master Plan to campus-wide wastewater reclamation and reuse, Georgia Tech is implementing a comprehensive water management system that minimizes its environmental footprint, reduces risk, and saves money. Attendees will learn how Georgia Tech’s numerous academic, outreach, and research opportunities help advance its educational goals, and are also replicable and scalable to other campuses.

continued >>>
80-Minute Concurrent Workshops

**Track: The Campus as a Learning Laboratory**

**World Cities, World Class: The WC2 University Network**  
Janna Cohen-Rosenthal, Second Nature  

Established in 2010, the WC2 University Network was developed with the goal of bringing together top universities located in the heart of major world cities in order to address cultural, environmental and political issues of common interest. As a result of initial discussions, the participating universities, including the University of São Paulo, outlined a plan of action for the network. Short-term plans include retrofitting buildings, increasing sustainable behavior, reducing energy consumption, and managing water and resources sustainably. Long-term plans involve creating campus Master Plans. During the presentation, data that has already been collected related to energy use, water consumption, and CO2 emissions will be analyzed, and related research will also be discussed.

**ACUPCC Implementation Liaison Meeting**  
Janna Cohen-Rosenthal and Brett Pasinella, Second Nature  

The IL Networking Meeting is an interactive workshop designed to allow personnel at signatory institutions to make connections, share stories, and create a comprehensive learning network. There will be a particular focus on brainstorming about the next generation of sustainability frameworks and tools. How can we better collaborate and reference each other’s Climate Action Plans? Where are the possible synergies between reporting tools? Participants will break into groups and tackle these questions, sharing ideas and resources found with the large group. Representatives from Second Nature will introduce and facilitate the session, and provide metrics and research about how institutions are currently using existing tools.

**Track: Change Management: Towards Transformation**

**Building Your Sustainability Alliance**  
Caroline Savage, Indiana State University  

The success of a campus sustainability movement is intimately linked to vibrant partnerships. So how do we go beyond one-time collaborations to build lasting connections with diverse stakeholders? This workshop will assist participants as they develop their own Sustainability Fellowship: a way of branding or conceptualizing partnerships that empowers all campus (and relevant off-campus) parties to take ownership of their role in the sustainability movement. In this workshop, participants will explore methods to build and maintain relationships, while also identifying existing relationships that can contribute to sustainability successes.

**Track: The Built Environment**

**Oberlin’s Environmental Dashboard: Combining Real-time Resources with Community Voices**  
John Petersen and Daniel Rosenberg Daneri, Oberlin College  

Throughout the course of human evolution, intimate and continuous feedback from the natural world informed and constrained individual and community decision-making. Today, technological advances in energy efficiency, renewable energy, and material science are important, but also insufficient conditions for achieving sustainability. However, new technologies are enabling and displaying novel forms of feedback on resource consumption and environmental quality. This session will explore how such feedback can be leveraged to drive electricity and water conservation.
Monday, March 30

50-Minute Concurrent Presentations

Track: The Campus as a Learning Laboratory

Empowering Students as Energy Efficiency Change Agents
Renee Lafrenz, Alliance to Save Energy

Annapolis Room

Colleges and universities offer prime opportunities to address energy issues, as demonstrated by the Alliance to Save Energy’s PowerSave Campus Program. This session will showcase transferable best practices of a student-driven campaign to foster diverse partnerships, infuse energy concepts into academia, pilot emerging technologies for measurable energy savings, and train the next generation of sustainability professionals. Attendees will receive a firsthand account of how to effectively train student leaders and empower them as change agents. Participants will also gain valuable insights into successful regional networking and alumni mentoring techniques.

Track: Community-Campus Partnerships

Changing Behaviors: A Lean Approach to Waste Management on Campus
Karin Holland, Haley & Aldrich
Paige Menees, University of Pennsylvania

Baltimore Room

Learn how stakeholders took an innovative, collaborative approach in developing a Solid Waste Management Plan at the University of Pennsylvania. By applying Lean Process Improvement Thinking, staff members from facilities to institutional leadership and students from across campus actively participated in examining resources, processes, workflows, behaviors and obstacles in managing waste. Today, university stakeholders have taken ownership of the plan and developed “eyes for waste” to ensure that the plan is being successfully implemented across campus. Representatives from the university will share the unique aspects of the “learning by doing” process, lessons learned, successes, and the results of this strategic approach.

Track: Change Management: Towards Transformation

Don’t Get Jeers from Stakeholders & Peers: MSU Sustainability Guidebook
Ann Erhardt, Michigan State University

Columbia Room

Michigan State University’s Sustainability Office developed a user-friendly web application, or “Guidebook.” Its content reveals how many sustainability-related programs and operations got their start, managed change and measured success. The Guidebook also outlines the process by which university strategic sustainability teams identified the need for the tool, assessed the required content, and simultaneously reviewed the university’s internal processes. Participants will learn how the Guidebook cultivated partnerships, fostered change management, and launched a web tool for use among peer groups.

Track: The Built Environment

Lessons Learned: A Review of Recycled Water Systems at Yale
Dawn Henning, Yale School of Forestry and Environmental Studies

Frederick Room

This presentation will examine seven reclaimed water systems at Yale University, and discuss lessons learned from the design phase to implementation. Between 2005 and 2010, a number of innovative projects were implemented at Yale University in response to a favorable building climate, a culture of academic research and development, and an overall desire to grow sustainably. The resulting collection of sustainable systems provides a unique opportunity to conduct comparative performance evaluations that can be used to inform adaptive management of future projects. Strategies and design guidelines will be presented along with evaluation techniques that can be applicable to green building projects at other universities.
Integrating Sustainability Practicum into the Business Curriculum
D. Scott Showalter and Carla Davis, North Carolina State University

Since businesses are increasingly looking for students who can apply sustainability concepts within their respective disciplines, finding ways to integrate sustainability learning experiences within existing curricula is important. This session will explore how students in an advanced auditing class at NC State’s Poole College of Management verified the accuracy of the university’s Annual Sustainability Report. Since third-party verification of sustainability reports is a common practice in corporate sustainability, experiential learning projects like this can introduce students to that concept in a higher education setting. In this session, participants will explore the process of creating a class project that will lead to the verification of a university’s sustainability report.

Turning Offsets to Onsets: Crowdfunding Local Solutions to Climate Change
Daniel Greenberg and Clara Fang, Earth Deeds
Chris O’Brien, American University

Colleges and universities often struggle to meet their carbon emission reduction targets after their “low hanging fruit” has been picked. While offsets can always close this gap, the voluntary carbon market is riddled with concerns regarding verification costs, additionality, and lack of pedagogical value. This presentation will examine the pros and cons of carbon offsetting and present case studies of colleges and universities going beyond offsetting to “onset” their emissions by crowdfunding local solutions to climate change.

Parking and Transportation: The Untapped Gold Mine of Sustainability
Brian Maleck, Gary Gaulin and Katerina Moreland, Clemson University

We often overlook the fact that driving our cars (and then driving around in pursuit of a parking spot) can significantly contribute to greenhouse gas emissions. But the EPA estimates that transportation accounts for 28% of greenhouse gas emissions in the United States, meaning that parking and transportation must factor into the sustainability equation. Clemson University has measured the effects that parking and transportation can have on sustainability goals, and representatives from Clemson’s Parking and Transportation Services will reveal how your campus can reduce emissions and tap into the sustainability gold mine of parking and transportation.

Green Cleaning for Health, Leadership, and Community Engagement
Susan Heaton, Green Seal
Sandra Smith, University of Virginia

Many colleges and universities have already shifted their procurement from conventional cleaning products to third-party certified cleaning products in order to provide a healthier indoor environment for staff and students. Only a few institutions, however, are taking green cleaning to a new level by using Green Seal’s GS-42 Standard to re-train their custodial teams on best practices. In this session, learn how greener cleaning products and procedures can help your institution improve indoor air quality, achieve LEED certification, and engage employees, staff, and students.
Track: The Campus as a Learning Laboratory

Plan a Learning Lab for Your Campus

Neil Leary and Lindsey Lyons, Dickinson College

Participants in this interactive workshop will share lessons of best practices from examples of effective learning laboratories, and will develop and critique plans for new learning laboratory projects at their universities. The workshop is appropriate for attendees with general knowledge about learning laboratories, some familiarity with at least one learning laboratory program, and a desire to develop and implement a learning laboratory project on their own campus.

Track: Community-Campus Partnerships

Taking it to the Streets: Long-term Partnerships for Neighborhood Sustainability

Jacob Sherman, Fletcher Beaudoin and Christina Williams, Portland State University

Building on Portland State University’s long-standing commitment to “Let Knowledge Serve the City,” the PSU’s Sustainable Neighborhoods Initiative connects faculty experts and motivated students with local neighborhoods to develop and implement projects that increase economic resilience, advance social equity, and restore ecological systems. The presentation will focus on the challenges and lessons learned from the implementation of this cross-university initiative as it relates to course projects, research, and partnership infrastructure. The presenters will also map out the history of this place-based sustainability initiative, its design, the partner selection process, and desired outcomes.

Track: Change Management: Towards Transformation

Visualizing Sustainability: Graphic Design Strategies for Communicating Metrics

Allison Wilson and Jillian Erhardt, Ayers Saint Gross
Valerie Sherry and Adam Chamy, University of Maryland

Every day, students, faculty, and administrators are inundated with information from social media, blogs, newspapers, radio, television, and magazines – and that’s before they even start thinking about their academic and professional work. Succinct information paired with graphic visualizations allows students, faculty, and administrators to become more engaged with topics related to sustainability. Presenter and attendees will work through a series of activities developed to communicate how graphic design can elevate campus sustainability initiatives to become compelling marketing and outreach tools.

Track: The Built Environment

Planning, Not Purchasing: Sustainability Solutions Using Existing Infrastructure

Ramona “Froggi” VanRiper, Knox College

Major advances in sustainability are often more accessible than we would think. Without major expenditures, your campus can make significant strides in waste diversion and reduction, habits of stewardship, environmental health, and more. In this workshop, participants will consider the existing structure of their campus grounds, food facilities, residential halls, services, and even academic and extracurricular structures. Inspired by examples of other campus accomplishments, they will identify “low-hanging fruit”; opportunities to effect meaningful sustainability improvements simply by rearranging, communicating, marking, and coordinating on their campus in new ways. Educators, facilities workers, students and sustainability coordinators are all encouraged to participate.
50-Minute Concurrent Presentations

MONDAY 4:00PM

Track: The Campus as a Learning Laboratory

General Education for Sustainability: Mitigation, Adaptation, or Salvation?  Annapolis Room
Paul Morgan, West Chester University of Pennsylvania
Josh Lasky, Center for Green Schools - US Green Building Council

How do we educate students about a climate crisis that increasingly demands more than mitigation, or even adaptation? The ultimate challenge may be gaining salvation in the face of an existential threat. If so, then education for sustainability will become a core tenet of higher education. At the very center of that core is the general education program, where we simultaneously establish our institutional values and provide a foundation for all learning. We will look at one initiative to transform a general education program in a way that acknowledges the full scale and urgency of this challenge.

Track: Community-Campus Partnerships

The Partnership for Action Learning in Sustainability (PALS) at UMD  Baltimore Room
Kiel Edson, University of Maryland

In its inaugural year, PALS at the University of Maryland, College Park has evolved into one of the largest action learning initiatives in the country. PALS is designed to harness the expertise of UMD faculty and the energy and ingenuity of UMD students to help Maryland communities become more sustainable. This year’s partnership with Frederick, Maryland involves 30 courses and some 50,000 student hours in a campus-wide effort to promote sustainability. Many lessons have been learned since PALS was launched, and this workshop will share the experience of creating such an ambitious program and provide guidance for other universities looking to implement a similar initiative.

Track: Change Management: Towards Transformation

Meeting Carbon Goals While Saving Money with Renewable Energy  Columbia Room
Jay Carlis, Community Energy
Chris O’Brien, American University

The purchase of unbundled Renewable Energy Credits (RECs) is falling out of favor due to their intangibility and added costs. But since Scope II emissions are still a significant source of carbon emissions, universities need solutions. Today, colleges and universities have multiple options to meet long-term carbon reduction goals, save money, protect against rising electric rates, and participate in the construction of new renewable energy facilities by entering into long-term, fixed-price energy contracts. Presenters and attendees will work together to compare and contrast different models for clean energy procurement across the country.

Track: The Built Environment

Sustainability through Holistic Facilities Management  Frederick Room
Kevin Coulon, Triumvirate Environmental
TBD, Worcester State University

Many institutions don’t have the time or budget to do a complete facility renovation, or overhaul existing programs for sustainability reasons. This presentation will teach attendees how they can make a big difference in their institutions through small changes to routine maintenance and facilities management programs. Attendees of this session will learn about sustainable maintenance tactics, the impact that improper routine maintenance procedures can have on sustainability goals, and how to creating a maintenance calendar optimized for sustainability.
Track: The Campus as a Learning Laboratory
Implementing the LEED Lab Program on Your Campus
Traci Rider, North Carolina State University
Jaime Van Mourik, Center for Green Schools at the U.S. Green Building Council

This workshop will help campus sustainability leaders think through the process of implementing a LEED (Leadership in Energy & Environmental Design) Lab program that is compatible with their particular campus, resources, and culture. Workshop facilitators from different university settings will provide insights based on their experiences with implementing LEED Lab methodologies, including partnerships, class sizes, and student backgrounds.

Track: Community-Campus Partnerships
The Wild Campus Community, Climate Resilience and Roles for Student Ecoleaders
Courtney Cochran and Julian Keniry, National Wildlife Federation

What is the “wild” campus community? How are campuses advocating for the protection of wildlife and ecosystems? What is this thing called “climate resilience,” and how are campuses involved? This interactive workshop will identify best practices from across the county and on individual campuses, and attendees will work in regional groups to create theoretical community resiliency projects tailored to their own diverse ecosystems. Participants will create projects that can help inform various types of educational and leadership initiatives for students.

Track: Change Management: Towards Transformation
Using Interactive Media & Social Tools to Transform Behavior
Casey Roe, Duke University
Chad Carwein, UNC Greensboro
Carla Davis, North Carolina State University
Jessica Bilecki, Elon University

While having a social media presence can help sustainability offices reach students and university employees, these online tools are only as powerful as their campaigns. Compelling campaigns that provide rewards and recognition can drive user engagement and encourage participants to try or maintain a new sustainable behavior. Sustainability outreach coordinators at four North Carolina universities will review the basics of successfully engaging your community through social media and take a deeper look at interactive media tools and campaigns.

Track: The Built Environment
Leadership and Capacity Building Workshop for Under-Resourced Institutions
Brett Pasinella, Second Nature

How can institutions with limited resources strengthen their sustainability capacity? This interactive workshop will help participants gain an understanding of how to build cooperative sustainability teams across campuses with limited dedicated resources. Discussion topics include building a successful campus-wide sustainability team, designing an inclusive planning process that is responsive to established planning needs, integrating sustainability outcomes into the campus mission, examining how sustainability programs can support an institution’s priorities, and using metrics as decision-making tools to facilitate long-term planning.
50-Minute Concurrent Presentations

**Track: The Campus as a Learning Laboratory**

**Codesign for Community-Based Learning in Urban Sustainability**

*Annapolis Room*

**Evan Barba and Audrey Stewart, Georgetown University**

The Georgetown Sustainability Fellowship pilot brought together a multidisciplinary team to create a new model for learning and practicing sustainability on campus. Using a participatory codesign process involving faculty, staff, outside collaborators, and a team of undergraduates, teaching modules and projects were developed at the intersection of social justice, community-based learning, urban sustainability, and institutional change. Students received valuable pre-professional experiences, while faculty and staff experimented with new pedagogies and practices. This session will provide an overview of the resources that enabled the initiative, lessons learned from the codesign process, and the short- and long-term benefits of this approach.

**Track: Community-Campus Partnerships**

**Campus Community Partnerships: Public Partners Promoting Sustainability**

*Baltimore Room*

**Brent Fryrear, Partnership for a Green City**

**Pamela Dumm, Jefferson Community & Technical College**

The Partnership for a Green City is an innovative campus-community partnership of a large metropolitan research university, the largest urban school district, the largest merged municipal government, and the largest community college in Kentucky. The Partnership process convenes peers from each public organization and resources from the community to address problems, increase capacity, and share sustainability solutions. Presenters will share the program’s successes, challenges, and funding models, and attendees will learn how to reproduce this model to increase sustainability through collaboration.

**Track: Change Management: Towards Transformation**

**Reducing Carbon Emissions One Window At a Time**

*Columbia Room*

**Emily Sullivan, Holy Cross Alumna and Victoria Pennacchio, Holy Cross Student**

The prevalence of open windows in college residence halls during the winter months is one of the most frustrating issues that facility departments encounter, and unfortunately, students often fail to recognize the deleterious effects of such behavior. At Holy Cross, administrators and student leaders collaborated to overcome this problem. Following the implementation of an educational campaign, fewer open windows were observed and more students reported confidence in operating room thermostats. Through this interactive session, participants will learn how to brainstorm methods of reducing open windows using programming-based behavior change, an important aspect of realizing carbon neutrality on college campuses.

**Track: Change Management: Towards Transformation**

**Serendipity Crossed with Persistence: A ‘STARS’ Studded Transformation**

*Frederick Room*

**Kevin Adkins and Connie Frey Spurlock, Southern Illinois University Edwardsville**

When Southern Illinois University Edwardsville (SIUE) decided to include sustainability in its strategic plan, some people saw it as a merely symbolic gesture. As one of the first schools to adopt AASHE’s STARS, however, SIUE has discovered tremendous benefits of participating in a program that can measure sustainability success and encourage campus-wide change. This presentation will examine how universities can use STARS as means to build consensus, increase community buy-in, and assist in the accreditation process.
Poster Session

Improving the Energy Performance of Existing Buildings
Arfa Aijazi, Simpson Gumpertz & Heger, Inc.

Sustainability Beyond Composting & Recycling: Reducing Waste at the Source
Jessica Medicus, Triumvirate Environmental

Games that Change: Do Campus Contests & Peer Comparisons Achieve Energy Conservation?
Hannah Marshall, Ursinus College

UNCG Buy Green Expo: Collaboration Leads to Successful Sustainability Event
Chad Carwein, UNC Greensboro

Determination of Ideal Parking Lot Bioswale Porous Material
Jungseok Ho and Marianella Franklin, University of Texas Pan American

A Comprehensive Approach to Behavior Change in the VCU Population
Erin Stanforth and Wyatt Carpenter, VCU Office of Sustainability

Monday, 6 pm, 2nd Floor Atrium

Experiential Learning within the Community Garden: A Case-Study
Ashley Rose Newton, Indiana State University

Students Transform South Dakota Campus
Jennifer McLaughlin, South Dakota State University
Student Sustainability Council
Shelly Brandenburger, South Dakota State University

Food Waste Awareness on Campus: Transforming Student Perspectives
Noemie Keller and Noah Erwin, Johns Hopkins University (Real Food Hopkins)

Investigating Campus Cycling Environment from an Ecological Perspective
Margaret Shields, Angelia Paschal and Melanie Tucker, University of Alabama

Campus Sustainability Map: A User Driven Approach for Identification and Display
Kristen Crossney and Beau Ryck, West Chester University

Sustainability Literacy: Faculty vs. Students
Carl Obermiller and April Atwood, Seattle University

STEALTH
The world’s most efficient toilet.

The world’s most efficient toilet.
Higher education plays an important role in developing and inspiring sustainability-minded leaders to solve global challenges through scholarship, research, and direct action. Universities and their associated communities have the ability to harness a range of experiences and expertise to provide opportunities for students to engage with sustainability and learn problem-solving skills. Sustainability leaders from Virginia Tech and the University of Virginia will share creative and replicable models to foster engagement, sustainability literacy, and leadership through stewardship programs, both on campus and within the larger community.

Developing a syllabus to teach freshman about environmental sustainability can be challenging, but when utilizing the campus to its potential, students will soon be able to make connections between their lectures and their experiences outside the classroom. Drawing upon key themes to teach students about sustainability, this presentation will help attendees become connected to campus projects in a meaningful way that will enhance their student’s understanding of sustainability. By examining case studies from Eastern Connecticut State University, participants can expect to take away ideas for their campuses and learn more about how to effectively structure a freshman sustainability course.

For nearly 30 years, graduation gowns have been manufactured with synthetic petroleum-based, non-biodegradable material. While mass producing polyester gowns is inexpensive, the destruction to the environment and financial burden for students and families can’t be ignored. Greener Grads and Berea College have partnered to recover, reuse, repurpose and recycle gently worn graduation gowns. Learn how to launch your own sustainability initiative from scratch using the Greener Grads method of building successful networks, rallying enthusiastic advocates, executing your entrepreneurial mission, and creating transformational partnerships between universities and sustainable organizations for the good of the Earth.

Change and transformation at an institutional level cannot happen overnight and requires active management. Universities are increasingly pressured to be more efficient, increase enrollment, and recruit the best faculty and students — all while maintaining social responsibility to students, the community, and the environment in which it operates. For the University of Washington, key priorities include reducing carbon emissions, increasing interaction with local businesses, and executing a vast number of process improvements with transparency and a high degree of campus collaboration. This interactive session will involve attendees learning about creating successful outcomes.

continued >>>
50-Minute Concurrent Presentations continued

**Tuesday, March 31**

**50-Minute Concurrent Presentations continued**

**TUESDAY**

**9:50AM**

**Track: The Built Environment**

**Dickinson College Sustainability – Connecting Capital Projects, Campus Landscapes and Culture**

Frederick Room

Kenneth Shultes, Dickinson College
Manisha Kaul, Andropogon

Dickinson College is a sustainability leader in higher education, both in operations and academics. Thanks to excellent planning and steadfast commitment, Dickinson has made sustainability a distinct element of the comprehensive student experience, both in and out of the classroom. This presentation will offer a unique perspective on how sustainability is becoming an integral element of the campus culture. A comprehensive strategy that integrates planning and operations, lifestyle and community, and education and research will be discussed through examples of newly constructed LEED Gold buildings, with an emphasis on their landscapes.

**80-Minute Concurrent Workshops**

**TUESDAY**

**9:50AM**

**Track: The Campus as a Learning Laboratory**

**Growing Food For Your Campus**

Ballroom C

Allison Lilly, University of Maryland Dining Services
Rial Carver, Virginia Tech Dining Services
Sarah Geurkink, University of Washington Botanic Gardens
Casey Roe, Duke University

As Wendell Berry once said, “Eating is an agricultural act.” But college students are looking for even more hands-on opportunities to learn about the interrelationships between food, agriculture, environment, and health. This workshop is designed to help start, develop, and/or enhance your already existing campus farm or garden. Through sharing and dialogue, you will work with facilitators and other participants to identify and discuss different models for campus farms, develop a checklist for expanding educational opportunities at your farm, and identify next steps for your campus farm initiative while drafting a strategic plan.

**Track: Change Management: Towards Transformation**

**Collaborating with Existing Leaders**

Ballroom E

Sally Grans Korsh, National Association of College & University Business Officers
Steve Glazner, APPA: Leadership in Education Facilities

Campus facilities and finance officers have the unique opportunity to develop, support, and implement campus sustainability initiatives. All campuses have major leaders in their facilities and business offices that may, or may not, be partners to develop campus sustainability goals. Join two directors from major higher education associations who work with these leaders to create better collaborations on sustainability issues. Each will discuss means, techniques and anecdotes for how they have moved the dial for campuses to become more sustainable in financial, facilities and environmental issues.

**Track: The Built Environment**

**Strategically Linking Campus Water Management to Open Space Enhancements**

Ballroom F

Jennifer Dowdell, Biohabitats
Arijit De, Rowan University
Amelle Schultz, Ayers Saint Gross

Can green spaces encourage contemplation, support academic programming, and provide recreational opportunities while also helping to regulate and treat stormwater flows? Yes! And cost-effective, green infrastructure can also help universities transition from being a commuter-based institution to a residential campus. In this interactive session, play the role of a green infrastructure planner while learning about how Rowan University achieved its landscaping and stormwater management goals through integrated design methods.
**Track: The Campus as a Learning Laboratory**

**Avoiding Pitfalls and Breathing Life into University Living Lab Programs**

Jacob Sherman, Anthony Hair and Christina Williams, Portland State University

Universities often face difficult questions when developing innovative, learning laboratory programs on their campuses. In this session, academic and facilities staff members from Portland State University will reflect on the important processes, challenges, and lessons learned from their own Living Lab program. Presenters will also share a concrete example of the “Waste Audit Living Lab Experience” project and discuss how this initiative provides students with the knowledge, skills, and experience needed to take on the world’s most complex problems.

**Track: Community-Campus Partnerships**

**CompuCycling: Sustaining the Instructional Technology Investment**

Michael Scribner and Julie Leary, Towson University

What is the environmentally and socially responsible solution to deal with slightly out of date technology that still has remaining useful life? Enter the CompuCycle program: extending the usable lifespan of technology on campus, building partnerships, creating a learning experience through volunteering and service learning, and donating surplus computers to neighboring public schools. Attendees of this session will learn about CompuCycle, an ambitious new initiative started by Towson University to solve a problem endured by many public higher education institutions.

**Track: Change Management: Towards Transformation**

**Culture Change Through Training and Professional Development for Sustainability**

Brent Fryrear, Partnership for a Green City
Pamela Dumm, Jefferson Community & Technical College

Maintaining a consistent sustainability message helps organizations promote desired norms, values, and assumptions in order to create a culture of sustainability. The Partnership for a Green City — made up of the largest community college, city, school district, and the second largest university in Kentucky — aims to do this by including sustainability in the orientation sessions at all four partners. Employees at all levels become familiar with the meaning of sustainability, the expectations of single stream recycling and waste reduction, composting, green purchasing, packaging reduction, and energy efficiency. The results have been amazing. Attendees of this interactive presentation will learn how to implement something similar in their workplaces, how the Partnership for a Green City has been successful in creating change, and that successes and barriers are not always the same in different contexts.

**Track: The Built Environment**

**Rejuvenating a Campus Landscape Pays Surprising Dividends**

Michael Mastrota and Helen Lee, American University

Do you want to rejuvenate your campus landscape to be a learning laboratory, a fund raising magnet, a marketing tool, a town and gown resource, and a branding icon for your university? Representatives from American University will share their strategy for transforming a once-denuded campus landscape into an award-winning, designated arboretum and public garden. Learn the powerful potential of your campus landscape and how to reap its unexpected benefits.
Tuesday, March 31

50-Minute Concurrent Presentations

**Track: The Campus as a Learning Laboratory**

**Developing a Natural Educational Landscape on Campus Grounds**
Christie-Joy Hartman and Wayne Teel, James Madison University

Ballroom C

Learn how to creating a hands-on educational landscape on campus grounds that can be incorporated into the undergraduate curriculum. Elements of transforming a grassy hillside into a natural educational landscape will be presented (including partnerships, resources, and design), along with specific course assignments that illustrate how the landscape operationalizes the pedagogy of place, maximizes facilities resources, and integrates scholarship into a course. Attendees will receive an introduction to the facilities and educational elements of the project, and will be guided through the process of developing a similar project at their own institutions.

**Track: The Built Environment**

**The International Green Construction Code**
David Walls, International Code Council

Ballroom D

The IgCC is the first model code that takes a broad approach to a building’s construction and operations with regard to sustainability. The IgCC establishes a foundation of green building measures that offers a clear and uniform path to sustainability in the built environment. Many jurisdictions have adopted, or are considering adopting, the IgCC to meet their sustainability needs and goals. This presentation will discuss sustainable measures such as: water efficiency, energy efficiency, resource management, indoor environment, and site development. The session will also cover the context of the IgCC as it relates to rating systems such as LEED.

**Track: Change Management: Towards Transformation**

**Turning Facilities Challenges into Sustainability Successes**
Jeff Murphy, Sightlines
Natalie Berland, Bentley University
Michelle Smith, University of Vermont

Ballroom E

Campus buildings are typically responsible for 60-80% of campus greenhouse gas emissions. In order to develop effective policies to curb emissions and increase campus sustainability, you’ll need to have a strong partnership with your facilities and financial officers. However, business and facilities officers are facing some of the biggest challenges in the history of U.S. higher education. Find out what those challenges entail, and learn how campuses are turning those facilities challenges into sustainability successes.

**Track: The Built Environment**

**Sustainable Stormwater Management on METU Campus, Ankara, Turkey**
Emre Alp and Gizem Gui Topal, Middle East Technical University

Ballroom F

Middle East Technical University (METU) is an international research university with about 26,500 students. It is the leading university in Turkey in terms of international research funding and the depth of its international ties. Although the campus has extensive green spaces, hydrologic effects of increased urbanization on the campus areas are significant. Hence, METU has faced challenges in developing and implementing a campus-wide stormwater management plan. In this presentation, possible Low Impact Development strategies for controlling stormwater impacts on METU’s campus will be demonstrated through Environmental Modeling strategies, with the help of GIS applications.
The Dumpster Project: Campus Sustainability in Education, Outreach, and Operations
Karen Magid and Amanda Masino, Huston-Tillotson University

At Huston-Tillotson University, a historically black college in Austin, Texas, a team of designers, engineers, scientists, and students is addressing a provocative and engaging question: Is it possible to live a happy, healthy life with less? The Dumpster Project, an educational initiative and learning lab program that involves converting a simple trash dumpster into a high-tech, net-zero energy microhome, seeks to answer that question, and more. This session will discuss how this project has already powered campus transformations by connecting faculty, students, and staff to broader campus sustainability goals and providing an engaging platform for outreach and resource development.

Creating Momentum Across Campus and Community for Sustainability
Dr. Shelly Brandenburger, South Dakota State University

Engaging a campus of 12,500 students, more than 2,000 employees, and a community of 22,000 residents in conversations about sustainability can be an exciting and educational journey. This presentation will explore efforts to ramp up campus sustainability initiatives at South Dakota State University in the absence of a formal sustainability plan. Attendees will learn about creating a platform for cross-campus connections and developing transformational relationships with campus and community partners.

Retention, Graduation, and Sustainability: Is There a Link?
Kevin Adkins, Southern Illinois University Edwardsville

In the current climate of increased governmental oversight of higher education and fiscal downturns, increased scrutiny is being paid to retention and graduation rates as markers of an institution’s success. At the same time, individual programs and initiatives at colleges and universities, including those focused on sustainability, are being required to justify their existence. Previous study found a correlation between institutional commitment to sustainability and increased student retention and graduation rates. This year’s presentation will examine a different set of variables that will further our understanding of the relationship between sustainability and retention and graduation rates.

Improving Sustainability in Campus Data Centers
John Clinger, ICF International on behalf of U.S. Department of Energy
Lynda Boomer, Michigan State University
Michael Ohadi, University of Maryland

Did you know that data center energy use can be cut by 20-40% through best management practices? According to the U.S. Department of Energy, if all data centers across the country improved their energy efficiency by just 20%, it would save $4.2 billion. Michigan State University and University of Maryland are demonstrating leadership in this area and will share their knowledge, barriers, results, and future plans for data center energy efficiency, including participation in the U.S. Department of Energy’s Better Buildings Challenge.
Tuesday, March 31

50-Minute Concurrent Presentations

Track: Community-Campus Partnerships

From STARS to STAR Communities: Helping Cities Track Sustainability Performance
Mieko Ozeki and Daniel Baker, University of Vermont

Similar to AASHE’s STARS, the STAR Community Rating System is a comprehensive sustainability certification program specifically designed for local governments. Both rating systems utilize self-reporting, multi-tiered systems, and have unique obstacles to overcome for participating institutions and communities. This panel presentation will illustrate lessons learned through a collaboration between the University of Vermont and City of Burlington, Vermont to become a STAR Member Community. Presenters will discuss how this kind of mutually beneficial relationship with local community can improve process efficiency, reduce costs, enhance the university’s educational reach and curriculum, and improve “town-gown” relationships.

Track: Change Management: Towards Transformation

Culture Shift for Sustainability: A Process-Based Approach to Institutional Change
Karen Kao, GreenerU
Michael Orr, Lesley University

With tighter budgets, leaner staff, and many competing priorities, colleges and universities are finding it increasingly difficult to commit the funds necessary to support energy efficiency initiatives. GreenerU and Lesley University will illustrate a case study on Mass College Green (MCG), a whole-system alternative financing option that eliminates upfront project costs, provides quick paybacks, and integrates participatory stakeholder engagement and behavior change programs to maximize impacts. Attendees will benefit from effective, adaptable tools for institutional change, a deeper understanding of creating stakeholder buy-in, and the power of best practices in language and communication for promoting a culture for sustainability.

Track: The Built Environment

A Multi-Disciplinary Campus Collaboration and Community Engagement for Sustainable Transportation
Elise Barrella, CJ Hartman, Kelsey Lineburg and Kristen Castilleja, James Madison University

Green rating systems are an important lever for promoting campus sustainability and an opportunity to promote campus and community engagement. This presentation will provide a brief overview of sustainable transportation rating systems and focus on lessons learned and outcomes from piloting STARS (Sustainable Transportation Analysis and Rating System) at James Madison University. Participants can expect practical examples of campus-community collaboration that can shape a sustainable built environment. Examples will include multi-disciplinary research efforts of faculty, students, and staff; an undergraduate project-based course on sustainable place-making; a participatory design charrette; and university-city cooperation for data collection.

Track: The Campus as a Learning Laboratory

Real-World Solutions for a Simple, Sustainable Lifestyle
Jim Gabel, Hastings+Chivetta Architects
Derrick Singleton, Berea College

Dedication to service, hard work and simple living exemplifies the mission of Berea College in Berea, Kentucky. Sustainability in all forms is integral to achieving this mission, especially when it comes to campus architecture. This commitment to the environment has culminated in the Deep Green Residence Hall, one of the world’s greenest residence halls and a model for sustainable student housing across the country. Come learn how the concept of sustainable living was incorporated into every aspect of the hall’s design and construction — from using mules to haul FSC-certified local lumber to the wood studio, to teaching students how to build furniture and a dashboard system to monitor energy use.

continued >>>

continued >>>
**Track: Social Sustainability**

**Making Social Sustainability Sustainable**

Rachelle Peterson, National Association of Scholars  
Gordon Evans, The Texas A&M University System

Too often, the implementation of sustainability programs violates several of their own social sustainability principles. In fact, three of the nine basic human needs identified by economist Manfred Max-Neef can be jeopardized: understanding, participation, and freedom. Using case studies from Yale University and Texas A&M University, this presentation will critique these internal inconsistencies and offer recommendations for improving discussion, analysis, and critical thinking about sustainability.

**Track: The Built Environment**

**The WaterHub at Emory University: Extending the Lifecycle of Our Water**

Matthew Early, Emory University  
Jonathan Lanciani, Sustainable Water

Comprehensive, campus-wide water management is critical for universities aiming to achieve sustainability objectives. It can create a more resilient campus through localized and redundant water supplies, which protects against service interruption and rising water rates. Emory University is leading the academic world in reducing its water footprint and will be home to the largest ecological-based decentralized water reclamation and reuse system in the United States. This presentation will examine Emory’s strategy from the master planning stage through operations and maintenance, and will include a discussion on project implementation and how it can be applied to other universities.

**Track: The Built Environment**

**Innovative Procurement Models for Renewable Electricity**

Anthony Amato, ERG, contractor to U.S. EPA’s Green Power Partnership  
Chris O’Brien, American University  
Meghan Chapple, The George Washington University  
Rich Walsh, WGL Energy

Only recently have a few leading institutions purchased renewable electricity from off-site projects via power purchase agreements (PPAs). This session will explore PPAs for renewable energy, and the questions and issues that universities should consider when investigating this procurement option. Participants will learn about the structure, key terms, and requirements of PPAs; the potential for PPAs to reduce energy costs, price volatility, and an institution’s carbon footprint; likely challenges and elements of a successful procurement process; and the influence of long-term contracts on decisions by project developers to build new generation facilities, such as solar and wind farms.
Save the Date
April 4 and 5, 2016
Hyatt Regency Baltimore on the Inner Harbor