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Dear Greenbuild Community,

In 2015, Informa Exhibitions and the U.S. Green Building Council (USGBC) was excited to bring the world's largest conference and expo dedicated to green building to Washington, DC - our nation's capital, hometown of USGBC and city with the most LEED certified properties (per capita) in the US. It was an event worth celebrating for Greenbuild, and it was beyond the ability to welcome more than 19,000 visitors to the largest conference dedicated to green building. It was about setting an example on how to create a truly sustainable event. With estimates of the conference and events industry producing upwards to 1 billion lbs. of garbage annually, the Greenbuild Team set lofty goals to make our annual meeting the most sustainable meeting of its kind and push ourselves and the industry toward innovation and progress.

Greenbuild 2015 brought together green building experts from around the world for three days of education sessions, renowned speakers, green building tours, networking and an impressive 144,300 square feet of exhibit and display space on the trade show floor. The Greenbuild Team strives to make our annual meeting the most sustainable meeting of its kind and push ourselves and the industry toward innovation and progress.

In 2015, we were proud to continue to raise the bar, and it is with great excitement that we share with you the Greenbuild 2015 Sustainability Report, summarizing our sustainability initiatives and performance results.

In 2015, we upheld our commitment to offsetting 100% of our emissions (including attendee travel) through the purchase of Green-e certified offsets in partnership with TerraPass. Carbon offset projects supported in 2015 were the New Beulah Landfill (Dorchester County, MD) and The Big Smile Wind Farm at Dempsey Ridge (Roger Mills and Beckham Counties, OK).

For the second year, Greenbuild showcased the Greenbuild “Net Zero Zone”—a 3,200 square foot pavilion powered by solar panels, installed on-site at the Walter E. Washington Convention Center. We are also very proud of our 84% waste diversion rate at the convention center—an accomplishment that would not have been possible without the tireless work of a waste sorting team on the back docks and 346 volunteers who helped attendees properly dispose of waste at the show.

We strive to positively impact each city we visit and feel we accomplished this in 2015 in several ways. Through meaningful engagement with our hotel partners, we were able to introduce the properties to helpful programs and resources like the Smarter DC Challenge, the EPA WaterSense Hotel Challenge and encourage participation in the TripAdvisor GreenLeaders certification program. Sixty-eight percent of our 2015 hotel partners, are GreenLeaders certified to-date.

For our 2015 Greenbuild Legacy Project, the USGBC-NCR and the Greenbuild Host Committee were thrilled to partner with the Capital Area Food Bank (CAFB), HKS Architects, and Clark Construction to introduce an “Urban Food Studio” to the CAFB Garden located in northeast DC.

Our Greenbuild Greening Subcommittee was also hard at work, engaging with nearly 100 restaurants located near the DC Convention Center. The group provided restaurants with information on sustainable operations and distributed energy efficiency starter kits provided by DC Sustainable Energy Utility (DCSEU). The kits contained a variety of LED bulbs and faucet aerators and the group offered hands-on assistance installing the kits. The Committee also made restaurants aware of the National Restaurant Association’s Conserve Program, which provided resources to restaurants on how to reduce energy and water use and food waste.

We are proud of the hard work and results achieved at Greenbuild 2015 and extend thanks to our event partners who worked hard alongside us to make it all possible.

As we set our sights on Greenbuild 2016 in Los Angeles, we look forward to implementing our comprehensive event sustainability practices with a special emphasis on regional challenges around water scarcity.

We look forward to seeing you there!

Sincerely,

Kate Hurst
Vice President, Community Advancement
Conference & Events
U.S. Green Building Council

Lindsay Roberts
Greenbuild Show Director
Informa Exhibitions
ABOUT GREENBUILD

Greenbuild is the world’s largest conference and expo dedicated to green building. The green building community gathers to share ideas and mutual passion at Greenbuild, sparking a contagious buzz throughout the week.

When industry leaders, experts and frontline professionals dedicated to sustainable building in their everyday work come together, the result is a unique and palpable energy. Participants are invigorated and inspired. They find themselves equipped to return to their jobs with a renewed sense of purpose.

Greenbuild features three groundbreaking days of inspiring speakers, invaluable networking opportunities, industry showcases, workshops and tours of the host city’s green buildings.

TRADE SHOW NEWS NETWORK (TSNN) TOP 250 US SHOWS

Greenbuild once again ranked as one of the top 250 trade shows held last year in the U.S. based on net square footage. Greenbuild also made the top 5 list in the TSNN “Best of Show” category which honors the shows that stand out for their innovation. The Trade Show News Network (TSNN) is the world’s leading news and online resource for the trade show, exhibition and event industry.

2015 DEMOGRAPHICS

WHO ATTENDS

- **23%** Architecture/Engineering & Design Firms
- **13%** Contractors & Builders
- **10%** Government & Utilities
- **5%** Manufacturing
- **12%** Other
- **16%** Professional Services Consulting/Education
- **7%** Real Estate
- **9%** Trade Associations/Non Profits
- **5%** Students

19,058 ATTENDEES

548 EXHIBITORS

77 PRODUCT CATEGORIES

144,300 SQUARE FEET

96 COUNTRIES REPRESENTED
GREENBUILD SUSTAINABILITY PERFORMANCE AT-A-GLANCE

The Greenbuild Team strives to improve sustainable event performance each year through meaningful stakeholder education and collaboration. To understand the impacts of our efforts, our team and our event partners carefully track hundreds of sustainability-related indicators. Greenbuild key performance indicators (KPIs) are presented below to give you a snapshot of our efforts and performance.

<table>
<thead>
<tr>
<th>Greenbuild Key Performance Indicators</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHG Emissions Per Attendee (lb CO2e)</td>
<td>831 lb</td>
</tr>
<tr>
<td>GHG Emissions Offset (%)</td>
<td>100%</td>
</tr>
<tr>
<td>Total Waste Per Participant (lb)</td>
<td>7.49</td>
</tr>
<tr>
<td>Total Waste Diversion (%)</td>
<td>71%</td>
</tr>
<tr>
<td>Sustainable Signage Sourced (%)</td>
<td>91%</td>
</tr>
<tr>
<td>Materials Donated to Local Organizations (lb)</td>
<td>7,330 lb</td>
</tr>
<tr>
<td>Food Donated (lb)</td>
<td>0 lb 1</td>
</tr>
<tr>
<td>Hotels - Walking Distance (1 mi) (%)</td>
<td>96%</td>
</tr>
<tr>
<td>LEED Certified Venue Partners (#)</td>
<td>1</td>
</tr>
</tbody>
</table>

**CENTER**

| Waste Diversion at Convention Center (%) | 84% |
| Waste Diversion Over Convention Center Baseline (%) | 52% |
| Local Food Sourced at Center (<100 miles, % by weight) | 33% |
| Regional Food Sourced at Center (<500 miles, % by weight) | 70% |
| USDA Organic Food Sourced at Center (% by weight) | 0%  |
| Exhibitor GMEGG Participation (%) | 79%  |
| Green Exhibitor Award Participants (#) | 17 (3%) |

**CELEBRATION EVENT**

| Waste Diversion at Celebration Venue (%) | 17% 2 |
| Local Food Sourced at Celebration Venue (<100 miles, % by weight) | 50%  |
| Regional Food Sourced at Celebration Venue (<500 miles, % by weight) | 100% |
| USDA Organic Food Sourced at Celebration Venue (% by weight) | 0%   |

1 Food ordered very conservatively, resulting in no overages.
2 Landfill data for the Newseum included waste from museum operations, and attached restaurant and residences.

Greenbuild’s carbon footprint in 2015 was 7,184 MTCO2e, equivalent to the annual electricity use of 665 homes. 3

3 EPA Greenhouse Gas Equivalencies Calculator
## OBJECTIVES & GOALS

The USGBC has established seven long-term objectives for improving the sustainability performance of Greenbuild. We believe these objectives address the most relevant event impacts of both Greenbuild and the meetings and events industry.

1. **Move Toward a Zero Waste Event**

2. **Increase Stakeholder Education and Engagement**

3. **Improve Sustainable Sourcing**

4. **Improve Performance Tracking**

5. **Reduce Greenhouse Gas Emissions**

6. **Positively Impact Communities**

7. **Catalyze the Advancement of Green Building Initiatives and Sustainable Operations within the Hospitality Industry**
2015 GOAL HIGHLIGHTS

To ensure continuous improvement and focus, every year we set specific goals and targets related to our key objectives. Goals connected to venue or vendor performance (e.g., waste diversion, local food sourcing) remain relatively constant, as Greenbuild tackles new, regional challenges with new partners each year. Goals connected to the Greenbuild Team’s performance (e.g., procuring sustainable merchandise and conference materials) are more likely to evolve over time, as these goals are less dependent on location and more reliant on ongoing collaboration with our vendor partners. Reference Appendix D to learn more about Greenbuild best practices and 2015 goals.

<table>
<thead>
<tr>
<th>GOAL</th>
<th>2015 Results</th>
<th>Primary Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>80% waste diversion at Walter E. Washington Convention Center</td>
<td>84%</td>
<td>Zero Waste</td>
</tr>
<tr>
<td>95% Greenbuild Mandatory Exhibitor Green Guidelines (GMEGG) participation</td>
<td>79%</td>
<td>Stakeholder Engagement</td>
</tr>
<tr>
<td>25% attendee opt-out from conference registration materials</td>
<td>11%</td>
<td>Stakeholder Engagement</td>
</tr>
<tr>
<td>50% local food and beverage items served at convention center</td>
<td>33%</td>
<td>Sustainable Sourcing</td>
</tr>
<tr>
<td>80% local food sourced for Celebration</td>
<td>50%</td>
<td>Sustainable Sourcing</td>
</tr>
<tr>
<td>Replace laptops with USBs (as source data for LCD screens) by 2018</td>
<td></td>
<td>Sustainable Sourcing</td>
</tr>
<tr>
<td>Find an alternative for vinyl tabletops by 2017.</td>
<td>✔</td>
<td>Sustainable Sourcing</td>
</tr>
<tr>
<td>Sponsor one or more legacy projects to leave a social and environmental impact in the local community.</td>
<td>✔</td>
<td>Impacting Communities</td>
</tr>
<tr>
<td>Ensure reusable expo materials exhibitors choose not to ship back are donated to local charity groups.</td>
<td>✔</td>
<td>Impacting Communities</td>
</tr>
<tr>
<td>Encourage vendor partners to develop solutions for Greenbuild that can also be used for other clients.</td>
<td>✔</td>
<td>Catalyzing Industry Advancement</td>
</tr>
<tr>
<td>Increase Attendee communication on hotel greening through TripAdvisor ratings and feedback mechanisms, social media, e-blasts and articles.</td>
<td>✔</td>
<td>Stakeholder Engagement</td>
</tr>
<tr>
<td>Increase hotel partner participation in TripAdvisor GreenLeaders program.</td>
<td>✔</td>
<td>Catalyzing Industry Advancement</td>
</tr>
<tr>
<td>Host a “behind the scenes” Greenbuild sustainable event tour.</td>
<td>✔</td>
<td>Catalyzing Industry Advancement</td>
</tr>
</tbody>
</table>

Legend: ✔ Achieved   ![Progress]  ![Improvement Needed]
MONUMENTAL GREEN

The following sections of this report bring each Greenbuild sustainability objective to life through a summary of 2015 challenges and opportunities and case study examples.

MOVE TOWARD A ZERO WASTE EVENT

Waste from large events is generated in high volumes and is often highly visible to attendees and exhibitors. Each year, the Greenbuild Team collaborates with key event partners to reduce the amount of materials used, reuse materials wherever possible and develop a waste management plan to maximize waste diversion from landfill. Throughout this process, we look to engage and educate Greenbuild partners and participants to promote more responsible waste management.

CHALLENGES & OPPORTUNITIES

CHALLENGE: The public/attendees are not aware of the differences between compostable materials (e.g., PLA, polylactic acid) and traditional plastics (e.g., PET, used to make most plastic bottles). The materials look and feel almost exactly alike, but are contaminants when disposed of improperly. This makes it very difficult to maintain a clean composting/organics waste stream.

OPPORTUNITY: Work to increase general awareness and education and identify compostable materials with green stripes or labeling.

CHALLENGE: Finding specialty recyclers for materials like compost, carpet, plastic films and construction/large debris waste can be difficult. Partnering up for only one event doesn’t allow time to create a smooth, efficient process with consistent results.

OPPORTUNITY: Review current waste streams during early/initial venue site visits and encourage facility to establish relationships with material recipients and put collection and sorting processes in place well in advance of the event.

Market fluctuations can make it difficult to recycle certain types of waste.

During Greenbuild 2015, the low price of oil made recycled carpet fibers unattractive because manufacturers can produce carpet from virgin fibers cheaper than they can from recycled fibers.
Greenbuild 2015 Waste Bin Makeover
*Move Toward a Zero Waste Event*

When it comes to waste management, the Walter E. Washington Convention Center has a strong foundation of best practices. For years, the center has been operating its “Know the Code” waste program and more recently introduced front-of-house composting. However, like many centers, waste bin streams, bin types and signage at the venue were not completely consistent, causing confusion for attendees and staff.

The Greenbuild Team collaborated closely with the center’s Operations Team, housekeeping contractor, Aramark, and catering partner, Centerplate, to ensure all areas of the center provided ample waste bins and clear signage for event participants.

Here’s a look at the center’s bins before:

Here’s a look at how they turned out:

**PUBLIC SPACES**
Preparation for Greenbuild helped expedite the replacement of older waste bins at the center with new, cherry wood, 4-stream recycling stations. All bins, old and new, were set up to offer consistent waste streams and clear, instructional signage.

**EXPO HALL**
For efficiency, the center’s existing color-coded “cardboard (bin) surrounds” were used in the expo hall. New signage containing images was added to each bin to supplement the existing text.
Greenbuild 2015 Waste Bin Makeover

Move Toward a Zero Waste Event

RESTROOMS
All paper towels collected in restrooms were separated for composting. Signage was placed to distinguish bins for “paper towels only” and “landfill bins.”

KITCHEN
Centerplate expanded and improved its waste management process for Greenbuild by purchasing new composting and recycling bins for the kitchen and providing staff training on all 4 kitchen waste streams—recyclables, compost, cardboard and landfill.

MEETING ROOMS
All bins were removed from meeting rooms because the sets did not include a composting option and were inconsistent with public space bins. This encouraged attendees to use the complete 4-stream recycling stations in public spaces, diverting a lot of compostable coffee cups from landfill! The majority of these public space bins were staffed by volunteers who assisted attendees in selecting the correct streams for their waste.
**ABOVE AND BEYOND**

The Walter E. Washington Convention Center staff along with partners Aramark and Centerplate went above and beyond to create a solid waste management plan and execute it with the utmost attention to detail on-site at Greenbuild. Many people invested in the success of the 2015 Greenbuild waste program, but these individuals were all-stars in “walking the walk” and ensuring the plan was ultimately put into action!

**Peter Shogren**, Director Facility Operations, Walter E. Washington Convention Center  
**Asim Thomas**, General Manager Facilities, Aramark  
**Tony Thompson**, Senior Operations Manager, Aramark  
**Matt Barr**, Associate Operations Manager, Aramark  
**Jon Dornbusch**, Executive Chef, Centerplate

Aramark managed a team of 15 hand sorters for 8 days during Greenbuild. This team worked long mornings and nights to manage the large volumes of waste produced during move in and move out, and navigated the complexities around what materials are compostable, recyclable or neither. The work of these sorters was critical in achieving the center’s 84% waste diversion rate for Greenbuild 2015.
To Compost or Recycle? That is the Question.

Move Toward a Zero Waste Event

In the last decade, the market has exploded with compostable food and beverage service ware options that can be used as alternatives to plastic products derived from petroleum. Cups, plates, bowls and utensils can now be made from materials like starch (e.g. corn, potato, tapioca), cellulose, soy protein and lactic acid. These products are attractive to environmentally conscious businesses and individuals because they are produced using renewable raw materials and decompose back into carbon dioxide, water and biomass when composted under specific conditions. Alternatively, traditional plastics are manufactured using petroleum and can be recycled or landfilled.

The good news is that more and more compostable products look, feel and function like plastics. The challenge is that the public can't tell the two materials apart, resulting in a lot of contamination at recycling and composting (organics recycling) facilities.

WHAT TO DO?

1. **Identify the material.** Compostable products are also often marked with a green stripe and the words “compostable.” If markings on the product are not obvious, look at the bottom of the product. If there is a chasing arrows symbol with the number 1-6, this is a plastic material. If the number is 7 and it says “compostable,” it is compostable and likely made of PLA (corn starch), a popular compostable material on the market.

2. **Identify the correct waste bin/waste stream.** The kinds of plastics accepted for recycling will vary among municipalities, but generally all rigid plastics can be placed in the recycling stream, when available. Many municipalities only take plastics #1 and #2, so it is important to check what is accepted locally so that your plastic materials aren't landfilled when they reach the recycling facility. Plastic utensils are almost never able to be recycled. Compostables should be discarded in the composting/organics stream. If no composting stream is available, place compostable products in landfill. It is tempting to want to recycle them (especially since they look the same!), but this only causes confusion and more labor and landfill waste for the recycling facility down the line.

WHY USE COMPOSTABLES IF YOU DON’T HAVE A COMPOSTING BIN/STREAM?

Using compostable food and beverage service ware items means reducing the demand for petroleum-based plastics, which means reducing the demand for oil. Seventeen million gallons of oil are used each year to produce plastic water bottles, for example, or enough to fuel one million American cars for one year. As always, there are two sides to every coin. Demand for compostable products means increased impacts associated with commodity crops which can damage ecosystems.

Transitioning to compostable materials that meet your needs can take time. Starting now means you will be prepared when composting does become available at your venue or in your municipality.

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* It should be noted that some compostable products are actually made from petroleum, but hold that thought before things get too confusing!

* The Pacific Institute: “Because bottled water required approximately 1 million tons of PET in 2006, those bottles required roughly 100 billion MJ of energy. A barrel of oil contains around 6,000 MJ, so producing those bottles required the equivalent of around 17 million barrels of oil, enough energy to fuel one million American cars for one year.” Pacific Institute’s fact sheet on the topic: http://www.pacinst.org/topics/integrity_of_science/case_studies/bottled_water_factsheet.pdf

* Learn more about the impacts of soy farming here: wwf.panda.org
At Greenbuild 2015, The Walter E. Washington convention center achieved an 84% waste diversion rate, an outstanding achievement in and of itself, however even more impressive is that the center improved its average diversion rate by almost 52%. Especially when a center is already starting at a 32% baseline diversion rate, that improvement takes hard work, communication and a lot of collaboration.

Every year USGBC and Informa assemble a waste planning team for Greenbuild comprised of convention center staff, the center’s catering staff, waste haulers and waste processing facilities within the host destination as well as other key event vendors. The team meets bi-monthly to understand the waste process currently in place at the center and identify the challenges and areas of improvement for waste processing. Over a 4-5 month period, the team also creates clear waste signage to effectively manage the different waste streams coming off the show floor, identifies where the most heavily trafficked areas will be and ensures staffing and bin placement are ready to manage the volume of waste. All of these efforts come together in a comprehensive waste plan that is finalized one month before the show and is distributed to all stakeholders.

Over the years, Greenbuild waste teams have extensively tracked waste from the show. This data gives the Greenbuild Team a clear make-up of the type of waste typically produced at the show every year. This information is used to find local waste haulers, processors and organizations that will to take materials for virtually all the waste produced by the show the following year. Understanding the type and volume of waste a hauler can expect is very useful when searching for hauler partners to process less common recyclable items like carpet or construction and waste debris. This also informs a convention center if they will need to bring in a new hauler to recycle materials like visqueen that they may not currently be recycling at their facility.

For Greenbuild 2016 the hard work of Aramark and the staff at the Washington Convention Center made the waste planning process an outstanding success. Not only did the center create images to accompany the signage for their front of house waste bins to make the disposal easier for attendees, they also created a waste sorting station back of house to further sort, process and reduce contamination of waste streams that came off the show floor. Additionally, staff worked tirelessly with haulers and waste processing facilities to gather data and information on offsite waste processing to ensure all waste leaving the facility was accounted for and verified.
INCREASE STAKEHOLDER EDUCATION AND ENGAGEMENT

Each year, tens of thousands of green building professionals from across the globe unite to learn, share and be inspired with the goal of advancing the green building movement. While on-site at Greenbuild, we want attendees to learn and talk about green building concepts, but also to see, experience and actively partake in their application. To create this unique experience, the Greenbuild Team also engages with its staff and event supply chain (the destination, convention center, hotel partners and vendors) to increase awareness and raise the bar.

CHALLENGES & OPPORTUNITIES

**CHALLENGE:** Efforts to simplify and clarify the Greenbuild Mandatory Exhibitor Green Guidelines (GMEGG) process have helped gradually increase program participation, however the number of exhibitors applying for the Green Exhibitor Award decreased significantly in 2015.

**OPPORTUNITY:** The Greenbuild Team continues to work to streamline the GMEGG process. In 2016, the Team will explore a submittal and scoring system that automatically qualifies exhibitors for the award using their GMEGG responses.

**CHALLENGE:** Conference materials opt-out was introduced in 2014. In 2015, the opt-out rate remained steady at 11%. The Greenbuild Team would like to reduce the number of printed programs and encourage more use of the mobile app.

**OPPORTUNITY:** Explore ways to incentivize opting-out of conference materials and make this the default option.

**CHALLENGE:** Collecting multiple iterations of Vendor Sustainability Plans and post-event data from partners is time consuming and sometimes difficult when people have shifted their attention to other events/tasks.

**OPPORTUNITY:** Continuously simplify and improve the Vendor Sustainability Plan documents and process, potentially placing files in an online platform.
**CASE STUDY**

**Sustainability as Part of the Attendee Experience**

*Increasing Stakeholder Education & Engagement*

The Greenbuild Team strives to engage attendees around sustainable practices from the time they register and select a hotel to helping them plan public transportation to the airport for their flight home. In 2015, special attention was also paid to educating and engaging attendees during their time at the convention center.

During the conference, greening messages were played periodically on all digital screens throughout the center. Over 20 messages helped remind attendees of the sustainability practices going on behind the scenes for Greenbuild, including:

**Did you know we introduced a Digital Pub Bin this year?** Attendees were also introduced to an electronic publications screen, allowing them to use their badge number to have industry publications electronically delivered. In this first year, a total of 163 publication requests were placed by 54 attendees.

**Did you know,** a portion of the exhibit hall is powered by on-site, alternative solar energy generated and distributed on-site?

Another new addition in 2015 was an interactive greening wall, which allowed attendees to learn more about specific sustainability initiatives they were interested in. The display was an LCD, ENERGY STAR certified touchscreen located next to a mini green wall.

**Greenbuild Special Set rooms are designed to expose attendees to green building concepts.** This year was no exception with one of the rooms being day-lit and featuring a LiveFence “green wall” by SuitePlants and Fluidstance workstation levels, which were named one of the “7 biggest workplace game-changers” by Inc. Magazine.

Additionally, as part of the Greenbuild experience, attendees had access to the Greenbuild Film Festival featuring 7 specially selected films, including The Wisdom to Survive, Project: ICE and Food Chains. The expo hall showcased the Greenbuild Unity Home, a 1,620 square-foot demonstration home designed to achieve LEED Platinum. The home was WaterSense certified and net zero, and included a full array of Cradle to Cradle-certified products. On the expo floor, attendees could also see the world’s only Net Zero Zone, a 3,200 square foot pavilion powered by alternative power collected on-site at the Washington Convention Center.
Hotel Education & Engagement

Increasing Stakeholder Education & Engagement

The Greenbuild Team works with TripAdvisor to evaluate hotel partners through the use of the industry’s most adopted certification—TripAdvisor GreenLeaders. TripAdvisor GreenLeaders is a free certification, recognizing hotels at four status levels: Bronze, Silver, Gold, and Platinum. The certification covers the areas of energy, water, purchasing, waste, site, innovation and education. The higher the status achieved, the greater the impact of a property’s green practices.

By having hotel properties answer the TripAdvisor GreenLeaders survey questions as part of their contractual agreement as a Greenbuild hotel partner, the properties were encouraged to take this important step of evaluating their practices, and then were made aware how close they were to achieving the certification. Seventeen Greenbuild hotel partners were TripAdvisor GreenLeader program participants, making 68% of the room block GreenLeader certified.

As a result of our hotel engagement efforts, an additional two properties indicated intent to apply for certification.

To assist hotels in improving practices and performance beyond certification, hotels were also engaged and provided resources. A pre-event kick off was held at the USGBC headquarters where hotel partners were introduced to impactful local and national programs including the Smarter DC Challenge and EPA WaterSense Hotel Challenge.

Did you know?

Approximately 15% of the total water use in commercial and institutional facilities in the U.S. takes place in hotels and other lodging businesses. The largest uses of water in hotels are restrooms, laundry operations, landscaping, and kitchens.

GREEN HOTELS

74% of the hotels in the Greenbuild room block donate leftover soaps bottles, and amenities to charitable organizations. The majority of the properties work with international organizations such as Clean the World. Some properties, such as the Marriott Marquis DC and Renaissance Washington, DC work directly with the Mt. Vernon Church (located across the street from the convention center) to provide bottled amenities for their Shower Ministry program, which provides the homeless with a safe place to shower.

IMPROVE SUSTAINABLE SOURCING

From printed materials to carpet, food and beverage to merchandise, each item that makes up Greenbuild is carefully sourced, taking health, the environment and the impact on those who made it, into consideration.

CHALLENGES & OPPORTUNITIES

CHALLENGE: The Greenbuild Team worked to eliminate laptops in favor of USBs to display content on flat screens. They were able to eliminate the usage of laptops at eight monitors this year but many presentations were not compatible with the USB port on the flat screens.

OPPORTUNITY: Work in advance to confirm screen model types and design and convert display content to formats specified by manufacturers.

CHALLENGE: Obtaining Energy Star rated and energy efficient AV equipment is still a challenge in the market. Many of the equipment manufacturers are very good about marketing energy efficiency for consumer products but fall short in their professional product lines.

OPPORTUNITY: Continue to work directly with the manufacturers to identify how products were energy efficient and how we can better identify these moving forward and increase demand for these products.

CHALLENGE: “Local” food procurement (within 100 miles) is a challenge in the northeast during winter months.

OPPORTUNITY: Continue to work closely with caterers to ensure menus reflect the agricultural strengths of the region according to the season.

CELEBRATION EVENT

The Greenbuild Celebration décor featured bars made from recycled aluminum and cork and furniture vignettes made from recycled cardboard with glass tops and reused cotton pillows. Table décor consisted of moss, locally collected leaves, branches, and fall items with pictures of LEED certified buildings in D.C.

50% of the food served at the Celebration was locally sourced (within 100 miles) and 100% of the food was sourced regional (within 500 miles).
Tabling Vinyl at the Greenbuild 2015 Exhibition

Improve Sustainable Sourcing

In 2013, the Greenbuild Team took materials use and planning to the next level. Specifically, we were on a mission to eliminate materials like vinyl and polystyrene from our show design. To accomplish this, we refined our approved materials list, which evaluated materials based on reusability, recyclability, human health and practical end-of-life disposal options. Vinyl was not included on our acceptable materials list, which was a big challenge to navigate given the prevalence of vinyl use in the events industry.

With the exception of our Education Labs and show office, which require the use of a reusable, clear acrylic material since 2013 no new vinyl has been created for build outs, signage or banners. That is, with the exception of one material – white, vinyl exhibit table top material.

In 2013, we set a goal to find a functional alternative to the vinyl table top covers and phase them out of the Greenbuild show in 3 years. Freeman tested over 5 different options, but each was flawed in either appearance, durability or cost effectiveness. In 2015, year 3, Freeman found TableFlex, a non-vinyl, recyclable material, and used it for all tables at the Greenbuild show.

The change to the TableFlex material was undetectable and the use at Greenbuild proved it could be used for other Freeman shows and across the industry. Like our early adoption of Freeman’s cardboard signage substrate, “honeycomb,” that is now being used as Freeman’s default signage material, we hope our push for this non-vinyl table top cover can grow to become an industry standard.
Event WELLness

Improve Sustainable Sourcing

The WELL Building Standard™ (WELL) marries best practices in design and construction with evidence-based health and wellness interventions. It is a standard that focuses on the people in the building and harnesses the built environment as a vehicle to support human health, well-being and comfort. WELL is third-party certified through the Green Business Certification Inc. (GBCI) and designed to work harmoniously with the LEED rating systems.

Launched in 2014, WELL sets performance requirements in seven categories, or Concepts, relevant to occupant health and well-being in the built environment: air, water, nourishment, light, fitness, comfort and mind. WELL is composed of over 100 Features that are applied to each building project. Each WELL Feature is designed to address issues that impact the health, comfort or knowledge of occupants through design, operations and behavior.

Each feature of the WELL Building Standard is ascribed to the human body systems that are intended to benefit from its implementation (e.g., cardiovascular, digestive, endocrine, immune, integumentary, muscular, nervous, reproductive, respiratory, skeletal, urinary).

Using the seven WELL Building Standard Concepts as the basis, the following are examples of Features within each of the WELL Concepts that Greenbuild sought to integrate as part of its healthy event design.

AIR

Feature 9: Cleaning Protocol: Regular cleaning is an important practice as it helps to remove potentially harmful debris and maintain a healthy indoor environment. However, numerous chemicals and improper cleaning techniques can undermine indoor air quality. Harmful ingredients in cleaning products can lead to eye, nose, throat and skin irritation, and emit VOCs into the indoor environment, which may lead to other health effects including sick building syndrome (SBS). An adequate cleaning regimen using nontoxic, hypoallergenic cleaners helps to reduce bioloads, pests, environmental allergens and unpleasant odors without introducing chemicals that might adversely impact indoor air quality.

Greenbuild Application: Aramark maximizes the use of OrbioTM for cleaning throughout the convention center. Orbio Split Stream technology uses tap water, a small amount of salt and electricity to create an effective multi-purpose cleaning solution, matching or exceeding the performance of most conventional cleaners without potentially harmful chemicals.

WATER

Feature 37: Drinking Water Promotion: Access to clear, good-tasting water helps to promote proper hydration throughout the day. Many otherwise healthy people unknowingly suffer from mild dehydration, a condition where there is less water and fluids in the body than there should be, which results in avoidable symptoms such as muscle cramps, dry skin and headaches. Drinking plenty of water, especially when exercising and at higher temperatures is essential to ensure good hydration. Improving the taste and appearance of tap water encourages increased water consumption and reduces reliance on bottled water. This feature sets limits for dissolved minerals that can compromise the taste and appearance of water, and requires that drinking water is easily accessible throughout the building.

Greenbuild Application: Water fountains and supplemental water bubblers are located throughout the convention center to help keep attendees healthy and hydrated. Water was provided in bulk with compostable cups and attendees were encouraged to bring their own water bottle.

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1 The WELL Building Standard v1 is optimized for commercial and institutional office projects, as well as retail, multifamily residential, education, restaurant and commercial kitchen projects through the pilot program. Currently WELL is not directly applicable to large-scale events.
EVENT WELLNESS

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NOURISHMENT

Feature 48: Special Diets: Individuals with food allergies or dietary restrictions often encounter difficulty in finding suitable meal options. Clear labeling can prevent unintended exposure to allergens or food items that require some degree of restriction, but if a sufficient variety of alternatives is unavailable, these individuals may be at risk for consuming potentially harmful foods. This feature requires establishments that provide or sell food to include a variety of meal options available to those with common food allergies or dietary restrictions.

Greenbuild Application: At the convention center, Centerplate labels all food items to aid safe consumption by individuals with food allergies. This same practice was done at the Celebration venue catered by Wolfgang Puck Catering. Greenbuild strives to provide attendees with local food options and vegetarian and vegan options at each concession or buffet.

LIGHT

Feature 61: Right To Light: Exposure to adequate levels of sunlight is critical for health and wellbeing, for effects ranging from visual comfort to potential psychological and neurological gains: there are measurable physiological benefits to receiving the quality of light provided by the sun, as well as positive subjective reports from occupants able to enjoy access to sunlight. Proximity to windows, outdoor views and daylight in indoor spaces are some of the most sought-after elements of design. As such, buildings should utilize daylight as a primary source of lighting to the greatest extent possible. To ensure that daylight is maximized within buildings, this feature sets minimum distances from windows to regularly occupied spaces.

Greenbuild Application: In 2015, a Special Set Room was specifically designed to be a day-lit room, allowing attendees to experience this important building design concept at Greenbuild. Unfortunately, day-lit rooms in convention centers are generally quite limited.

FITNESS

Feature 69: Active Transportation Support: Active transportation is a cost-effective way to integrate physical activity into daily routines while reducing carbon footprint. Biking or walking to work has been associated with lower rates of diabetes, hypertension, overweight and obesity. Showers and changing rooms at work are preferred by the majority of employees as a support strategy for more physical activity. Therefore, providing amenities and facilities on-site can support the ability of occupants to engage in active commuting. This feature requires that showers and bicycle storage be provided on-site or near the building entrance.

Greenbuild Application: Attendees were highly encouraged to walk to and from their hotels, of which 96% were within walking distance (1 mile from the convention center). Before the event, attendees were sent emails with information about public transportation and detailed walking instructions on how to get to the center from their hotel. To further support walking, Greenbuild offers attendees a “shoe check.”
Event WELLness

Improve Sustainable Sourcing

COMFORT

Feature 76: Thermal Comfort: Thermal comfort in the body is provided through homeothermy, the balancing of heat gains and losses to maintain the body’s core temperature within its narrow range, 36-38 °C [97-100 °F], and regulated by the hypothalamus. Thermal comfort can affect mood, performance and productivity. However, temperature preferences are highly personal and differ from one individual to another. Balancing the energy requirements of large buildings with the varied occupant preferences can thus be challenging. This feature uses best practices to ensure a sufficient level of comfort for the majority of occupants.

Greenbuild Application: The Facilities Team at the Walter E. Washington Convention Center actively monitored the temperatures of all spaces in the convention center to maximize energy efficiency and attendee comfort.

MIND

Feature 88: BIOPHILIA 1 - QUALITATIVE: Until relatively recently in human history, people had constant interaction with living things and their natural surroundings. Biophilia, or the idea that humans have an affinity towards the natural world, is an emerging field that aims to address our psychological need to be around life and life-like processes. Exposure to views and images of nature can help to speed up healing and recovery time, boost positive feelings and reduce negative ones. Interior environments that are cold, sterile and devoid of life, on the other hand, can diminish our experience, mood and happiness. This feature recognizes the importance of creating an interior environment that nurtures the innate human-nature connection. Modeled after the Living Building Challenge, the biophilia requirements involve conducting historical, cultural, ecological and climatic studies to inform biophilic elements and creating a biophilic framework that tracks biophilia at each design phase of the project.

Greenbuild Application: Biophilia is utilized at Greenbuild through the addition of plants. This year, we were able to feature green walls in one of the Special Set rooms and near the interactive greening wall display in the lobby.

To download the WELL Building Standard and review all Features, visit www.wellcertified.com.

EATING & DRINKING LOCAL

Both Centerplate and Wolfgang Puck catering sought to source as much local food (within 100 miles) as possible, achieving 33% and 50%, respectively. Some local food highlights enjoyed by attendees at Greenbuild include:

Centerplate (Walter E. Washington Convention Center)
- Grayson Natural Farms (Grayson County, Virginia): 100% grass fed cattle, no artificial ingredients, no preservatives, raised without the use of implants, added growth hormones or steroids. Dry-aged for tenderness and processed and packaged at a USDA and Animal Welfare approved and inspected facility.
- Route 11 Chips (Mount Jackson, VA): Non-GMO, gluten-free, peanut-free, no trans fats, all natural, and produced in an almost waste-free facility.
- Uptown Bakers (Hyattsville, MD): Under the direction of Master Baker and VP of Operations Didier Rosada, Uptown Bakers produces over 40 different varieties of dough every day. All products are 100% Trans Fat Free and baked fresh daily.

Wolfgang Puck (Newseum)
All food and beverage served at the Celebration was from within 500 miles of Washington, DC, with an average of 98 miles per pound of food served.
- Produce and daily items were sourced from: Crown Orchards (Batesville, VA), Shlagel Farms (Waldorf, MD), N. Ellis Produce (Faison, NC), Lakeville Specialty (Washingtonville, PA), Mountainview Farm (Fairfield, VA), Cherry Glen Farm (Boystown, MD), Firefly Farms (Accident, MD).
- Seafood purchased through ProFish, providing Maryland crab that is “True Blue” certified and sourced from the Maryland Chesapeake Bay.
- Wine and beer were sourced from less than 135 miles from the venue, including: White Hall Vineyards (Crozet, VA), Barboursville Vineyards (Barboursville, VA), and Flying Dog Brewery (Frederick, MD).
The Greenbuild team values the adage “you can’t manage what you don’t measure.” To ensure we are effectively managing our event impacts and improving performance over time, we track hundreds of sustainability indicators around waste, energy, emissions, and sourcing. Greenbuild sustainability KPIs are highlighted on page <TBD> and a summary of historical performance can be found in Appendix A. Each year, we carefully evaluate our tracking efforts to ensure we are monitoring the most meaningful indicators and that our measurements are as complete and accurate as possible. Details around our measurement boundaries and quantification methods can be found in Appendix C.

**CHALLENGES & OPPORTUNITIES**

**CHALLENGE:** Collecting event impact data (energy, water and waste) from the celebration event venue for Greenbuild is an annual challenge. Particularly, it is difficult to collect accurate waste data because often the event is one day and therefore shares a compactor with daily activities or events held before and after.

**OPPORTUNITY:** Explore including impact data tracking requirements into celebration venue contract language, and/or incorporating the celebration venue into the waste management plan created in collaboration with the convention center. There may be opportunities for the operations teams in both venues to learn from one another.

**CHALLENGE:** Each year, there is a challenge around collecting complete and timely information from venues and vendors.

**OPPORTUNITY:** Explore “incentives” that could be tied to supplying information on time—additional recognition in report or other post-event communications (emails, press releases, webinars).

**ISO 20121:2012 Certification**

In 2014, the sustainable event management system of the Greenbuild Conference & Events Department achieved ISO 20121:2012 certification. A significant part of having a successful sustainable event management system is ensuring quality engagement with key stakeholders and continuously evaluating and refining your management system. When it comes to tracking performance, we work to continuously simplify our metrics and our collection and reporting processes, while simultaneously looking to be as accurate and transparent as possible.

**GMEGG: Comparison, Competition, Progress**

The Greenbuild Team is excitedly working on improvements to the Greenbuild Mandatory Exhibitor Green Guidelines (GMEGG), adding a scoring component which will allow exhibitors to compare themselves to their peers, and incentivize them to improve their practices for additional recognition at Greenbuild 2016. Stay tuned!
Case Study

How to Calculate Waste Diversion

Improve Performance Tracking

Waste is a hot topic for events because they produce so much of it. Think expo hall set up and breakdown, activity on the show floor and thousands of attendees eating on the go. But how do you measure how well your event is performing when it comes to waste management and waste diversion?

First, it is important to remember the order of the fundamental mantra “reduce, reuse, recycle,” which reminds us that the amount of waste generated is always more important to monitor and control than the amount recycled or composted. We certainly want to maximize the diversion of generated waste, but we never want to celebrate behaviors that drive it in the first place—serving beverage in heavy glass containers (instead of in bulk), overprinting conference materials or composting tons of uneaten food from buffets, for example.

Second, we must define “waste diversion rate.” The Greenbuild Team defines this as “the percentage of total waste generated that is collected and processed by means other than landfill disposal or incineration (e.g., recycling, composting, donation, etc.),” a definition that is supported by the Zero Waste International Alliance and the White House.

Below we have broken down the steps to measuring and calculating common event waste metrics. We acknowledge that these calculations can get very complex, but we’ve set out the basics here to get you on your way to understanding your baseline and tracking your progress.

1. DEFINE YOUR WASTE STREAMS: The simplest way to understand how you will measure your event waste and how it will be processed is to identify what waste containers the venue has on its docks and what special collections it may arrange outside of traditional open top containers and compactors. The following are commonly generated and collected materials at convention centers.

   The Basics
   • Cardboard
   • Mixed Recycling
   • Landfill

   Well Rounded Programs
   • E-Waste Program (bulbs, batteries, computers, ink cartridges)
   • Food Donation
   • Large Debris
   • Organics (for composting, animal feed, anaerobic digestion)
   • Wood Pallets
   • Kitchen Oil/Grease
   • Specialty Event Waste (furniture, linens, etc.)

   Leading Programs
   • Conference Materials & Exhibitor Items (bags, signage, exhibitor products & giveaways)
   • Carpet
   • Visqueen Plastic and Films
   • Construction & Debris (booth structures, flooring)

How to Calculate Waste Diversion

**Improve Performance Tracking**

2. **DEFINE THE MEASUREMENT BOUNDARY:** This is often defined as waste generation that occurs from the time of move-in through move-out. Depending on the size of your event, and number of simultaneous events occurring in the space, you may have to ask the venue to collect your waste separately or develop a way to attribute the correct percentage of waste to your specific event. This can get complicated fast and unfortunately reduces the accuracy of your waste data.

3. **COLLECT DATA:** Working with your venue partner (and their waste haulers or other third-party collectors, such as non-profit donation recipients), collect waste weight data related to the waste streams identified in Step 1. Convert all waste data to a single metric (likely pounds). Remember 1 US short ton = 2,000 pounds.

4. **VERIFY PROCESSING METHOD AND RECOVERY RATES:** Unfortunately, one cannot assume organics put in a compactor intended for composting have been composted. Your venue partner (and maybe you) will need to verify where materials are sent for processing, if the loads were accepted or rejected, and what percentage of the material sent was actually recovered. For example, if 3,000 lb of recycling was hauled away from your event and taken to a facility that recovers approximately 80% of the material they receive, you would allocate 2,400 lb to recycling and 600 lb to landfill. If your waste was hand sorted on-site, then it would be appropriate to allocate the entire 3,000 lb to recycling.

5. **CALCULATE YOUR WASTE METRICS:** The following metrics will allow you to track your waste management and diversion performance, allowing you to compare show-to-show figures, even as your event grows.

   - Waste Diversion Rate: To arrive at this figure, total the weight of waste materials that are collected and diverted from landfill or incineration and divide that figure by the total weight of waste generated for your event.
   - Waste Per Participant (lb): Divide total weight of waste generated by the total number of event participants (attendees, exhibitors, vendors, staff)
   - Waste Per Sqft Expo Space (lb): Divide total weight of waste generated by the square footage of expo space

6. **ANALYZE YOUR DATA AND IDENTIFY AREAS FOR IMPROVEMENT:** Is the waste for your event much higher than the amount the venue is used to seeing? Is one of the waste categories much larger than the others? Are you composting and donating a lot of food, indicating over-ordering? Is your show growing in size, but waste per participant expo square footage is reducing, indicating improved performance? Recognizing the drivers of your waste can help you become more efficient and reduce costs.

For Greenbuild 2015, the Walter E. Washington Center achieved an **84% waste diversion rate**—a true accomplishment for such a large conference and expo!
REDUCE GREENHOUSE GAS EMISSIONS

City-wide conferences and exhibitions produce significant greenhouse gas emissions from carbon-intensive participant air travel, energy use at venues and hotels, and fuel use associated with freight and ground transportation. The Greenbuild Team collaborates with event partners to reduce on-site energy use, maximize the use of renewable energy and offset 100% of Greenbuild-related emissions.

CHALLENGES & OPPORTUNITIES

CHALLENGE: The Greenbuild Team heavily encourages walking and the use of public transportation, but it is difficult to understand how much attendees are following these best practices versus relying on taxis to get around the city.

OPPORTUNITY: Add questions to attendee post-event surveying to better understand primary mode of transportation used during event.

CHALLENGE: Difficult to capture data around exhibitor-shipped freight—a potentially significant component of exposition carbon footprints

OPPORTUNITY: Work with Freeman and exhibitors to find a viable measurement solution for this under-explored area of event greenhouse gas emissions

NET ZERO ZONE

For the second year, Greenbuild showcased the world’s first “Net Zero Zone”— a 3,200 square foot pavilion powered by solar panels, installed on-site at the Washington Convention Center.

AV INNOVATION—IT’S IN THE DETAILS!

PRG was able to convert the stage wash lighting in Greenbuild’s four special set rooms to LED utilizing their ReNEW fixture. The fixture was designed and manufactured by PRG to reduce overall energy usage while also reusing components from their existing inventory. The overall energy savings for this change for Greenbuild 2015 amounted to a reduction of around 675 kWh. Additionally, the fixtures produce significantly less heat, helping to reduce the amount of HVAC required to keep rooms cool.

Internet provider, SmartCity, felt the green building spirit and, for the first time, used 100,000 ft of refurbished/reused cable to keep Greenbuild attendees online and connected!
A Green-e Certified Carbon Free Greenbuild

Reducing Greenhouse Gas Emissions

In 2014, Greenbuild became the largest US conference ever to become 100% carbon-neutral and Green-e certified. In 2015, the Greenbuild Team remains committed to this standard. In partnership with Terrapass, Greenbuild has purchased the following Green-e certified carbon offsets:

New Beulah Landfill (Dorchester County, MD)
New Beulah Landfill is an active municipal landfill located on Maryland's Eastern Shore, near the Chesapeake Bay. The gas collection system is designed to grow with the landfill in anticipation of generating enough gas to someday install a generator to create renewable power. In the meantime, the project destroys methane in an enclosed flare, and carbon offsets are the project’s only source of revenue. Additionally, this project creates revenue and employment in a rural municipality and reduces odor in the surrounding area.

The Big Smile Wind Farm at Dempsey Ridge (Roger Mills and Beckham Counties, OK)
The Big Smile Wind Farm at Dempsey Ridge has a capacity of 132 MW and will deliver enough clean energy to power more than 46,000 U.S. homes. The project will create 13 new full-time local jobs and more than 130 people were employed during the construction phase. During the project development phase, ACCIONA participated in an extensive county permitting and review process and conducted biological assessments, bird and bat impact studies, and wetland delineation to address wildlife concerns.

SINCE 2002, GREENBUILD HAS OFFSET 103,731 MTCO2e to make the event carbon-neutral. This is equivalent to the carbon sequestration of 85,025 acres of US forest in one year.9

9 EPA Greenhouse Gas Equivalencies Calculator
Each year the Greenbuild Team partners with Freeman and the convention center to implement an Exhibitor Donation Program. In 2015, 7,330 lb of carpet, tile, cleaning supplies, insulation, batteries and more were donated to support the following non-profit organizations:

**Habitat for Humanity of Metropolitan Maryland - RESTORE**  
Heather Bouley, ReStore Manager  
Habitat for Humanity ReStore® is a nonprofit retail outlet specializing in the resale of quality new and gently used furniture, antiques, appliances and building supplies. ReStore diverts tons of reusable materials from our local landfills. Household goods are sold to the public at deep discounts and all proceeds are used to help create decent and affordable homeownership opportunities in Montgomery and Prince George’s Counties, MD.

**The Community Partnership for the Prevention of Homelessness**  
Michael Berry, Operations Manager  
The Community Partnership is an independent non-profit corporation that coordinates the District of Columbia's Continuum of Care on behalf of the city. The D.C. Continuum of Care includes prevention services, street outreach efforts, emergency shelter, transitional housing, and permanent supportive housing for individuals and families.

**Safeway Feast of Sharing**  
Theresas DuBois, Events DC External Affairs Manager  
The Safeway Feast of Sharing is designed to celebrate the spirit of the holiday by providing a festive meal on the day before Thanksgiving to underprivileged District of Columbia residents and senior citizens. Co-sponsored by Events DC and our caterer Centerplate/NBSE along with a number of other local organizations, Feast of Sharing includes an employment/community services expo, health screenings, financial and career seminars, free fresh produce, and the distribution of new/gently-used clothing.

**Mayor’s Office on Returning Citizen Affairs (MOCRA)**  
Theresas DuBois, Events DC External Affairs Manager  
As part of an inaugural partnership with the Mayor’s Office on Returning Citizen Affairs (MORCA), Events DC is proud to host nine female returning citizens during an eight-week internship and mentoring program that began September 28, 2015. Greenbuild encouraged Women in Green Power Breakfast attendees to bring professional clothing that could support these returning citizens and the Safeway Feast of Sharing event.
**POSITIVELY IMPACTING COMMUNITIES**

Greenbuild is carefully planned and designed each year to provide attendees with an educational and inspiring on-site experience. The event may only last days, but attendees continue to benefit from the connections and ideas generated at Greenbuild long after they’ve returned home. Likewise, we strive to create a lasting impression on our Greenbuild partners, including volunteers, exhibitors, vendors, venues, hotels and the host city.

Our goal to positively impact communities is three-fold. First, through careful supply chain management, we support businesses and communities that help make Greenbuild possible (e.g., the people who manufacture our conference bags). Second, we strive to leave a living legacy in the local host community that will positively impact residents for years to come (e.g., our annual Greenbuild Legacy Project). Finally, we look to leave the local hospitality community as a stronger, more sustainable event destination (e.g., improved waste practices, newly established relationships within community).

**CHALLENGES & OPPORTUNITIES**

**CHALLENGE:** Exhibitor donations are decreasing

**OPPORTUNITY:** After further analysis we believe less materials are being donated because exhibitors are becoming savvier about designing their booths. We will continue to encourage waste reduction as well as maximizing the donation of any materials that are reusable and left behind.

**CHALLENGE:** The Legacy Project has a low on-site presence at Greenbuild; attendee awareness of the project may be low

**OPPORTUNITY:** Work in 2016 to check in on the progress of past legacy projects and share this story with attendees on-site and through other communications—further supporting the sentiment that Greenbuild leaves a lasting impression on each city and community.
The realities of hunger are crippling – 700,000 of the 5.8 million people living in and around the District of Columbia are lacking food security – an 11% increase since 2010. The Capital Area Food Bank (CAFB) provides food assistance to one out of every twelve individuals living in Virginia, Maryland and D.C, distributing 42 million pounds of food a year. The CAFB answers the problem of hunger and diet-related illness by providing leadership, education, training and food to 500 partner agencies including churches, synagogues, senior centers and community groups. The CAFB believes that wellness through nutrition is key to establishing food security.

For this reason, the Urban Demonstration Garden was created at the CAFB headquarters in Northeast D.C. in 2012 to provide hands on food growing experience to members of the community. The CAFB uses the Garden for food growing demonstrations, nutrition education and gardening basics, expanding the capacity of the CAFB’s partner agencies to teach local communities about healthy foods.

For the Greenbuild 2015 community legacy project, the USGBC-NCR and the Greenbuild Host Committee are thrilled to partner with the Capital Area Food Bank, HKS Architects, and Clark Construction as partners to introduce a “Urban Food Studio” to the Garden. The studio will act as an all-season space for gardening, cooking education classes, volunteer respite, workshops and other events. Reflecting the mission and vision of the CAFB through the use of reused and recycled materials, the structure will demonstrate sustainable ecosystems including water collection and solar harvesting. This Legacy Project will catalyze the long-term vision of the Urban Food Garden and the CAFB’s capacity to impact the future of food security through healthy food growing education. More information on the Legacy Project, including sponsorship and volunteer opportunities, can be found at usgbcncr.org/greenbuild.
Women In Green Power Breakfast

*Positively Impacting Communities*

Seven o’clock in the morning never felt (or looked) so good! The Fourth Annual Women in Green Power Breakfast was a continued success, saluting the women in our industry who have emerged as great sustainability leaders and their legacy in shaping the green economy. The breakfast provides the opportunity for women in the green building industry to connect with new leaders in the movement and create relationships that encourage, inspire, mentor and motivate. To ensure women from across the industry have access to these critical conversations, over 100 free passes were provided to emerging community members.

This year the group examined the impact gender has on mentorship. Stripping away convention, the group took an honest look at the attitudes and insecurities of women and men within the work place and explored current barriers and challenges standing in the way of meaningful mentorships. The group of over 500 women heard from five generations of trailblazers who are leading the industry towards a truly equitable workplace, including: Barbara Worth, Director of Strategic & Private Development, Association for Learning Environments; Janine Benyus, Co-Founder & President, Biomimicry Institute; Sara Teaster, Sustainability Manager, VMDO Architects; Erika Eitland, PhD Candidate, Harvard School of Public Health; Sydney Machion, Girl Scout Council of the Nation’s Capital (GSCNC)

During the event, participants had the opportunity to make a pledge to support younger women in the workplace through meaningful mentorship. Following the breakfast, participants were able to participate in Learning Lab Live, a new service that helps students get exposure to green career pathways and assists teachers in adding real-world application to classroom curriculum.
CATALYZE THE ADVANCEMENT OF GREEN BUILDING INITIATIVES & SUSTAINABLE OPERATIONS WITHIN THE HOSPITALITY INDUSTRY

Greenbuild provides a unique opportunity for our events team to combine two passions—green building and “green meetings.” Ensuring that Greenbuild is a sustainable event is part of USGBC’s organization mission, but as event organizers, we don’t want our work to stop there. Instead, our goal is to promote positive change throughout the hospitality industry by catalyzing the adoption and advancement of green building practices.

While hosting Greenbuild in a new destination each year requires significant work around implementing sustainable practices, the benefit is that Greenbuild touches and affects a new destination and hospitality community every year.

CHALLENGES & OPPORTUNITIES

**CHALLENGE:** The Greenbuild Behind the Scenes Tour was a great success, but it was difficult to schedule a time that allowed participants to see the expo floor live. The action of the conference also made it difficult to hear speakers in public spaces.

**OPPORTUNITY:** A walking route for the tour will be devised that ensures there is quiet and sufficient space for the group along the way. Multiple, smaller groups can be formed to make sure participants can hear and ask questions.

**CHALLENGE:** The Greenbuild sustainability story can be overwhelming to many planners exploring “greening”

**OPPORTUNITY:** Creating a standalone best practices document and posting it to the Greenbuild sustainability page, as an approachable alternative to the report

**CHALLENGE:** Greenbuild has little influence on whether vendors or venues will continue to offer sustainable solutions and services to other event organizer clients

**OPPORTUNITY:** Continue to make the “green meeting” community aware of these solutions to create critical mass and demand for responsible, default practices within our industry (sharing report on GMIC website, speaking events) and encourage venues and suppliers to offer sustainable options to clients or make them a part of their default offerings.

Through the USGBC/Informa partnership in 2013 and 2014, the Informa team has been exposed to the many challenges and opportunities around sustainable event practices. Informa Exhibitions Dallas produces a portfolio of 14 trade shows in various sectors of the construction and real estate industry. Informa has a unique opportunity to leverage its communities, buying power, supply chain and Greenbuild best practices to make its shows higher performing when it comes to sustainability and affect serious change within the industry. Already, Informa has moved to using a printer that uses 100% recycled content paper and created an in-house Green Team to help transition Greenbuild best practices to other shows. Lastly, through the collaboration around building the LEED Platinum home, Informa established a partnership with non-profit Make it Right, which they will continue to work with and support.
You Are What You Eat

_Catalyze the Advancement of Green Building Initiatives and Sustainable Operations within the Hospitality Industry_

Each year, the Greenbuild Greening Subcommittee’s mission is to ensure that Greenbuild creates lasting change in its host city. For this year’s Greenbuild in DC, the Greening Subcommittee, lead by Allison Porter, LEED AP, Vice President, Sustainability Services, Cushman & Wakefield and Takehiro Nakamura, LEED AP BD+C, Associate, Perkins Eastman, chose to focus on restaurants.

This was done through a 3-part approach:

1. Offer solutions to restaurants’ sustainability challenges
2. Recognize restaurants that implement green practices, and
3. Connect Greenbuild attendees with nearby eateries and watering holes that share their environmental commitment.

The first step was to reach out to nearly 100 restaurants located near the DC Convention Center. At each stop, the restaurant owners and managers were educated about Greenbuild, asked about their sustainability practices and challenges, and invited to opt-in to this resource-sharing program. It took some extremely dedicated volunteers to sign up to survey restaurants on hot June and July days!

This fact-finding expedition revealed some interesting and unexpected feedback. One of the areas where we thought restaurants would need a lot of help was in phasing out Styrofoam take-out containers, in advance of a DC-wide ban going into effect in January 2016. Surprise! Most of the businesses we surveyed had already given Styrofoam the boot. Rather, we learned, one of the main challenges the restaurants faced was finding a reliable organization to haul away food waste for composting. Many of the restaurateurs were interested in learning how to advocate to the DC government to make compost pick up a municipal service!

Participating restaurants were supplied energy efficiency starter kits, provided by DC Sustainable Energy Utility (DCSEU). The kits contained a variety of LED bulbs and faucet aerators, as well as hands-on assistance installing the kits, The Committee also made restaurants aware of the National Restaurant Association’s Conserve Program, which tailored resources to restaurants on how to reduce energy and water use and food waste.

**GREENBUILD 2015 GREEN RESTAURANT PARTNERS**

The restaurants on this list opted to participate in the Greening Committee’s sustainability coaching program, and completed at least one sustainability action leading up to Greenbuild 2015.

- A&D Bar  
  (1314 9th St NW, andbardc.com)
- Baby Wale  
  (1124 9th St NW, babywaledc.com)
- Bibiana  
  (1100 New York Ave NW, bibianadc.com)
- Brasserie Beck  
  (1101 K St NW, brasseriebeck.com)
- Casa Luca  
  (1099 New York Ave NW, casalucadc.com)
- Chaplin’s  
  (1501 9th St NW, chaplinrestaurantdc.com)
- Compass Coffee  
  (1535 7th St NW, compasscoffee.com)
- Corduroy  
  (1122 9th St NW, corduroydc.com)
- Cure Bar & Bistro  
  (1000 H St NW, curebarandbistro.com)
- Del Campo  
  (777 I St NW, delcampodc.com)
- Flight Wine Bar  
  (777 6th St NW, flightdc.com)
- Indique  
  (3512-14 Connecticut Ave NW, indique.com)
- La Colombe  
  (924 Blagden Alley NW, lacolombe.com)
- Matchbox Chinatown  
  (713 H Street NW, matchboxrestaurants.com)
- Nando’s Peri-Peri Chinatown  
  (819 7th St NW, nandosperiperi.com)
- Proof  
  (775 G St NW, proofdc.com)
- Queen of Sheba Ethiopian Restaurant  
  (1503 9th St NW, queenofshebadc.com)
- Sbarro DC Convention Center  
  (1104 7th St NW, sbarro.com)
- Sundevich  
  (1314 9th St NW, sundevich.com)
- Vapiano Chinatown  
  (623-625 H St NW, us.vapiano.com)
- Wok and Roll Chinatown  
  (604 H St NW, dcwoknroll.com)
Behind the Scenes Greenbuild Sustainable Event Tour

Catalyze the Advancement of Green Building Initiatives and Sustainable Operations within the Hospitality Industry

USGBC’s mission is to “transform the way buildings and communities are designed, built and operated, enabling an environmentally and socially responsible, healthy, and prosperous environment that improves the quality of life.” USGBC and Informa are dedicated to making progress toward this mission through the planning and on-site execution of the Greenbuild International Conference & Expo, and work to catalyze the advancement of green building initiatives and sustainable operations within the hospitality industry.

In 2015, a “Behind the Scenes” Greenbuild Sustainable Event Tour was offered to the local and visiting hospitality community. Over thirty professionals attended the tour, representing hotels, convention centers, CVBs and event organizers from around the world. The 2-hour tour gave participants exposure to the “thought design” behind the Greenbuild sustainability program and to usually inaccessible parts of the convention center. Tour highlights included:

• Waste operations on the back docks to see the waste hand sorting operation in action and take a peek at the various waste streams separated and collected for Greenbuild, including mixed recycling, composting, carpet, visqueen films, wood pallets, large debris and landfill.

• The Washington Convention Center control room to see how lighting, heating and air quality are centrally controlled to maximize comfort and efficiency.

• Centerplate kitchen to discuss local food sourcing efforts, compostable food service items and kitchen composting.
SUSTAINABLE DESTINATION WASHINGTON, DC

Washington, DC was a powerful and inspiring host city, as our nation’s capital, hometown of USGBC and city with the most LEED certified properties (per capita) in the US. The city is one of the most sustainable metropolitan areas in the country. Here are a few reasons why:

Washington, DC has surpassed the monumental benchmark of 100 million square feet of LEED-certified building space. Only three other cities – Chicago, New York, and Houston – have more LEED-certified square feet, an impressive feat given that these cities are significantly larger than the District. Per capita, DC leads all states and major cities in number of LEED certified projects and square footage.

DC has adopted the ground-breaking Green Construction Code, committing to some of the most progressive sustainable building standards in the country. (You can read USGBC’s case study of DC’s Green Construction Code here.)

In spring of 2015, DC ranked number 1 on the US EPA’s list of cities with the most Energy Star certified buildings.

Maryland ranked third in the nation on USGBC’s most recent annual ranking of Top 10 LEED States. Maryland had 132 LEED-certified projects in 2014 representing 2.70 square feet of LEED space per resident, with the high concentration in Montgomery and Prince George’s County, which are part of the National Capital Region.

Virginia ranked fourth in the nation on USGBC’s most recent annual ranking of Top 10 LEED States. Virginia had 150 LEED-certified projects and 2.33 square feet per resident, with high concentrations in Northern Virginia, which is part of the National Capital Region.

The National Capital Region has more LEED APs than any other metropolitan area in the U.S.

Washington DC is one of the most walkable large metropolitan areas in the US.

Maryland’s Montgomery County is the first county in the US to pass an energy benchmarking law.

Virginia’s Arlington County is the first in the country to adopt a program to incentivize green building that ties incentives specifically to LEED v4.

The amount of people commuting by bicycle in DC has doubled in four years, largely in part to the over 2500 bikes available all over the city, provided by Capital Bike Share.

There are over 170 farmers markets in DC and the surrounding areas.

On average, over 700,000 passengers board the DC metro during the work week.

See more at: www.usgbcncr.org
SUSTAINABILITY PARTNERS

We thank our partners for their commitment to helping us make Greenbuild the most sustainable event in the world.

ARAMARK. As the Washington Convention Center’s in-house housekeeping services provider, Aramark played a vital role in keeping the conference clean and safe for participants and managing the back-of-house manual waste sorting operation, which helped achieve the event’s 84% waste diversion rate.

CADMIUM. CadmiumCD offers digital copies of the recordings for conference attendees and other people who were not able to attend the event. All transactions were done digitally and distribution of content was completed in a sustainable manner.

CENTERPLATE. Centerplate strengthened their kitchen waste management practices around organics and recycling, procured 100% compostable service ware (including large exhibitor platters and other more difficult items) and sourced 33% of all food and beverages for Greenbuild from within 100 miles.

COMPUSYSTEMS. Through months of testing badge material options, Greenbuild and CompuSystems found a paper-based badge solution that works for Greenbuild and can be used for any other show looking to eliminate the cost and waste associated with plastic name badge holders.

EVENTOLOGIE. Eventologie teamed with the Newseum, Wolfgang Puck Catering and the Design Foundry to create a Greenbuild Celebration which allowed for an easy flow through of the impressive seven floors of exhibit areas of the Newseum, highlighted culinary D.C. delights all sourced within the region, at an average of 98 miles per pound, and featured unique sustainable décor elements made from recycled cork, aluminum and cardboard.

FREEMAN. The entire Freeman Team feels very lucky to be supporting this organization and working with all the vendors on the overall sustainability goal for the show. We are very proud of all the efforts that each department at Freeman does to find new and better alternatives to produce this show and give back to the community.

GREENVIEW. As the sustainability consulting and reporting partner for Greenbuild, Greenview works with the Greenbuild Team to raise the bar in sustainability practices, measurement and reporting and then apply those practices across other industry-leading shows hosted across the country.
MAGICWIG. The pursuit of environmental sustainability is a fundamental value close to our hearts here at MagicWig Productions, Inc. We always seek to partner with environmentallly-conscious companies as both customers and vendors.

NEWSEUM. Wolfgang’s Eat, Love, Live (WELL™) philosophy addresses the critical need to create a new standard in food production that celebrates local farmers, promotes sustainable seafood and humanely treated animals, while offering the most innovative and delicious tastes.

PRG. PRG is committed to the sustainability effort at Greenbuild and at our many other events throughout the year. PRG spends over $30 million annually in equipment. In 2015 we continued to focus on ensuring that we are acquiring the most energy efficient equipment available. At Greenbuild, we have continued to reduce our overall energy usage for the event and have utilized this event to help other customers understand the importance of increasing their sustainability efforts. Our Energy Conservation Task Force worked closely with our production staff to successfully implement our greening efforts.

PROSHOW. ProShow is proud of the sustainability commitment we make to each show we have worked with for 7 years. Through our sustainability contest that we hold on site, we teach each staffer to be aware of their impact locally and globally and reward those who are making the biggest difference. For Greenbuild 2015, our winner was Nicole Barnes, who takes the Metrorail and bus, recycles takeout packages, paper, grocery bags for trash, and uses leftover copper wire from an electrician to make jewelry!

TRANSPORTATION MANAGEMENT SERVICES. TMS has partnered with Carbonfund.org to create an innovative Carbon Offset Shuttle Program that provides a neutral carbon footprint from ground transportation. The TMS Carbon Offset Shuttle Program manages and computes the logistical on-site shuttle information and creates a post-show tally of the number of gallons of diesel each bus burned along with the number of numeric tons each bus emitted. TMS was awarded by Alliance for Workplace Excellence with the EcoLeadership award in 2011 as a company that shows commitment to environmental sustainability.

WALTER E. WASHINGTON CONVENTION CENTER. As the primary host of Greenbuild 2015, the convention center went above and beyond to actively monitor and reduce energy consumption, collaboratively develop and implement a rigorous waste management plan and provide complete and accurate impact data for the event.
Our goal remains constant—to make Greenbuild as sustainable of an event as possible. To achieve continuous improvement at Greenbuild 2016 and beyond, we will tackle the following challenges in the coming year:

• Water – Water scarcity and quality is a critical issue in our 2016 host state of California. Greenbuild will continue to pursue water offsets and strategies for reducing water consumption.

• For the first time this year, we incorporated elements of the WELL Standard at Greenbuild. In 2016, we look to expand these efforts and take a new focus on attendee wellness at events.

• In 2016 we will be adding a scoring system to our GMEGG program to provide benchmarks and inspire competition and innovation among our exhibitors around their sustainability efforts.

• In 2016, we will continue to use the GreenLeaders program as a third-party certification program to help improve the sustainability performance of Greenbuild hotels.
## APPENDIX A - HISTORICAL PERFORMANCE DATA TRACKING

<table>
<thead>
<tr>
<th>Event Sustainability Data</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Destination</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participants (#)</td>
<td>24,660</td>
<td>23,600</td>
<td>17,507</td>
<td>19,058</td>
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<tr>
<td>Exhibit (sqft)</td>
<td>164,160</td>
<td>142,000</td>
<td>144,300</td>
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<tr>
<td><strong>CONVENTION CENTER</strong></td>
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<tr>
<td>Energy Use (kWh)</td>
<td>253,088</td>
<td>647,887</td>
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<tr>
<td>Renewable Energy Use (%)</td>
<td>74%</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Water Use (gal)</td>
<td>4,154</td>
<td>205,639</td>
<td></td>
<td></td>
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<tr>
<td>Waste Per Participant (lb)</td>
<td>5.5</td>
<td>6.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waste Per Sqft Exhibit Space (lb)</td>
<td>2.09</td>
<td>0.80</td>
<td></td>
<td></td>
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<tr>
<td>Waste Diversion (%)</td>
<td>67%</td>
<td>78%</td>
<td>84%</td>
<td></td>
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<tr>
<td>Waste Diversion Over Baseline (%)</td>
<td>57%</td>
<td>67%</td>
<td>52%</td>
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<tr>
<td>Local food (&lt;100 miles) (% by weight)</td>
<td>40%</td>
<td>33%</td>
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<tr>
<td>Regional food (&lt;500 miles) (% by weight)</td>
<td>73%</td>
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<tr>
<td>Food Miles Per Pound (#)</td>
<td>465</td>
<td>590</td>
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<tr>
<td>Organic food (% weight)</td>
<td>0.6%</td>
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<td>Fresh Goods (% by weight)</td>
<td>37%</td>
<td>81%</td>
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<td><strong>CELEBRATION VENUE</strong></td>
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<td>Energy Use (kWh)</td>
<td>359,981</td>
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<td>Renewable Energy Use (%)</td>
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<td>Water Use (gal)</td>
<td>776,000</td>
<td>50,039</td>
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<td>Waste Per Participant (lb)</td>
<td>57.8</td>
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<td>Waste Diversion (%)</td>
<td>68%</td>
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<tr>
<td>Waste Diversion Over Baseline (%)</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>Local food (&lt;100 miles) (%)</td>
<td>97%</td>
<td>50%</td>
<td></td>
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</tr>
<tr>
<td>Regional food (&lt;500 miles) (%)</td>
<td>100%</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Miles Per Pound (#)</td>
<td>34</td>
<td>98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organic food (%)</td>
<td>0%</td>
<td>0%</td>
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<td></td>
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<tr>
<td>Fresh Goods (%)</td>
<td>87%</td>
<td>100%</td>
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<tr>
<td><strong>VENUE TOTALS</strong></td>
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<tr>
<td>Total Energy Use (kWh)</td>
<td>863,554</td>
<td>1,167,425</td>
<td>613,070</td>
<td>690,537</td>
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<td>Total Water Use (gal)</td>
<td>396,163</td>
<td>525,000</td>
<td>780,154</td>
<td>255,678</td>
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<tr>
<td>Total GHG Emissions (lb)</td>
<td>30,014,656</td>
<td>15,008,515</td>
<td>24,968,955</td>
<td>15,836,895</td>
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<td>GHG Emissions Per Participant (lb)</td>
<td>1,217</td>
<td>635.95</td>
<td>1,426.23</td>
<td>831</td>
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<td>Total Emissions Offset (%)</td>
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<td>100%</td>
<td>100%</td>
<td>100%</td>
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<tr>
<td>Donated Materials (lb)</td>
<td>13,288</td>
<td>13,630</td>
<td>9,487</td>
<td>7,330</td>
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<tr>
<td>Donated Food (lb)</td>
<td>4,592</td>
<td>4,027</td>
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<tr>
<td>Total Waste (lbs)</td>
<td>-</td>
<td>115,875</td>
<td>296,274</td>
<td>115,829</td>
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<tr>
<td>Total Waste Per Participant (lb)</td>
<td>0.54</td>
<td>4.91</td>
<td>16.9</td>
<td>6.1</td>
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<tr>
<td>Total Waste Diversion At Venues (%)</td>
<td>86%</td>
<td>67%</td>
<td>72%</td>
<td>84%</td>
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<tr>
<td>Local food (&lt;100 miles) (% by weight)</td>
<td>55%</td>
<td>67%</td>
<td>47%</td>
<td>38%</td>
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<tr>
<td>Regional food (&lt;500 miles) (% weight)</td>
<td>74%</td>
<td>77%</td>
<td>77%</td>
<td>79%</td>
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<tr>
<td>Food Miles Per Pound (#)</td>
<td>314</td>
<td>461</td>
<td>409</td>
<td>441</td>
</tr>
<tr>
<td>Organic food (% by weight)</td>
<td>62%</td>
<td>17%</td>
<td>0.5%</td>
<td>0.5%</td>
</tr>
</tbody>
</table>
## APPENDIX A - HISTORICAL PERFORMANCE DATA TRACKING (CONT.)

<table>
<thead>
<tr>
<th>PERFORMANCE</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freight Fuel Use (gal)</td>
<td>116,155</td>
<td>26,698</td>
<td>2,280</td>
<td>2,064</td>
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<tr>
<td>General Contractor Fuel Use (gal)</td>
<td>2,180</td>
<td>3,559</td>
<td>2,812</td>
<td>522</td>
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<tr>
<td>Shuttle Fuel Use (gal)</td>
<td>38,744</td>
<td>26,655</td>
<td>28,514</td>
<td>24,994</td>
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<td>Signage Produced (sqft)</td>
<td>7%</td>
<td>14%</td>
<td>70%</td>
<td>0%</td>
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<tr>
<td>Sustainable Signage Sourced (%)</td>
<td>76%</td>
<td>86%</td>
<td>77%</td>
<td>91%</td>
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<tr>
<td>Paper Used (sheets)</td>
<td>2,740,610</td>
<td>1,116,992</td>
<td>Not Reported</td>
<td>TBA</td>
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<td>Exhibitors - GMEGG participation (%)</td>
<td>93%</td>
<td>88%</td>
<td>70%</td>
<td>79%</td>
</tr>
<tr>
<td>Exhibitors - GMEGG compliance (%)</td>
<td>67%</td>
<td>68%</td>
<td>55%</td>
<td>72%</td>
</tr>
<tr>
<td>Exhibitors - Green Award Participants (#)</td>
<td>26</td>
<td>37</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>AV - ENERGY STAR (Laptops, Projectors, Monitors)</td>
<td>60%</td>
<td>51%</td>
<td>59</td>
<td></td>
</tr>
<tr>
<td>AV - Energy Efficient (All Equipment)</td>
<td>29%</td>
<td>18%</td>
<td>100%</td>
<td></td>
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<tr>
<td>LEED-Certified Venue Partners (#)</td>
<td>6</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Hotels - Walking Distance (1 mi) (%)</td>
<td>100%</td>
<td>80%</td>
<td>86%</td>
<td>96%</td>
</tr>
<tr>
<td>Hotels - Digital Thermostat (%)*</td>
<td>100%</td>
<td>96%</td>
<td>86%</td>
<td>88%</td>
</tr>
<tr>
<td>Hotels - Amenity Donation (%)</td>
<td>88%</td>
<td>72%</td>
<td>43%</td>
<td>68%</td>
</tr>
<tr>
<td>Hotels - In-room Recycling (%)</td>
<td>48%</td>
<td>95%</td>
<td>84%</td>
<td></td>
</tr>
<tr>
<td>Hotels - Kitchen Composting (%)</td>
<td>100%</td>
<td>0%</td>
<td>5%</td>
<td>32%</td>
</tr>
<tr>
<td>Hotels - No Auto Newspaper Delivery (%)</td>
<td>100%</td>
<td>92%</td>
<td>95%</td>
<td>92%</td>
</tr>
<tr>
<td>Hotels - Green Cleaning Products (%)</td>
<td>67%</td>
<td>40%</td>
<td>19%</td>
<td>88%</td>
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<tr>
<td>Hotels - Trip Advisor Green Leaders (%)</td>
<td>19%</td>
<td>68%</td>
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<td></td>
</tr>
<tr>
<td>Hotels - Housekeeping incentive Program (%)</td>
<td></td>
<td></td>
<td></td>
<td>12%</td>
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</tbody>
</table>
APPENDIX B –
BOUNDARY AND QUANTIFICATION METHODS

This section provides additional details pertaining to boundaries and calculation methods used to arrive at our reported performance results.

ENERGY USE

The energy boundary consists of energy consumed during Greenbuild events and corresponding move-in/move-out periods from main venues (Walter E. Washington Convention Center and Newseum) and contracted transportation only.

- For the convention center, actual energy usage was reported in 24-hour increments
- For the celebration venue, the total energy consumption (purchased electricity, fuel burning for heating and cooling, forklift operation) during Greenbuild move in, event and move-in/out days was estimated by that period’s billing cycle.
- District Chilled Water data was collected in 24-hour increments.
- Fuel data from the contracted shuttles were provided by TMS.
- The total energy consumption for the entire period was assumed to be all attributed to the Greenbuild event.
- Energy use from hotel accommodations, fuel burning from participant travel to/from the destination, and mobile fuels from other vehicles operated by the venues or third parties were not included in the energy footprint (but were included in the GHG emissions calculations).

WATER USE

The water boundary consists of water consumed at the main venues (convention center and celebration venue) during the event and corresponding move-in/move-out periods.

- For the convention center, actual water consumption data was provided in 24-hour increments
- For the celebration venue, total water consumption was estimated from the corresponding average daily consumption of that period’s billing cycle

BOUNDARY CONSIDERATIONS

- Water data include district potable water consumption only.
- Water data only includes the operational water footprint and does not include virtual water content of processes involved in the materials and supplies used or consumed during the event.

WASTE CALCULATIONS

The waste boundary consists of waste generated at the main venues (convention center and celebration venue) during the event and corresponding move-in/move-out periods.

Convention center back-of-house waste streams measured and tracked included:

1. Composted material – scale weight of compactor as reported by hauler
2. Comingle Recycling (Plastic/Aluminum/Glass/Paper) – scale weight of compactor as reported by hauler
3. Cardboard – scale weight of compactor as reported by hauler
APPENDIX B –
BOUNDARY AND QUANTIFICATION METHODS (CONT.)

4. Visqueen/Plastic Film – scale weight of compactor as reported by hauler
5. Large Debris (C&D) – scale weight of compactor as reported by hauler with recovery rate factored in per compactor. (recovery rates ranged from 85-95%, remaining attributed to landfill)
6. Wood – Weight estimated based on # of pallets donated
7. Carpet/Padding – scale weight of compactor as reported by hauler
8. Donated Food – none reported in 2015, no food overages
9. Donated Items – weight captured on forklift during loading process for individual donation recipient groups
10. Landfill - scale weight of compactor as reported by hauler

Celebration back-of-house waste streams measured and tracked included:

1. Composted material – data provided by AgriCity (hauler)

Note: Comingle Recycling and Landfilled materials were not tracked and no waste diversion data was reported for the Newseum in 2015.

BOUNDARY CONSIDERATIONS

• Upstream waste not disposed of onsite is not included.
• Waste generated from hotels, or other vendors offsite, is not included.

GHG EMISSIONS

Included in the total GHG emissions value:
• Electricity use at the venues
• Stationary combustion of fuels at venues
• Mobile fuel combustion of fuels at venues
• Estimated mobile fuel combustion of freight:
  o General contractor/show management deliveries
  o Exhibitor freight sent from advanced warehouse to the center
  o Marshaling yard trailers used to support this show
• Travel to the destination by participants (attendees, staff, vendors, exhibitors)
• Ground transportation by participants from airport to city center
• Ground shuttle use for offsite events and event staff
• GHG emissions per occupied room for hotels within the contracted room block (per the Hotel Carbon Measurement Initiative), using either data provided by the hotels directly, or default metrics per the Cornell Hotel Sustainability Benchmarking research report published May 2015.
APPENDIX B –
BOUNDARY AND QUANTIFICATION METHODS (CONT.)

Not included in the value:

• Emissions from waste disposal and wastewater treatment
• Fugitive emissions from refrigerant leakages
• Emissions from ground transportation other than USGBC contracted shuttles
• Emissions from hotel accommodation used outside the contracted room block

QUANTIFICATION

• Emission factors for mobile fuel burning obtained from the US EPA Climate Leaders Program
• Emission factors for electricity consumption at venues were obtained from EPA eGRID V1.0 (2010 Data)
• Emission factors for air travel obtained from the US EPA Climate Leaders Program, assuming a direct flight from major US hubs, with 1 connection for other cities, and a connection through 1-2 major hubs internationally.
• Emission factors for stationary fuel burning obtained from the World Resources Institute stationary combustion tool 4.0
• GWP of CH4: 28
• GWP of N2O: 310
• Other attendee carbon offsets were calculated separately from the total GHG emissions value
• Actual count of air travel offsets used to figure out total MTCO2e of attendee offsets
• Actual count of attendee offsets for hotel accommodations, with an assumption of 3-day length of stay to calculate total room nights
SELECT ENERGY-EFFICIENT AV EQUIPMENT WHEN ENERGY STAR RATED EQUIPMENT IS NOT AVAILABLE.

Properly dispose on-site electronic waste (e.g., bulbs and batteries).

PRG centrally collected batteries for donation or proper disposal. All expended bulbs returned to the PRG depots for recycling.

Minimize electricity consumption through the use of LED lighting fixtures and other energy efficient technologies.

Utilize 100% local A/V equipment from local or regional (100/500 miles) facilities and vendors. 90% of all AV equipment came within a 600 mile radius of Washington DC, the remaining specialized equipment was brought in on consolidated shipments from the next closest depot.

Utilize A/V vendors that prioritize sustainability, source sustainable equipment, and utilize energy efficient technologies.

Collect and dispose gaffing tape to avoid recycling stream contamination.

99% of gaffing tape was sorted and disposed of.

Audio Visual: 2015 Goals

Use 100% ENERGY STAR computers, monitors, printers, laptops and breakout room projectors.

Source sub-rental items 95% locally (100 miles).

We worked with local vendors to source sub-rental of equipment PRG did not own or that we did not have locally.

Replace laptops with USBs (as source data for LCD screens) by 2018.

In 2015, Year 1 of 3-year plan, we eliminated the use of laptops at 8 monitors. Many presentations were not compatible with the USB port on the LCDs. We will need to work ahead next year to design and/or convert more content to the appropriate formats.

Encourage local labor and visiting vendors to use public transportation.

We were able to provide our local labor force along with PRG staff that traveled to DC with additional information about cost effective and convenient public transportation before and during Greenbuild.

Audio Visual - Master Series/Special Sets: Best Practice

Eliminate vinyl in scenic design elements.

Audio Visual - Public Space: Best Practice

Track energy usage of LCD screens and other special A/V equipment.

Audio Visual - Public Space: 2015 Goal

Track usage of cyber café computers to determine future orders. Reduce cyber cafe computers by 10%.

Usage data collected. We plan to reduce computers by 10% in 2016 based on the 2015 data.

Create an “Energy Conservation Task Force” to follow a daily shut down plan to conserve energy.

Task Force trained staff onsite and followed daily shut down plan. Equipment was disconnected from power in all areas when possible.

Legend:

- Achieved
- Progress
- Improvement Needed
APPENDIX C – 2015 GOALS & BEST PRACTICES (CONT.)

AUDIO VISUAL - SPECIAL SETS: BEST PRACTICE

- **Reuse 3 existing Special Set Stages**
  Used 3 existing stages in Special Set rooms; built one new stage (soapbox)

- **Use standard products available at convention centers to decrease the carbon footprint of the Special Sets.**
  Used convention center tables and chairs in all Special Set rooms.

- **Source furniture and stage rentals locally or reuse existing Freeman inventory from regional facilities.**
  Staging and furniture was used from convention center and/or Freeman inventory.

AUDIO VISUAL - SPECIAL SETS: 2015 GOALS

- Source materials and decorative elements in special set rooms that are local and sustainable.
  Acquired materials that were made of sustainable materials, including the green wall, greenhouse panel stage set, and Fluidstance boards. We found other materials that promoted health and wellness, including balance balls, balance cushions, and presenter engagement toss ball.

- Incorporate biophilia (natural elements) into special set design.
  Green wall donated background in “Illuminate” Special Set.

BOOKSTORE: 2015 GOALS

- Improve tracking of shipment information.
- Track information related to materials books are printed on.
  Publishers were asked for this information. Working to expand these efforts in 2016.
- Encourage all publishers to ship using sustainable shipping methods (EPA SmartWay Shipper Program)
  EPA SmartWay Shipper Program information was provided to publishers.

CELEBRATION: BEST PRACTICE

- **100% Domestic Beverages**
  100% domestic beverages sourced within 135 miles

- Include in sustainability contract language in venue and catering contract.

- Implement Sustainable food service practices: Food labeling, compostable products, bulk service, food donation, etc.
  All guests used compostable plates, napkins, flatware and cups to enjoy all food and beverage. All items were labeled accordingly - gluten free, vegan, vegetarian, et al.

CELEBRATION: 2015 GOALS

- 90% waste diversion at Celebration Event venue. Final waste diversion was 17%. Landfill data for the Newseum included waste from museum operations, and attached restaurant and residences.
- 80% Local Food (within 100 miles)
  50% local food, 100% regional (500 miles)

Legend: ✓ Achieved  🌟 Progress  ⚠ Improvement Needed
### Celebration: 2015 Goals (Cont.)

- ✔ Implement a recycling program at the facility.
- ✔ Use décor that is biodegradable, reusable or recyclable.
- ✔ Track all celebration venue waste, water, and energy used during Greenbuild-occupied days.
- ✔ Provide sustainable transportation to the celebration venue and offset all emissions.
- ✔ Source 100% compostable (ASTM D6400) food and beverage packing/containers wherever disposable products are necessary.

### Show Materials / Décor: Best Practice

- ✔ Catalog all signs and build-outs used at Greenbuild to create a Materials Summary.
- ✔ Collect sustainability, sourcing and disposal information for all show materials.
- ✔ Highlight material and disposal considerations during design phase of show décor.
- ✔ Track disposal/reuse plan and quantities for all small signage.
- ✔ Reuse show carpet for at least 3 years (2014-virgin carpet).

**Eliminate decor lighting in registration area**
Not achieved. New Freeman standard registration counters use LEDs embedded in the structures to be used over and over.

### Show Materials / Décor: 2015 Goals

- ✔ No new PVC used for show management buildouts.
  - There were no new PVC materials used for show management structures.
  - Eliminate new vinyl from being created for 2015 show, except in Education Labs, Sales Office and table tops.
  - Some PVC panels were reused from previous years for Education Labs and the Sales office. A new non-vinyl material was introduced to replace vinyl tabletops.
- ✔ Find an alternative for vinyl tabletops by 2017.
  - We used a new “TableFlex” non-vinyl material that worked for all the table tops at the show.
- ✔ 99% of carpet scrap is recycled. Small scraps cannot be recycled.
- ✔ Replace 10% of printed signage with digital signage.
  - Only provided directional to cross L Street and at base of escalators. The DC Convention Center provided substantial built-in digital signage options.
- ✔ Utilize human directionals in lieu of directional signage when possible.
  - Eliminate physical publication bins and replace with 100% interactive, digital offerings.
  - Digital publication bins were introduced in 2015 along with printed publications. We plan to completely replace the printed publications with the digital publications in the next two years.
APPENDIX C –
2015 GOALS & BEST PRACTICES (CONT.)

GMEGG: BEST PRACTICE

✓ Provide Simple GMEGG Forms
✓ Implement Exhibitor Sustainability Requirements (GMEGG)
✓ Provide quality on-site GMEGG auditor training
✓ Conducted 1 pre-show webex and one onsite training. For 2016 make sure to include the sales team.

GMEGG: 2015 GOALS

90% on-site audit participation
65% participation.

95% GMEGG Participation
79% participation.

✓ Update GMEGG 2015 form based on 2014 lessons learned. Update GMEGG on two-year cycle.
✓ Communicate GMEGG program and details to exhibitors through at least four mechanisms and directly to exhibitors through sales calls.
   Telemarketing calls were the most effective - saw immediate results. Will continue this in 2016.

GREEN EXHIBITOR AWARD: BEST PRACTICE

✓ Provide an incentive program for exhibitor sustainability practices.
✓ Will look at expanding the GEA program overall in 2016.

GREEN EXHIBITOR AWARD: 2015 GOAL

20% exhibitors participation for Green Exhibitor Award (GEA).
3% participation.

EXHIBITION: BEST PRACTICE

✓ Educate local Freeman staff on show sustainability goals, to in turn, educate local labor.
   We had pre-event training and meetings with our WDC office and then on show site. We also did a training and tour.

EXHIBITION: 2015 GOAL

✓ Improve exhibitor onsite communication relating to sustainability through onsite signage and PA announcements via fully implemented plan
   PA announcements again for 2015. Sustainability signage was placed near the Exhibitor Service Desk. The donation program has been mentioned in all EAC correspondance.

EXHIBITOR ENGAGEMENT: BEST PRACTICE

✓ Communicate sustainability goals to exhibitors prior to arriving onsite.
   Included sustainability info in every newsletter pre-show.
✓ Removing individual trash cans from booths.
   All bins removed.

Legend: ✓ Achieved  ❍ Progress  ➡ Improvement Needed
EXHIBITOR ENGAGEMENT: 2015 GOAL

- Increase awareness of Exhibitor Donation program pre-show via exhibitor newsletters and through onsite signage.
- Add flatscreen to exhibitor service desk and in registration about sustainability accomplishments, donation program, etc.
  Duplicated greening wall slide show.

F&B: BEST PRACTICE

- Provide 100% domestic alcohol service with an emphasis on local and regionally sourced beverages.
- Provide 20% Vegetarian Options available at every food buffet.
- No bottled water on event buffets (concessions exception).

F&B: 2015 GOALS

- Label all farms and distributors that are local and organic on buffets.
  Some items labeled.
- Serve 50% local (100 miles) food items at Convention Center.
  33% local food.
- Serve 50% organic food items served at Convention Center.
  0.7% organic food.
- Ensure all disposable food serviceware, including concessions, can go in the compost stream.
- Use China service for all served meals in the Convention Center.
  All plated meals used china. Tuesday summits used compostables for lunch buffet.
- Do not serve individually wrapped food items at coffee breaks and buffets. This does not include concessions which can be individually wrapped.
- Track food miles and organic status for 100% of Convention Center food and beverages.
- Provide at least one vegan and gluten free option at every food buffet.
- Work with local coffee shops to use a compostable or recyclable serviceware.
  Some local vendors provided compostable serviceware.
- Label food allergens on buffets.
- Incorporate WELL standards into food practices as much as possible.

HOTELS: BEST PRACTICE

- Incorporate LEED Certified hotels into official Greenbuild 2015 housing block.
  1 property.
- Ensure as many official Greenbuild 2015 hotels as possible are within walking distance of the DC Convention Center.
  96% within 1 mile.
HOTELS: BEST PRACTICE (cont.)

✓ Include sustainability clauses in all hotel contracts.
✓ Execute on-site audits for all hotels to confirm that sustainability practices are in place.
✓ Audited 92% of hotels.

HOTELS: 2015 GOALS

✓ Increase attendee communication on hotel greening through TripAdvisor ratings and feedback mechanisms, signage, social media, eblasts and articles.
✓ Have 100% of hotels implement recycling programs and amenity donation programs. 100% hotels recycled, 68% amenity donation program participation.
✓ Engage the local hospitality industry through education and communication related to federal water savings programs and resources.
✓ Have 100% of hotels compliant with 100% of key sustainability practices. See Appendix A.

LEGACY PROJECT: BEST PRACTICE

✓ Sponsor one or more legacy projects to leave a social and environmental impact in the local community.

LEGACY PROJECT: 2015 GOAL

✓ Increase attendee awareness of legacy project through onsite display at NCR booth, social media, NCR blog, USGBC+ mention, promotion at other events and through sponsors.

Blurb was added to greening wall, screens throughout convention center, and Program Guide. Project was promoted during an Expo Hall presentation and during the Legacy Project ribbon cutting pre-show. Additional promotion was included in NCR booth, and in social media, blogs and articles.

X Where Are They Now? Article - Write one Greenbuild blog post before GB15 with updates on as many past projects as possible.
Article not posted.

MARKETING: BEST PRACTICE

✓ Print on 100% post-consumer recycled content
✓ Print using vegetable-based inks.
✓ Print show materials in show local area.

MARKETING: 2015 GOALS

✓ Maintain same size for registration mailer as 2014
  Mailer size maintained.
✓ Reduce quantities distributed of registration mailer by 10 percent
  Registration mailer quantities were consistent with 2014 quantities.
MARKETING: 2015 GOALS (cont.)

☑ Maintain same post card distribution as 2014
   The postcard quantities were reduced by 10%.

☑ Continue to not include a spiral binding for the education program to make recycling easier and reduce material use.

☑ Dedupe mailing lists and add best practice not to send more than 2-3 per address. Plan to work to improve process for 2016.

MERCHANDISE: BEST PRACTICE

☑ Track all sustainability material specifications for 100% of merchandise items.

☑ Prioritize local vendors in merchandise sourcing.

☑ Reduce the quantity of different items sold, increasing quality.

MERCHANDISE: 2015 GOALS

☑ Source 100% of t-shirts sold in Greenbuild merchandise store (as well as volunteer t-shirts) will be made from 100% recycled material, sourced domestically.

☑ Include one sustainability attribute for each item on all in-store signage.
   Every item had sustainability attributes printed on the actual merchandise.

☑ Ensure the non-clothing specialty item(s) have at least one sustainability story (domestic, organic, fair-trade, water or soy-based ink, biodegradable, compostable, or recyclable)
   All were domestic and made from recycled materials.

☑ Focus on creating more generic designs for use at future events (not show-specific).

☑ No products shall be packed in Styrofoam / polystyrene

☑ No vinyl material used in merchandise store items.

☑ Document Sustainability criteria (domestic, organic, fair-trade, water or soy-based ink, biodegradable, compostable, or recyclable)

OFF-SITE EVENTS: BEST PRACTICE

☑ Work with as many LEED Certified venues as possible.
   One LEED Certified facility was used.

☑ Use décor that is biodegradeable, reusable or recyclable.

☑ No Cut Flowers

☑ Prioritize local and organic foods and beverages.

Legend:  ✔ Achieved  ☐ Progress  ☐ Improvement Needed
APPENDIX C – 2015 GOALS & BEST PRACTICES (CONT.)

OFF-SITE EVENTS: 2015 GOALS

✓ Include sustainability requirements/initiatives in the program specs for the event.
✓ Review all sustainability programs/action items during tie-down meetings for all off-site events.
✓ Communicate key event sustainability programs/initiatives to attendees through invites/collateral/slides/menus etc.
   Some sustainable sourcing was noted on menu cards.
✓ Track F&B sourcing for Signature Events and Leadership@USGBC.

PROGRAM: BEST PRACTICE

✓ Serve water to speakers in pitchers and compostable cups.
✓ Do not allow handouts by speakers.
✓ While onsite at Greenbuild, shut down education rooms at night - making sure everything is turned off at the end of the day.
✓ Continue communicating with speakers electronically.
✓ Recycle non-reusable retreat items.
✓ Reuse printed materials when possible at retreat.
✓ View proposals in a digital PDF for retreat instead of printing.

PROGRAM: 2015 GOALS

✓ Increase communication to speakers regarding sustainability. Explore other avenues including speaker ready room (sign reminder). Sustainability language should be incorporated into speaker communications already being sent.
✓ Reduce amount of materials printed for the Program Working Group Retreat by using folders instead of binders and reusing wall card headers.
✓ Increase downloads of the mobile app by 5% to decrease dependance on printed materials. There was a slight decrease in the number of mobile app downloads.

CONFERENCE PROCEEDINGS: BEST PRACTICE

✓ Use 100% recycled paper and vegetable-based inks for all printed material.

CONFERENCE PROCEEDINGS: 2015 GOALS

✓ Print on 100% recycled paper using vegetable-based inks for key cards.
✓ Work with Cadmium to define their onsite presence and make sure they are using sustainable materials where appropriate.
✓ Eliminate paper receipts; only distribute digital receipts onsite
✓ Use Energy Star rated computers for Cadmium onsite transactions.

Legend: ✓ Achieved 〇 Progress ▲ Improvement Needed
APPENDIX C –
2015 GOALS & BEST PRACTICES (CONT.)

REGISTRATION: BEST PRACTICE

✓ Eliminate use of plastic name badge holders.
✓ Source recyclable, non-vinyl badge stock material.
✓ Badge stock is recyclable.
✓ Paperless pre-show registration process, and no on-site paper registration forms.

REGISTRATION: 2015 GOALS

✓ Minimize printing of additional offerings on multiple cards on badges.
✓ Source non-vinyl badge stock with at least 5% post-consumer recycled content.
   Non-vinyl badge stock was used but stock with post-consumer recycled content was unavailable.
✓ Use 100% ENERGY STAR rated (or equivalent) computers at registration.
✓ All of the CompuSystems laptops used in onsite registration and in access control areas are 
   ENERGY STAR rated and will have stickers.
✓ Incorporate product opt-out option into registration - 25% attendee opt-out from conference materials.
   We provided the option for attendees to opt out of the bag in registration and achieved an 11% opt out rate.

SPONSORSHIP: 2015 GOALS

✓ Include greening language in GMEGG newsletters to increase awareness for exhibitors. Follow-up with current participants and provide resources as well. Also send a separate email to audited exhibitors.
   Audit notifications include a link to the sustainability tips on the dashboard.
✓ Source a tote bag made from 100% Recycled content, made in the US.
✓ 100% recycled plastic - made domestically in CA. Reusable shopping bag - educational content printed on the outside of the bag instead of on a tag. Leftover bags were donated to Safeway Feast of Sharing. Used bags were recycled in the visqueen stream.
✓ Secure an Energy Sponsor.
   However - we did have onsite power generation via solar panels and wind turbines.
✓ Secure a living wall sponsor for use at the convention center.

TEMP STAFF: 2015 GOALS

✓ Staff engagement - make sure all temp staff are trained on basic sustainability practices.
  Group training on sustainability practices and one on one training, supervisor to staffer occurred.
✓ Motivate temps to go above and beyond with sustainability in an effort to increase participation and engagement in the program.
  Supervisors constantly coached staff to consistently use recycling bins and all but 3 took public transportation to the convention.
✓ Launch Sustainability contest during training.
  Excitement for the contest was great and 75% of staff filled out forms to tell us how they are supporting Greenbuild’s sustainability mission.

Legend: ✓ Achieved   ❭ Progress   ◀ Improvement Needed
APPENDIX C – 2015 GOALS & BEST PRACTICES (CONT.)

TEMP STAFF: 2015 GOALS (cont.)

- **Reduce printing 30% on site.**
  - Estimated reduction: 50%.

- **Reduce printing 50% pre show.**
  - Handouts are recycled from show to show for both temp staff and supervisors. All but 20 pages were carried in from our last show.

- **Train staff on all sustainability practices pre-show and on site.**
  - Many staff were not familiar with sustainability efforts prior to the show, or didn’t give it much thought. While on site though they were engaged in learning about ways they can participate in sustainability practices.

VOLUNTEER: 2015 GOALS

- **Recruit enough volunteers to staff all bins and recycling centers.**
  - We prioritized bins in busy areas. Will work to recruit more volunteers in 2016.

- **Make sure all volunteers are well educated in recycling and composting.**

- **Signage is clear and cheat sheets are accurate.**

- **Reduce amount of paper for volunteer check-in registration**
  - Increase volunteer knowledge on USGBC mission and the importance of Greenbuild sustainability.
  - Team leaders did an excellent job training volunteers and fostering the importance of the mission. Volunteers this year went above and beyond working directly with the facility to create additional signage at Starbucks and making a sustainability rap that was advertised on social media.

- **Provide incentives and reminders to volunteers to take sustainable transportation, etc.**
Greenbuild’s Mandatory Exhibition Green Guidelines (GMEGG) is a **mandatory sustainability initiative** that exhibitors must comply with for the construction and operation of a Greenbuild exhibit. All exhibitors are required to sign this agreement with their exhibitor application, design their booth(s) to the requirements outlined in GMEGG, and document their compliance.

## Energy Conservation

### Booth Lighting

The exhibitor will meet the following mandatory requirement:

- Incandescent bulbs are prohibited for use in any medium screw-based lighting applications. LEDs or compact fluorescent light bulbs (CFLs) must be used instead.

Booth lighting will meet one or more of the following additional requirements:

- Exhibitor will not purchase new bulbs; bulbs will be reused from prior exhibitions. The organization will create a policy that would only replace bulbs upon burnout.
- LED, CFL, T-5 or T-8 tubular fluorescent lighting will be used exclusively in at least one of the following:
  - Accent lighting
  - Backlighting
  - Overhead signage
  - General lighting
  - Booth Lighting is not used.

### Electronic Display

The exhibitor will meet the following mandatory requirement:

- All displays, monitors and booth lighting must be completely powered down each night after show/set-up hours. Any equipment that cannot be shut down must be put into sleep mode during non-expo hours.

Electronic display equipment (i.e. flat screen displays) will meet one of the following requirements:

- Display is reused from previous shows.
- Display meets criteria for ENERGY STAR qualification or equivalent energy efficiency program.

## Shipping Practices

### Energy Conservation Shipping Methods

Exhibitor will meet one or more of the following requirements:

- No exhibit materials will be shipped
- If the exhibitor ships booth materials using a third-party logistics partner, the exhibitor will choose a logistics partner that participates in the U.S. EPA’s SmartWay Partnership Program or an equivalent program.
- Shipments will be consolidated into only one shipment
- The exhibitor will purchase carbon offsets to cover all emissions resulting from shipping booth materials to and from Greenbuild.

### Shipping Materials

Exhibitor will meet one or more of the following requirements:

- All padding materials and exhibit crate(s) will be reused for all exhibition shipping.
- Exhibit crate(s) will meet one of the following options:
  - Made from rapidly renewable materials (defined above)
  - 50% recycled content
  - Be comprised of FSC-certified wood
- Polystyrene (i.e. packing peanuts, #6 or foam plastic) will be eliminated from booth shipping and operations.

## Water Reclamation

If using water for display purposes, the exhibitor must use water reclamation/recycling (i.e. holding tanks).
APPENDICES

APPENDIX D - 
GREENBUILD MANDATORY EXHIBITION GREEN 
GUIDELINES (GMEGG) (CONT.)

BOOTH MATERIALS

Flooring
Flooring will meet one or more of the following requirements. Flooring that is utilized to demonstrate products that the booth is marketing are exempt from these requirements.
- Flooring will not be used.
- All flooring is reused and has been in use for at least one year.
- New flooring must be comprised of one or more of the following:
  - Carpet and Rug Institute (CRI) Green Label Plus Certified Carpet
  - 25% post-consumer recycled material
  - 100% recyclable material
  - 100% rapidly renewable material(s). Rapidly renewable building materials and products are made from agricultural products that are typically harvested within a 10-year or shorter cycle.
  - Forest Stewardship Council certified wood flooring.
  - Reclaimed or repurposed from a source other than trade show use.
  - Sustainable flooring option provided by the Greenbuild general service contractor will be used. (GSC-provided carpet marked with a “green footprint” icon contains a minimum of 25% post-consumer recycled material.)

Booth Graphics and Signage
Graphics and signage will meet one or more of the following requirements:
- No graphics or signage will be used within the booth.
- Exhibitor will reuse graphics and signage that have been in use for at least one year.
- New graphics and signage will be 100% recyclable and will not be foam core.
- New graphics and signage will contain a minimum of 25% recycled material

Booth Structure
Pop-up displays and booth structural support materials will meet one or more of the following requirements.
- Display elements are reused from past exhibitions or the company has created a plan for reuse through future exhibitions for at least one year.
- New display elements will be 100% recyclable.
- New display elements will contain a minimum 25% recycled content.
- Booth structure is rented from the Greenbuild general service contractor, using standard inventory materials used throughout the year.

Communications & Collateral
Prerequisite: All printed collateral, if used, will be on 100% recyclable paper. Paper must be recyclable in a standard municipal recycling stream. Many laminated and coated papers are not recyclable and are prohibited.

In addition, exhibitor will meet one of the following requirements:
- Exhibitor will eliminate print and promotional giveaways used for attendee distribution.
- Exhibitor will limit the quantity to less than 1,000 handouts and giveaways combined.
- Exhibitor will distribute handouts and giveaways that match the sustainability criteria below. Quantity is not limited if criteria for both handouts and giveaways are met.
  - Paper Handouts: all paper handouts will contain 100% post-consumer recycled content or FSC-Certified content.
  - Promotional giveaways must match one of the following options:
    - Giveaway material contains 30% post-consumer recycled content.
    - Giveaways are made from rapidly renewable materials (defined above).
    - Promotional giveaways are 100% compostable.

Indoor Air Quality
The booth construction and maintenance will meet one or more of the following requirements:
- No paints, sealants, coatings or adhesives will be used to maintain the booth.
- Only low- or zero VOC paints, sealants, coatings or adhesives will be used within the show.
- Any new flooring, counters and paneling will be certified low- or zero VOC by their manufacturer.
- All booth flooring, counters, and paneling will be reused from previous shows
- All signage will be printed using non-toxic vegetable- or water-based inks.
ON-SITE OPERATIONS

Exhibitor Responsibility
Each booth is responsible for all materials brought into their booth at Greenbuild. It is the responsibility of the exhibitor to convey all GMEGG requirements and the exhibitor’s sustainable practices to all third-party vendors hired by the exhibitor for show set-up, tear-down and staffing. The Exhibitor is also expected to participate in a documentation review on-site with Greenbuild staff if randomly selected. All GSC-hired labor will be made aware of GMEGG requirements.

Staff Training
The exhibitor will discuss GMEGG with on-site booth staff prior to the show opening. This should include the following:
• Information about how the booth complied with each GMEGG option.
• Any other sustainable practices to be conducted within the exhibit booth.
• Sustainable booth operations such as waste management, shut-down plans, and transportation.

On-Site Transportation
The exhibitor will ask booth staff to do at least one of the following:
• Take the provided conference shuttles or public transit to/from the convention center
• Walk or bicycle to/from the convention center
• If cabs are absolutely necessary, use of shared cabs: no individual cab trips should be taken
• If public transit and/or walking are not an option, the exhibitor should offset travel to and from the convention center by purchasing carbon offsets.

Waste Management, cont.
The exhibitor will meet one of the following requirements:
• If the exhibitor plans on leaving any items after the show, the exhibitor will donate material through the Exhibitor Donation Program using the appropriate forms and labels.
• The exhibitor will have in place a “pack in/pack out” policy to minimize any waste left behind at the end of the show. All materials brought to Greenbuild, including booth components, giveaways and reusable packing materials will be shipped back to the exhibiting company after the event.
• The exhibitor will return materials back to local offices or partners after the show.

Food and Beverage Service
Any food and beverage service conducted within the booth will be ordered to minimize disposable material use and properly handle waste in accordance of the requirements of the Greenbuild Waste Management Program.

The food serviceware used will meet one of the following requirements:
• China service will be used (reusable serving platters, cutlery, plates, cups, etc.) Beverages may be served from individual recyclable containers.
• Compostable service ware will be used and the exhibitor will inform attendees of the compostability of the products, directing them to the proper disposal stream on-site. Beverages may be served from individual recyclable containers.

Waste Management
The Exhibitor will participate in Greenbuild’s Waste Management program, by properly disposing of all waste and utilizing all available recycling opportunities throughout the show, including set-up and move-out. Additional waste streams will be provided for special exhibition-related materials.

The exhibitor will not use individual waste containers in exhibit booths. The venue and show management will provide recycling stations throughout the exhibit area for attendee and exhibitor use during show hours. Each exhibitor is responsible for disposing of waste and recyclables at these stations.