UFI Sustainable Development Award Application Best Waste Management



November 19-22, 2019 Georgia World Congress Center | Atlanta, GA







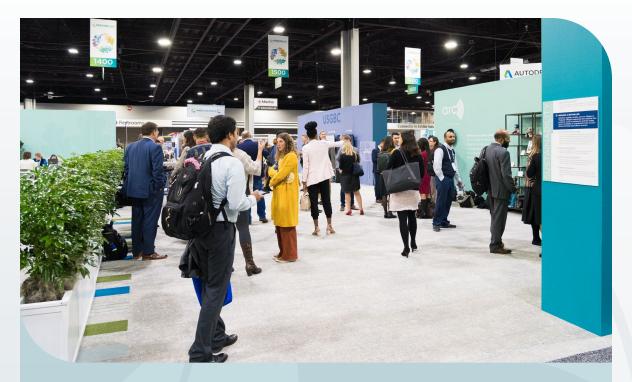
Background

In 2019, Greenbuild and the U.S. Green Building Council welcomed more than 10,000 visitors to Atlanta to learn and source cutting edge solutions to improve resilience, sustainability, and quality of life in our buildings, cities, and communities.

The theme of this year's event was A New Living Standard, focusing for the first time beyond the walls of the building and on the people that inhabit it, making Greenbuild in Atlanta a truly unforgettable experience.

Highlights included:

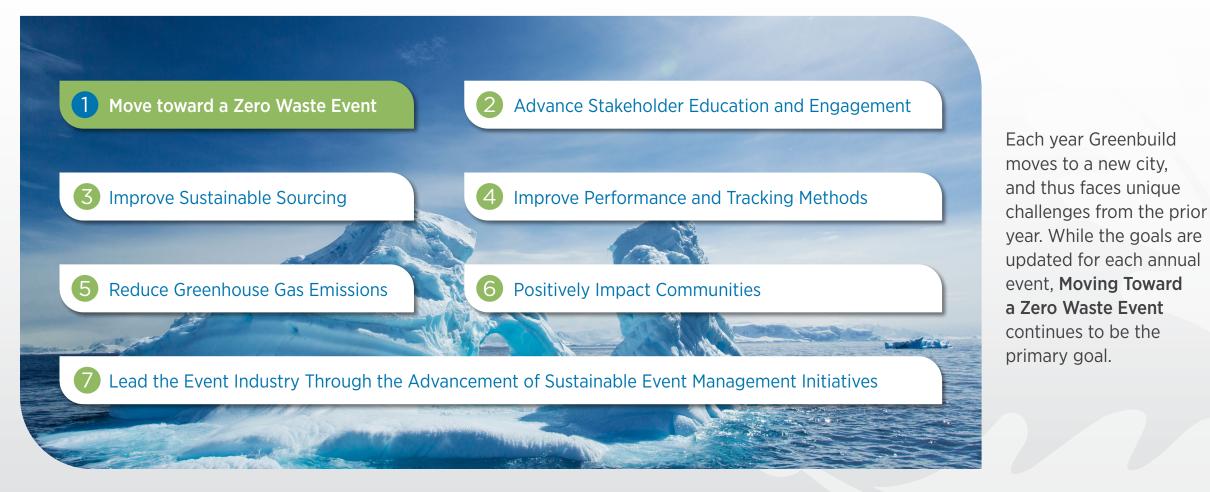
- 4 days of conference, including two brand new Summits on Human Health & Wellness and Resilience
- New daily keynotes featuring former President Barack Obama, climate activist Jamie Margolin, human rights activist Dr. Bernice King, and climate scientist Dr. Marshall Shepherd.
- 265+ exhibitors and brands
- An array of all-new special events including the signature Greenbuild Celebration headlined in 2019 by Collective Soul
- Experiential attractions like the Sustainability Hub, a new Tiny Home, and a fully functioning Microgrid, which powered a portion of the Expo Floor.



Even with all these new features and events, Greenbuild was able to push the sustainability bar even higher than in previous years, launching new initiatives and challenging the event-industry status quo. This year, the event moved even closer to zero waste. The team was able to remove all single-use plastics from the convention center, driving Greenbuild once again to TRUE Zero Waste Platinum status.

Project Objectives

Greenbuild's sustainability program seeks to advance the following objectives:



GREENBUILD INTERNATIONAL CONFERENCE & EXPO | GREENBUILDEXPO.COM

Scope of Entry

One of the most significant challenges of tradeshows and events remains waste. The very nature of the industry makes it hard to avoid. Whether it's leftover food, single use exhibitor booths or the carbon emissions created by powering a venue for a 10,000-delegate conference, getting a lot of people together in one place can have a huge environmental impact.

Greenbuild implements a robust waste-management plan each and every year, to continue **Moving Toward a Zero Waste Event**.

2019 New Challenge: Eliminating Single Use Plastic & Reducing Compostable Cups

As Greenbuild has migrated away from plastic disposables over the years, a large part of the current waste stream has become compostable serviceware (cups, utensils, etc). While compostable serviceware is better for the environment than plastic disposables, it, too, is becoming problematic as it is becoming harder and harder for commercial compost facilities to process these items. Thus, Greenbuild had to get creative in eliminating single use plastic entirely, while simultaneously reducing the use of compostable cups.



Greenbuild's Annual Waste Plan

Reduction of waste does not occur without intense planning and Greenbuild begins this process with each convention center at the time of contract signing, mapping out waste plans and committing to goals in advance. When the show gets into full planning (about 12 months out from the Event), the entire Greenbuild Sustainability Team begins bi-weekly waste planning meetings that engage all stakeholders that will be working during the convention (i.e. show decorator, building management, catering vendors, etc.). These meetings serve as an open forum to discuss Greenbuild's requirements and hash out any questions/challenges in advance with each vendor. They also allow each vendor to become abundantly familiar with the requirements and how to handle issues.



After months of work, the final Greenbuild Waste Plan is developed, which becomes the waste "bible" onsite. The 2019 waste plan was 22 pages covering all aspects of waste within the building including:

- Waste training processes & procedures for the 200+ volunteers Greenbuild & USGBC utilize to monitor trash bins at the facility and educate attendees on what qualifies as compostable, recyclable and landfill waste
- Signage for all trash bins, even in the restrooms, with instructions on what qualifies in each category
- Processes and procedures for building staff doing waste stream collection
- Processes and procedures for catering including the banning of single-use plastics (discussed in detail on page 13), the use of compostable silverware in lieu of plastic, and the ban of any individually packaged condiments at catered events
- Waste stream management in bulk during move-in and move-out on the expo floor

- The setup of back of house waste sorting stations
- A full waste plan specific to kitchens, concessions and catering, including a food donation program
- Composting locations
- Guidelines for materials that can and cannot be used in all exhibitor booths, including the completion of a Greenbuild Mandatory Exhibitor Greening Guidelines (GMEGG) survey.
- Partnership with local Habitat for Humanity for donations
- And much more

Review the Full Waste Plan Here

Greenbuild Waste Plan Objectives, Diversion Goals, and KPIs

Objectives

- Reduce the overall amount of materials used at Greenbuild
- Increase materials reuse
- Achieve Platinum TRUE certification for the 3rd year in a row*
- Minimize the amount of material sent to landfill
- Engage and educate Greenbuild stakeholders about responsible procurement and waste management

Diversion Goals

- Current Average Waste Diversion Rate at Georgia World Congress Center: **30%**
- 2019 Greenbuild Waste Diversion Rate Goal: **85%**, Stretch Goal: **91%** *TRUE Zero Waste Certification which requires a 91% diversion rate.*
- Landfill Waste per Participant: <11b
- Total Waste per Participant: <6Ib



*TRUE is a whole systems approach aimed at changing how materials flow through society, resulting in no waste. TRUE encourages the redesign of resource life cycles so that all products are reused. To achieve this, the lifecycle of the products and materials used to produce the show and those used by show partners had to be reevaluated. In order to meet the requirements of the certification, Greenbuild tracks its overall waste diversion, and then also adds in reduction and reuse to assess its TRUE Waste Diversion Rate. Total waste diversion is calculated on the waste diversion achieved at GWCC during Greenbuild Conference and Expo as well as the Celebration Event at the Mercedes Benz Stadium.

Key Performance Indicators (KPI) To evaluate performance and improvement, specific waste metrics tracked for 2019, we collected data on the weight in the following waste/reuse/donation streams:

- Landfilled materials
- Recycled materials
- Composted materials

- Donated materials (exhibitor & show mgmt)
- Donated food
- Waste diversion at venue (%)

- Waste diversion over facility baseline (%)
- Carpet used/returned to inventory (sqft)
- Graphics produced/returned to inventory (sqft)

Action Taken to Achieve Goals: Front of House Procedures

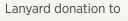


- Bin sets all labeled with "cheat sheets" to quickly educate users on what goes where
- Designated bin liners to easily delineate Landfill, Recycling & Compost for waste collectors
- Specialty bins provided for badges & lanyards
 Badges recycled
 - Lanyards donated to Salvation Army post-show
- Restroom paper towel bins labeled and separated for Recycle

Catered Events Procedures

- Food scraps composted
- Recyclables collected and moved to designated back of house recycling area

- 30 waste bin sets strategically placed throughout Expo Floor
 - Landfill-recycling-compost bins always paired together
 - Bins always placed in consistent order: Compost – Recycling – Landfill
- 60-70 waste bin sets in common areas
 - All sets contain Landfill-Recycling in consistent order
 - Compost bins added near food sales/concessions
- Majority of waste bin sets staffed with trained volunteers during event hours to educate attendees and ensure proper disposal is selected







- Food scraps and liquids
- Compostable clear cups (PLA or #7), utensils, napkins, and food containers from Georgia World Congress Center
- Compostable Coffee Cups and sleeves
- Paper towels and napkins
- Tea bags, sugar packets,
- wooden stir sticks



• Aluminum • Glass

RECYCLING

MIXED

- Plastics #1-6
- Paper, cardboard, newspapers, and brochures





- Plastic wrappers, condiment packets, chip bags, juice boxes
- Non-recyclable food containers
 purchased outside the
- convention centerCoffee cup lids
- Plastic bags

ANDFILL

- Plastic bags
 Non-Compostable coffee cups
- (Starbucks, Dunkin' Donuts etc.)

Action Taken to Achieve Goals: Back of House Infrastructure & Procedures

Waste Sorting Station

Setup in designated loading doc area with tables for sorting, tilts for swapping and full tilts for empties.

- Hand sorting implemented by hired vendor (United Services in 2019)
- Additional sorting manpower added during move-out
- 'Mystery' table/container for any items that don't fit into designated waste streams. Items individually reviewed for possible diversion
- Detailed sorting instructions agreed and disseminated to all parties pre-show (available for review in <u>Waste</u> <u>Plan</u>)

Kitchens & Concessions

- Excess food donated in partnership with Goodr*
- Food scraps and organics from the kitchen taken directly to compost open top designated location
- Landfill and mixed recycling including tin cans, aluminum, glass, plastic and cardboard taken to the waste sorting station
- Staging area for waste with a three-bin system created behind concession counters and food stations on the expo hall floor

Catering for Plated Functions, Buffets or Bars

- Food scraps and serviceware composted
- Recyclables including cans and bottles recycled
- All waste taken to designated sorting area for disposal

Food donation provided by



*About Goodr: At Goodr, we believe that hunger isn't a scarcity issue. It's a logistics issue. Even with many social programs that aim to end hunger, the current food supply chain ecosystem in the United States has failed to solve this problem which has grown into a national epidemic. Every year in the United States, we waste over 72 billion pounds of edible food, yet 42 million people are suffering from food insecurity. At the same time, over \$40 billion in tax benefits for businesses goes unclaimed annually. We believe the solution is simple: Feed more, waste less. Goodr provides a secure ledger that tracks an organization's surplus food from pickup to donation, delivering real-time social and environmental impact reporting analytics. The Goodr model aims to provide a triple-win solution by improving an organization's bottom line through charitable tax donations, reducing its greenhouse emissions from landfills and getting its edible surplus food to local communities in need.

Action Taken to Achieve Goals: Move-in / Move-out

- Cheat Sheet provided to all vendors listing types of items, waste stream details, and proper disposal location within the building
- Robust material donation plans developed & pre-reviewed with all vendors regularly
- Signage on all disposal locations





Action Taken to Achieve Goals: Stakeholder Communication

Attendees

- Email and social media campaign to all attendees and exhibitors about Bring Your Own Bottle Initiative and sustainability pledges
- Dedicated sustainability section on the Greenbuild website and mobile application showcasing overall show goals and information about efforts taken to achieve waste diversion
- Pre-Show Pledges collected digitally from attendees to commit to Green actions onsite, and the reusable, magnetized Sustainability Pledge Wall on the Show Floor



Vendors

Ongoing Vendor Sustainability Program

Show management works with each vendor to implement sustainable event best practices, and they set their own additional goals to minimize waste at Greenbuild. This is a three part program that requires reporting in the planning stages and post show on goal progress and achievement. Included here is one of the <u>Vendor's Sustainability Plan from Broadnax</u>, the Greenbuild Printer. Their efforts enabled Greenbuild to reduce additional paper/print waste.

- Stakeholder Responsibilities clearly delineated in Waste Plan and reviewed numerous times pre-show
- <u>Hotel Sustainability Program</u> all hotel partners that Greenbuild contracts with agree to enhanced sustainable operations, improved waste diversion and waste/ energy tracking.
- Delivering an onsite waste tour for Greenbuild future partners, venues and other miscellaneous event organizations to educate them on innovative processes and solutions Greenbuild has implemented to maximize waste and execute the most sustainable events.

Action Taken to Achieve Goals: Stakeholder Communication (continued)

GREENBUILD MANDATORY EXHIBITOR GREEN GUIDELINES (GMEGG)

Greenbuild's Mandatory Green Exhibitor Guidelines (GMEGG) is a required sustainability initiative to be completed prior to arriving on-site at Greenbuild. The idea is to evaluate how your exhibiting practices are impacting the environment via a short 22-guestion survey. We'll ask you about things like lighting collateral material in your booth, how you're shipping your booth and transportation while your staff is on-site with the goal of helping you ascertain small changes you can make to reduce your impact on the environment both at Greenbuild and ideally - at all other shows you're exhibiting in.

Exhibitors impact the success of our sustainability efforts on-site and exhibitors who meet all GMEGG requirements are considered for the Greenbuild Green Exhibitor Awards - an excellent way to gain visibility to your organization's sustainable practices and drive traffic to your booth. With each exhibiting company committing to sustainable exhibiting practices and making small changes to the way they exhibit, it adds up to a massive impact (see the results in our previous year Sustainability Reports).

COMPLETE GMEGG: We require each and every exhibitor complete the Green Exhibitor Guidelines program before you arrive on-site. Access your company's survey using your ecode by signing into your dashboard. We'll help you remember leading up to the show and we'll even have someone call you to assist if you'd like to complete it over the phone.

We'll make every effort to reach you and assist you in completing the survey prior to the show to ensure you have a great exhibiting experience

STATION ENERGY CONSERVATION

Booth Lighting The exhibitor will meet the following mandatory requirement: Incandescent bulbs are prohibited for use in any medium screw-bas 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 nurchase new hulbs: hulbs 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 - Booth lighting is not used

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 pu into sleep mode during non-expo hours. Electronic display equipment (i.e. flat screen displays) will meet one or more of the following requirements · Display is reused from previous show

· Display meets criteria for ENERGY STAR qualification or equivalent energy

🖧 BOOTH MATERIALS

Booth Structure, cont. 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 New display elements will contain a minimum 30% recycled content Booth structure is rented from the Greenbuild general service contractor, using requirements. standard inventory materials used throughout the year Flooring will not be used

- · All flooring is reused and has been in use for at least one year. 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
- Meet General Emissions Evaluation (Flooring products must be tested and ined compliant in accordance with California Department of Public Health (CDPH) Standard Method v1.1-2010.

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 use graphics and signage that have been used or will be used multiple
- Graphics and signage will be produced on 100% recyclable substrate and will
- not be foam core or PVC materials** Graphics and signage will contain a minimum of 30% 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 reuse through future exhibitions for at least one year.

New display elements will be 100% recyclable.

Communications & Collateral The exhibitor will meet the following mandatory requirement All printed collateral, if used, will be on 100% recyclable paper and will contain 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 · Promotional giveaways must match one of the following options:

Giveaway material contains 30% post-consumer recycled content. Giveaway are made from rapidly renewable materials (Rapidly renewable building materials and products are made from agricultural products that are typically harvested within a 10-year or shorter cycle. -i.e. Forest Stewardship Council certified wood flooring Promotional giveaways are 100% compostable.

Indoor Air Quality

efficiency program.

requirements: . No paints, sealants, coatings or adhesives will be used to maintain the boot contain a minimum of at least 30% recycled content)
 And the second of the second sec · Meet General Emissions Evaluation (paints, sealants, coatings, or ad products must be tested and determined compliant in accord Department of Public Health (CDPH) Standard Method v1.1-2010 Booth materials meet one of the following criteria:** - Materials contain third-party certified low- or zero VOC paint New flooring, counters and pane

* Required for new flooring, graphics, materials: Optional for reused flooring, graphics, materials

The booth construction and maintenance will meet one or more of the followin

Expand

Exhibitors

Continuing the Greenbuild Mandatory Green Exhibitor Guidelines for all exhibitors.

Highlights of this program include:

- Limiting promotional handouts
- Donation program
- Restrictions on booth structures and signage
- Waste management requirements
- Green Exhibitor Awards program with incentives provided to most sustainable exhibitors as voted on by Attendees and Show management through the Greenbuild Mobile App



Exemplary Performance: Southface Institute/ Lifecycle Building Center

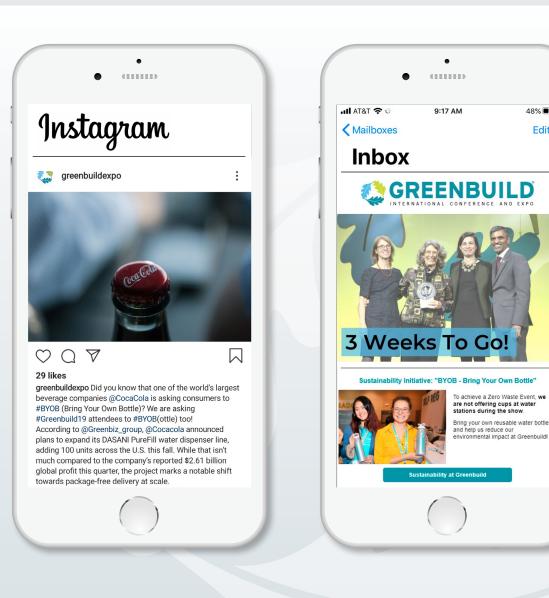
Bring Your Own Bottle Initiative

In an effort to maintain health & wellness of attendees, and also reduce the purchase of water in single use plastic bottles, Greenbuild offers water refill stations throughout the event. This has helped reduce the amount of single-use plastic at previous events, but also drives up the usage of compostable cups. In 2019, Greenbuild launched the Bring Your Own Bottle (BYOB) initiative 6 months prior to the show, boldly ditching the cups!

In every pre-show communication to registered attendees, Greenbuild reminded our constituents that they had to bring their own water bottle to the show. This message was reinforced via website, email, social media, throughout the show cycle. Onsite, the Greenbuild audience happily complied. In fact, the team kept one sleeve of compostable cups at our Info Desk for folks who desperately needed them and were pleasantly surprised when less than 20 were given out!







48%

Edit

Eliminating Single Use Plastic in 2019



To further supplement Greenbuild's waste plan, the team decided to also eliminate single use plastic available for purchase at the 2019 Atlanta event.

This included removing all single-use plastic bottles from the concession stands and catering menus at the Convention Center. Plastic water bottles were not even available for exhibitors to order for their booths. These two initiatives combined really pushed the envelope forcing Greenbuild attendees and exhibitors to walk the sustainability walk. They also helped to reduce the waste stream and better balance the compost stream.





Results

Greenbuild's 2019 waste diversion results were impressive! After calculating reuse and reduction, based on TRUE Zero Waste standards, the the event achieved a **91% diversion rate**. This includes an 82% diversion of of landfill waste, which is a striking 52% improvement over the annual venue baseline.

In fact, just 18% of Greenbuild's total waste went to landfill, with 82% being recycled, composted or donated locally:



Greenbuild also became one of the first events and exhibitions to receive the Events Industry Council Sustainable Event Standards Platinum Level Certification in the category for Event Organizers.

Event Sustainability Data	2019
GHG Emissions Per Participant (Ib)	548
Total Emissions Offset	100%
Energy Use at GWCC (kWh)	901,972
Renewable Energy Use (% of total)	0%
Total Waste per Participant (Ib)	5.6
Event Waste Diversion	82%
TRUE [™] Waste Diversion Rate	91%
Sustainable Signage Sourced (% of total)	94%
Total Donated Materials (Ib)	8030
Total Donated Food (lb)	297
Total Water Footprint (Gal)	2,018,751
Hotels – Walking Distance (% within 1 mile)	86%
LEED-Certified Venue Partners (#)	4
Exhibitors – GMEGG Participation (% of total)	78%
Exhibitors – Green Award Participants (#)	95
Local Food Sourced (<100 miles) (% by weight)	82%

Results

Evidence of Changed Behavior

Awards & Achievements



Events Industry Council Sustainable Event Standards – Platinum Level (one of two events internationally to achieve this honor)



Stakeholders utilizing Greenbuild waste streams on site.

Greenbuild community interacting at the sustainability hub pledging to make sustainable and less wasteful choices at the show.

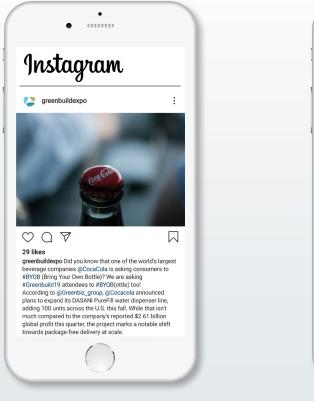


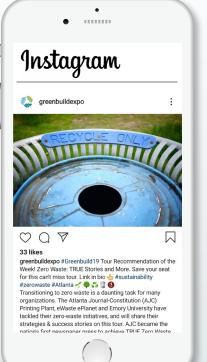


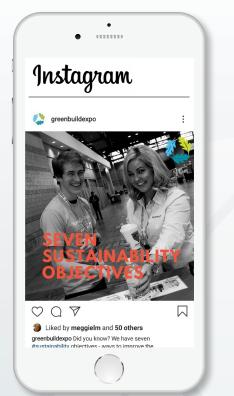


TRUE Zero Waste Platinum (3rd consecutive year)

Social Media Interactions









Total Reach across the Greenbuild Blog, LinkedIn, Twitter, Facebook and Instagram **75,000+**

Total Post Engagements (likes, mentions, shares, comments) for the BYOB/Waste Diversion campaign 500+

Lessons Learned



Finding commercial composting facilities that will accept compostable service ware is becoming increasingly difficult. Waste management infrastructure varies widely throughout the U.S. Early conversations with venue waste haulers is critical in helping us identify what materials will be more challenging to manage.



Carpet recycling waste haulers are becoming more difficult to source. We choose carpet with recycled content and our GSC partners do take back and reuse carpet and padding, there is still scrap carpet (that can be in excess of a ton of materials) that can't be salvaged. We are looking at ways to drastically reduce carpet use for future Greenbuild events.



All stakeholders are eager to do their part in minimizing waste at Greenbuild. There was no pushback on the lack of cups at water stations. In fact, we received overwhelmingly positive feedback from all stakeholders in this new program, making it a new Best Practice.



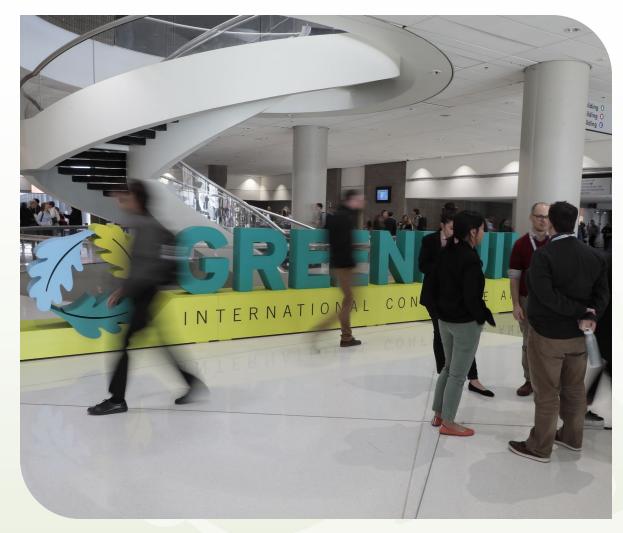
How Greenbuild Plans to Continue Improving

Greenbuild will continue seeking the most sustainable options to use in place of single use plastic. Part of this process will be attempting to source compostable service items that do not include any type of coating and are rapidly compostable.

Conclusion

Greenbuild's Waste Plan is second to none in the tradeshow/conference industry, each year achieving record high diversion rates, despite moving to a new city and overcoming unique challenges. Greenbuild has been tracking its waste data for years and always seeks creative ways to improve waste diversion, not because they have to, but because it's the right thing to do. Greenbuild doesn't keep its best practices to itself in an effort to win awards, either. On the contrary, the show puts out a comprehensive <u>Sustainability Report</u> each year, along with a <u>Guide to Green Meetings</u> for the first time in 2019 in an effort to share its best practices and improve the performance of every event in the tradeshow/conference industry.

The event innovated and made great strides in 2019 by eliminating single-use plastics from the Georgia World Congress Center and is excited to build on these practices with additional innovations and more sustainability measures in 2020 in San Diego. None of this would be possible without the help and support of each venue Greenbuild visits. The event would like to thank all its partners and vendors for their constant commitment to the mission. The results speak for themselves.



Appendix



Greenbuild becomes first of 2 events to achieve Events Industry Council Sustainable Event Standards Platinum Level.

- Events Industry Council Sustainable Event Standards Major changes have been made to increase the EIC Sustainable Event Standards' ease of use, strengthen social responsibility considerations and recognise innovation and exemplary performance. These standards have replaced the APEX/ASTM Environmentally Sustainable Meeting Standards.
- Additional information and Greenbuild 2019 Platinum Certification Announcement

Additional Links

- Sustainability Report
- Waste Plan
- Greenbuild Mandatory Exhibitor Green Guidelines
- <u>Vendor Sustainability Plan Broadnax Printing</u>
- Hotel Sustainability Checklist
- Guide to Green Meetings



TRUE Zero Waste - In 2019 Greenbuild achieved its 3rd consecutive TRUE Platinum certification through thorough a comprehensive waste reduction plan. TRUE is a whole systems approach aimed at changing how materials flow through society, resulting in no waste. TRUE encourages the redesign of resource life cycles so that all products are reused. To achieve this, the lifecycle of the products and materials used to produce the show and those used by show partners had to be reevaluated. In order to meet the requirements of the certification, Greenbuild tracks its overall waste diversion, and then also adds in reduction and reuse to assess its TRUE Waste Diversion Rate.

- Greenbuild 2019 TRUE Zero Waste Platinum Certification
- Information about the TRUE Zero Waste program for events
- TRUE Zero Waste Education offered at Greenbuild 2019
- Greenbuild 2019 TRUE Zero Waste Platinum Certificate