TRUE FACILITY CASE STUDY

U.S. Green Building Council Headquarters Office Washington, DC USA

Photo: © Halkin Mason Photography

Headquarters Office U.S. Green Building Council (USGBC)

Certification level: Platinum

Diversion rate upon certification: 94.3%

Facility location: Washington, DC, USA

Type of facility: 10-Story Commercial Office Building

Facility operations: Commercial Interior Space

Website: usgbc.org

Contact person: Director, Zero Waste Team zerowaste-facilities@usgbc.org



This project is a space renovation. USGBC downsized from two spaces totaling 59,756 square feet in two different locations to 16,498 square feet in one commercial interior location.

During the renovation, we employed strategic demolition to save existing materials such as ceiling tiles, drywall, glass panels, lock hardware, shades, terrazzo, and wood. We also reused cased goods furniture for offices, workstations and freestanding furniture throughout with minimal new furniture purchased to reduce embodied carbon. We reused office supplies and kitchen supplies to divert as much from landfill as possible. We donated and auctioned furniture and equipment that could not be reused in the new office.

The new space has incorporated bins built into the millwork for all waste streams and placed them in common areas to facilitate recycling and composting. We have developed policies and procedures and training materials for our space to support our staff in achieving our zero waste goals.

Why TRUE Certification

Implementing and managing a zero-waste program is an important facet of the USGBC commitment to transforming how buildings and communities are designed, built and operated. Waste reduction is a key priority for USGBC. We know that it will take each one of us committing to be a part of the solution by incorporating zero waste practices into our daily life to achieve this important goal.

Key motivations:

- We wanted our project and new office to be a replicable example for other projects.
- We developed innovative strategies to minimize our carbon footprint.
- We are committed to the education of our staff and visitors to promote zero waste.

Biggest wins

TRUE certification really pushed us to look for ways to improve in conserving resources, enhancing training, and reducing our impact on the environment.

We are proud that our new office was designed and built using 80% reused materials from our former space.

- We hope that our zero-waste project will serve as a template for other projects and inspire them to achieve zero waste certification.
- Our policies and procedures developed during our project will provide the structure needed to continue moving forward to meet our zero waste goals.
- We hope that through the educational programs developed for our staff and our educational tour program we will provide takeaways for attendees that may be implemented in their home or in their own office.

Credit category: Redesign

Construction

- Compost and recycle bins were provided and monitored during the renovation construction work.
- Waste collection data was reviewed monthly to determine any changes needed to bins or collection strategies.
 - Example: Weekly compost pick ups changed to every other week which reduced expense, transport costs and number of bags used.

Office space

- We worked with the architect to specify right-sized bins based on past waste audit analysis.
- Bin signage includes both easy to read images and text for all waste streams.
- Recycling storage bins are monitored daily during the work week using data tracking sheet to note how full the container is and when the contents are collected.
- Supply chain reviews have reduced our waste by purchasing less frequently and in bulk.
 - Example: Instead of purchasing bottles or cans, we order juice, lemonade and tea through catering vendor and serve in reusable glass pitchers.



Bins are incorporated into the millwork for all waste streams and placed them in common areas to facilitate recycling and composting.

Credit category: Reduce

- We are committed to reducing the amount of packaging entering our space by 8% by 2029.
- Software allowed us to go paperless for our construction meetings.
- We provide china, silverware and glassware for staff eliminating the need for paper plates, plastic cups and plastic utensils.
- An inventory tracking system monitors all purchases for the office to ensure order only what is needed.
- Supplies of coffees, creamer, and any product with an expiration date are organized by date so earliest expiration dates used first to reduce waste.
- Catering Guidelines do not permit plastic single use service ware to bring food in or serve it.
- The need for cardboard boxes is reduced through use of reusable shipping containers for supplies and equipment sent to conferences and durable plastic crates for inner office moves.



The single multifunction printer/copier reduces paper and toner needed; set to duplex printing as default TRUE

Credit category: Reuse

- Office renovation reused finishings, equipment, furniture, and office and kitchen supplies. Goods and furniture not used in new space were donated and/or auctioned off to prevent them from going to the landfill.
- During construction, any pallets delivered were quickly unloaded and sent back on the same truck they were delivered. Recycled pallets were used to store equipment and materials for reuse during the renovation.
- Coffee supply vendor uses reusable durable plastic containers; bi-monthly ordering reduces fuel for deliveries.
- Hard plastic containers used to ship and return trade show materials, equipment and supplies for conferences and events.
- Reusable plastic crates available for internal moves or temporary storage to avoid using cardboard boxes.
- Staff place extra unwanted office supplies and materials in a dedicated cabinet in Copy/Print/Mail room for others to use.
- The staff kitchen area has zero individually packaged items, only bulk products.



Reusable glassware, china and silverware provided and encouraged for staff and required of all catered events.

Credit category: Compost (Re-Earth)

- Separate compost bins to collect organic waste are available beside all waste receptacles in the office.
- Signage using text and images of what is appropriate to compost is provided on the compost bin and around the office space to educate and encourage the correct disposal.
- The minimal trimming and clipping needed from the living plant wall and freestanding plants throughout the office are composted.



Compost bin signage reminds staff and guest 'If it grows, it goes plus meat and dairy."

Credit category: Recycle

- Some paper documents are shredded and recycled but most are placed in paper recycling waste stream bins.
- We host paperless functions and meetings when able. Architectural drawings during construction were provided on web-based platform so all team members could access without using paper.
- The multifunctional printer/copier device is set to duplex as a default to reduce paper use.
- Right size catering orders for meetings and events to limit the amount of leftover food. Any leftover food is provided to staff to eat on site or take home or placed in compost.
- Many items polymers, metals, glass are reduced by not purchasing for use in the first place.
- Staff are trained that any items brought into our space (e.g., plastic bottles, soda cans, glass containers) are placed in the recycling bins.
- Wood and ceramics not reused as part of the renovation were recycled.
- The carpet tiles in our former space were recyclable and were returned to the vendor as part of their take back program.



Credit category: Zero Waste Reporting

- We tracked diversion data for a baseline year and the most recent 12 month period.
 - Baseline year: December 2020 November 2021
 - Diversion data most recent 12 months: May 2022
- A climate impact report was generated.
- Full waste audits are performed quarterly. One audit per year is an Educational Waste Audit for staff to join, ask questions, and learn how their actions impact our office performance.



Chart 1: Breakdown of the total waste stream by the material stream categories all audited material types fit

From 2022 Waste Audit Report

Credit category: Diversion (Min. 90%)

- Our diversion rate for the most recent 12 months was 94.3%.
- Our janitorial team weighs bags when they are removed and records the data on our waste tracking sheets.
- Our Zero Waste team monitors these waste tracking sheets closely to ensure the data is recorded accurately.
- The Zero Waste team works closely with our janitorial team to provide training for new hires to maintain accurate diversion data.



Facilities staff work with janitorial team to ensure waste correctly tracked.

Credit category: Zero Waste Purchasing

- An Environmentally Preferred Purchasing (EPP) policy was created and reviewed quarterly. Guidelines include:
 - Prioritizing purchase of durable goods to reduce the purchase and use of disposable goods in the office.
 - Ongoing Consumable Purchases must include postconsumer recycled content and strive for products with 100% postconsumer recycled content.
 - Paper and wood products must be certified by the Forest Stewardship Council or USGBC-approved equivalent, and be 100% post-consumer recycled.
 - Preference given to lightly used products prior to purchasing new materials. (e.g., repair laptops and monitors before purchasing new equipment).
- The Facility Management team developed a Product Purchasing Tool to help staff select pre-approved sustainable products for office supplies.

- The Facility Management team places, verifies and tracks product orders to ensure we meet our EPP and Zero Waste guidelines.
- We purchase in bulk when possible to cut down packaging required (e.g., hand sanitizer, paper towels, coffee and tea products, and hand soap)
- Both the multifunctional device (printer/scanner/ copier/fax) and postage meter are leased to reduce waste as the units return to the vendor at end of the lease.
- Cold brew and kombucha are provided on tap for staff. The kegs are picked up, cleaned, stocked and reused so there is no waste. The kegerator is rented so there is no equipment to dispose at the end of its use.

Credit category: Leadership

- Leadership set zero waste goals as part of the office renovation design workshops and planning meetings
- The Director of Facilities meets monthly with the Zero Waste Team and the COO to review reporting on waste stream generation and diversion, and discuss recommendations for improvement.
- Staff are engaged and encouraged to participate in our zero waste initiatives. A dedicated e-mail address used for suggestions and questions. Staff may also share feedback or ask questions at All Staff meetings.
- Employees who contribute to our zero waste reduction and diversion performance are recognized in our staff newsletter. Staff who win activities during Earth Day celebration receive sustainable gifts.
- We require vendors to take back and properly dispose of their products or packaging (e.g., multifunctional device in printer room has vendor take back program for toner cartridges.)
- We host local events for Facility Managers, Property Managers and members of the community to provide education and networking related to zero waste and sustainability. Members of our upper management team also present at community events and conferences to promote zero waste initiatives.



Credit category: Training

- Onboarding orientation training for staff, temporary staff and interns includes zero waste information that explains the types of waste streams and what is acceptable for each bin.
- Zero waste goals, policies, and updates are communicated to all staff through emails, presentations, waste audit reports, Sustainability Guide, interactive online course with quiz, video wall, and ongoing trainings.
- Games and activities during Earth Day celebrations provide staff fun ways to learn and practice sorting waste into the correct bins.
- Collection bins are built into cabinetry. Easy to read text and visual signage provide ongoing training/support tool on proper ways to divert waste.
- We train product vendors to ensure compliance with and understanding of the Zero Waste, Catering, and EPP policies.
- Relevant zero waste support goals are included in annual performance goals for staff on the Facilities team.







Staff games and training in person and online.

Credit category: Zero Waste Analysis

- Full waste audits are conducted quarterly. These help us analyze how well staff understand the process and where they need more support.
- The results are documented in reports with pictures of findings and recommendations to improve our performance. The Zero Waste team reviews to implement new strategies as needed.
- Waste audit reports are shared with all office staff. Photos and documented examples of mis-sorting help staff learn how to correctly sort and place waste stream items to avoid future issues.
- One of the quarterly audits each year is an Educational Waste Audit. Staff are invited to participate in the process. They assist in picking up bags labeled with waste stream type and location and assist the lead auditor in sorting and weighing materials. It is an opportunity to ask questions, discuss findings and gain clarity on best practice going forward. Feedback from staff has been very positive on this opportunity to be actively involved in our zero waste efforts.



2022 Waste Audit

Credit category: Upstream Management

- USGBC has long-standing relationships with many of its vendors. We find opportunities to work with them as part of our mission to promote sustainability, zero waste policy and operations.
- We eliminate non-recyclable packaging through a combination of office policies and ongoing cultivation of vendor relationships.
 - Example: Coffee creamer is delivered in plastic crate that is taken back for reuse.
- Catering guidelines and EPP reduce single use items, consolidate deliveries, and use durable goods.
- Vendors are requested to share their zero waste goals and sustainability strategies as part of the RFP process.
 - Example: The RFP received for a multifunctional printer/copier device included vendor's sustainable initiatives and toner recycling program.
- Preference given to vendors with waste reduction practices and zero waste policies in place.



Adding TerraCycle upcycling program allows us to recycle waxy cardboard, bubble wrap and other common soft packaging materials not accepted in general recycling stream and move towards 100% recyclable packaging.

Credit category: Hazardous Waste Prevention

- We follow all regulations and train Facility Management (FM) staff to properly identify, handle and track hazardous materials.
- Our EPP policy focuses on reducing generation of items such as batteries and toner cartridges. We implemented the purchase and use of rechargeable batteries.
- Majority of lamps in the office are LED. The minimal fluorescent lamp waste is labeled, securely stored, and shipped to authorized vendor for proper recycling.
- Batteries are collected, labeled, stored and shipped to authorized vendors for recycling or disposal.
- Working laptops and IT equipment not needed are donated. Broken equipment is recorded for waste tracking and stored until shipped to an authorized vendor for proper disposal.
- Staff are permitted to bring universal waste items from home that matches what we already collect (e.g., batteries, lamps, and e-waste).



Example of a bin used to hold hazardous waste until it is picked up by an authorized vendor for proper disposal.

Credit category: Closed Loop System

- Our EPP requires paper and wood products be certified by the Forest Stewardship Council or USGBC-approved equivalent, and be 100% post-consumer recycled. When not available, alternatives must contain at least 30% post-consumer recycled material.
- We purchase paper towels and tissue paper with a minimum of 20% post-consumer recycled content for janitorial products.
- Our EPP strives for products with 100% postconsumer recycled content, whenever possible. When that is not possible, the content of purchases must meet or exceed the levels listed in the U.S. Environmental Protection Agency Comprehensive Procurement Guidelines.



Example of copy paper and tissues purchased for office use.

Credit category: Innovation

- We participate in an upcycling program with TerraCycle. Collected items are sorted and processed into raw materials that can be reused.
- Our Zero Waste Policy has steps and strategies to increase diversion by at least 1% annually to achieve 100% diversion by 2029.
- Staff are encouraged to offer recommendations on how to meet zero waste goals.
- Reuse was a strategic part of the design of the new space. This is unusual and not done very often. The TRUE Review team awarded USGBC an Innovation point because reuse was intentionally designed into the new office. Reuse was included in the architectural drawings for demolition, for furniture, and salvaged materials such as wood, carpet and terrazzo tile.
- The TRUE Advisor on staff is an active member of Zero Waste team and TRUE certification team.



Salvaged beautiful, historically significant wood from the former stairway (left) was reused in two spaces in the new office (below).





USGBC's commitment to environmental stewardship begins with our own actions. By reusing over 80% of our furniture and diverting more than 94% of our waste in our headquarters, we've reduced both operational and embodied carbon, and minimized our impacts on the environment and our community.

We're proud of the commitment and actions taken by our entire team to meet the rigorous standards of TRUE certification.

Peter Templeton, President & CEO, USGBC/GBCI/Arc



The USGBC Zero Waste team