



American Society of
Landscape Architects



Sustainable Event Management Report

ASLA 2023 Conference on
Landscape Architecture

Sustainability Partner of ASLA



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Front cover image: Minneapolis Convention Center (Image Credit: Meet Minneapolis).

The Minneapolis Convention Center (MCC) is recognized for its environmental responsibility in operating and managing the venue, receiving LEED v4 Certification for Existing Building Operations and Maintenance by the U.S. Green Building Council. The MCC also achieved Level One Certification with the ASTM Standard for the Evaluation and Selection of Venues for Environmentally Sustainable Meetings, Events, Trade Shows and Conferences.

The MCC's Urban Meadow Plaza was awarded SITES® Silver certification under the Sustainable SITES Initiative® rating system. The MCC Plaza is the nation's first SITES certified project to be located at a convention center and the first ever SITES certified project in the Upper Midwest.



About

Attendees consistently rate the EXPO as the “most valuable event” at the conference each year, which reveals an engaged membership base ready to partner with ASLA to enact change at the conference.

About ASLA

Founded in 1899, ASLA is the professional association for landscape architects in the United States, representing more than 15,000 members. Landscape architects lead the planning, design, and stewardship of healthy, equitable, safe, and resilient environments.

The ASLA Conference on Landscape Architecture is the largest gathering of landscape architects and allied professionals in the world, coming together to learn, celebrate, build relationships, and strengthen the bonds of the professional community. The conference draws thousands of attendees and over 250 exhibitors each year.

Scope

In partnership with ASLA, Honeycomb Strategies worked with the conference team and key vendor partners to collect sustainability metrics and qualitative information on impacts for the ASLA 2023 Conference at the Minneapolis Convention Center in Minneapolis, MN.

This information is used to show environmental impacts and opportunities and progress from the baseline impacts of the 2022 conference. ASLA has developed a comprehensive sustainable event management strategy for their annual conference. This strategy focuses on continual improvement over time and includes goal and objectives setting, focused action plans, and implementation. It is understood not all impacts are under the direct control of the conference team, but rather under their influence.

This report outlines Scope 1, 2, and 3 emissions for the ASLA 2023 Conference on Landscape Architecture and shows the change in impact from the ASLA 2022 Conference. ASLA is sharing this report in the spirit of full transparency and as a learning opportunity for members, exhibitors, and partner organizations.

Sustainability Commitments

These short- and long-term commitments have goals, objectives, and key performance indicators (KPIs) aligned to measure progress with the ASLA Climate Action Plan and are specific to the yearly ASLA Conference.

Practice: Scale Up Climate Positive Approaches

Carbon Drawdown

We commit to zero emissions and doubling sequestration by 2040.

Climate Resilience

We commit to enhancing capacity, biodiversity, and resilience of livable cities and communities.

Equity: Empower Communities to Achieve Climate Justice

Cultural Empowerment

We commit to learning from cultural knowledge systems and practices of care.

Climate Agency

We commit to advocating for climate equity and social well-being.

Advocacy: Build Coalitions for Climate Action

Climate Leadership

We commit to galvanizing climate champions.

Global Alliance

We commit to advancing the United Nations Sustainable Development Goals and expanding international collaboration.



ASLA President (2022-23), Emily O'Mahoney, FASLA during the General Session (Image Credit: ASLA)

2023 Conference

Per Attendee Conference Impacts

	2022	2023
Travel (MTCO ₂ e)	0.48	0.63
Energy (MTCO ₂ e)	0.003	0.013
Total (MTCO ₂ e*)	0.50	0.68
Waste (pounds)	14.34	23.83
Water (gallons)	Not Provided	242.45

*MTCO₂e stands for metric ton of carbon dioxide equivalent, a measure of global warming potential.

2023 Conference Stats

- Show dates: October 27-30, 2023
- Location: Minneapolis Convention Center
- Total registrants: 5,294
- Number of exhibiting companies: 252
- Event space: 577,529 square feet
- Number of occupied room nights: 6,511

2023 By the Numbers

- 29,850 pounds of materials (park benches, playground materials, pavers, plants and trees) were donated to the local Habitat for Humanity Restore.
- 35% of flooring was multi-use classic carpet.
- 1,100 square feet of graphics were saved for reuse.
- 1,226 metric tons of carbon dioxide equivalent (MTCO₂e) were offset through Green Minneapolis.
- 71% waste diversion rate.
- 706% increase in recycling rate and 165% increase in compost rate due to waste diversion efforts.
- 38% of education sessions focused on how climate is affecting the industry.



Plaza of the Minneapolis Convention Center (Image Credit: Meet Minneapolis)

CARBON FOOTPRINT

ASLA is committed to reducing the emissions of the conference and ASLA headquarters operations by 20 percent by 2024. Furthermore, ASLA commits to achieving zero emissions for the conference and operations by 2040.

	2022	2023	% Change
Travel	2,928.52	3,332.63	+14%
Lodging	89.83 ¹	159.34	+77%
Venue Energy	14.87 ²	61.41	+313%
Freight	14.19 ³	22.36	+58%
Meals	Data not provided	7.06	
Waste	6.28 ⁴	3.35	-47%
Paper	Data not provided	1.95	
Shuttles	2.28	1.09	-52%
Forklifts	1.06	.52	-51%
Total MTC02e	3,057.03⁵	3,589.71	+17%

1. 2022 lodging nights emissions updated to reflect final data from vendor
2. 2022 Venue Energy revised to include natural gas and steam
3. 2022 freight data was updated from Freeman in March 2024
4. 2022 waste revised to include donations
5. 2022 data was recalculated using 2024 data measurements for comparison

All data in this table is reported in MTC02e and represents the total emission produced.

Carbon Emissions by Scope

Gases that trap heat in the atmosphere are called greenhouse gases (GHG). Greenhouse gas emissions are the result and are categorized in three Scopes.

Scope 1: 2.36 MTC02e

GHG from natural gas	0.76
GHG from courtesy shuttles	1.09
GHG from forklifts / booms	0.52

Scope 2: 60.65 MTC02e

GHG from electricity MCC	0*
GHG from electricity Hilton	8.06
GHG from steam MCC	46.41
GHG from Chilled Water	6.18

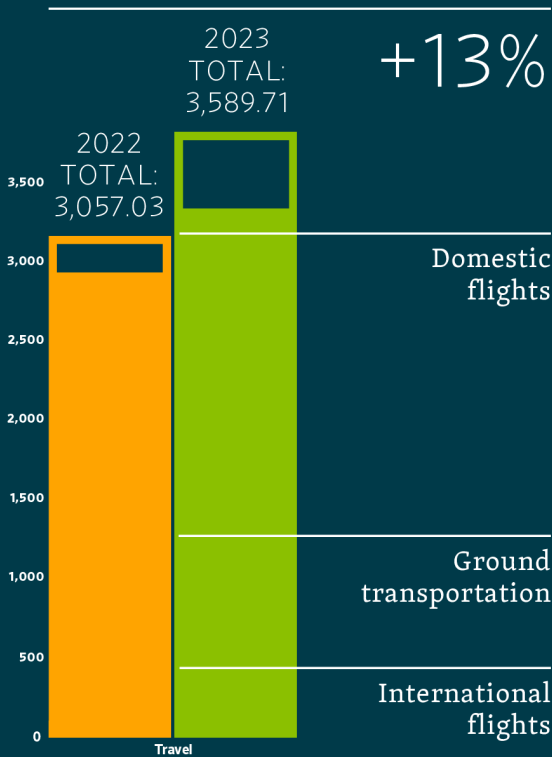
Scope 3: 3,526.69 MTC02e

GHG from air travel	2699.42
GHG from auto travel	633.21
GHG from lodging	159.34
GHG from paper consumption	1.95
GHG from waste	3.35
GHG from freight fuel	22.36
GHG from animal-based meals	4.52
GHG from planet-based meals	2.54

*Electricity from the grid is 100% renewable energy and REC's are retired on MCC's behalf.
Note: All measurements in MTC02e

CARBON FOOTPRINT

Increases to Note in Carbon Emissions Data



Graph displays total event carbon emissions per year. Solid boxes indicate percentage of totals from transportation.

Travel

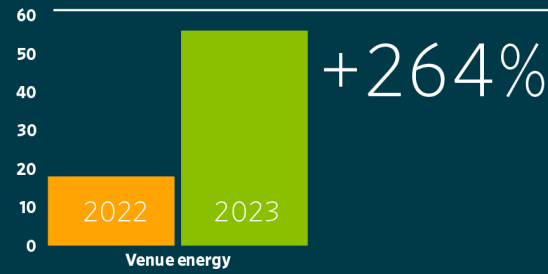
Travel emissions for 2023 include transportation to/from the Minneapolis–Saint Paul International Airport and the Minneapolis Convention Center, which were not measured in 2022. Total participant numbers were also larger in 2023.

See additional travel data on the following page.

Freight

Additional data points were collected in 2023. For 2023, ASLA is reporting on all the freight information related to the conference provided by Freeman, not just those trips ordered by show management and exhibitors. As a result, the total carbon emissions attributed to the conference freight increased compared to 2022.

- 10 more trailers were used and traveled a farther distance to/from the regional warehouse.
- 17 fewer trailers were used and traveled a farther distance to/from the local warehouse.
- 6 more trailers were used for advanced freight.
- Trailer and miles data to/from the carpet mill in Georgia was added to calculations in 2023.



Venue Energy

While more energy came from solar than traditional energy sources, steam was an energy source in 2023, which has a high carbon emissions factor and resulted in a large increase in venue-related energy emissions (read more under Energy).



Lodging

There were fewer hotel nights in 2023, but the carbon emissions were higher due to the sources of energy provided by utilities in Minnesota (read more under Energy).



CARBON FOOTPRINT

A Closer Look at Transportation Emissions

Total Travel Emissions: 3,332.63 MTCO₂e

- International flights: 529.26 MTCO₂e
- Domestic flights: 2,170.15 MTCO₂e
- Ground transportation: 633.21 MTCO₂e

15%

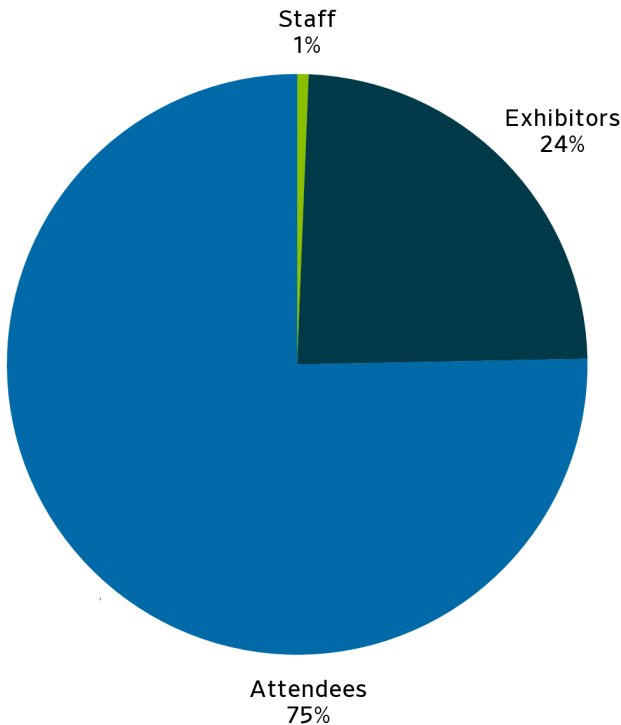
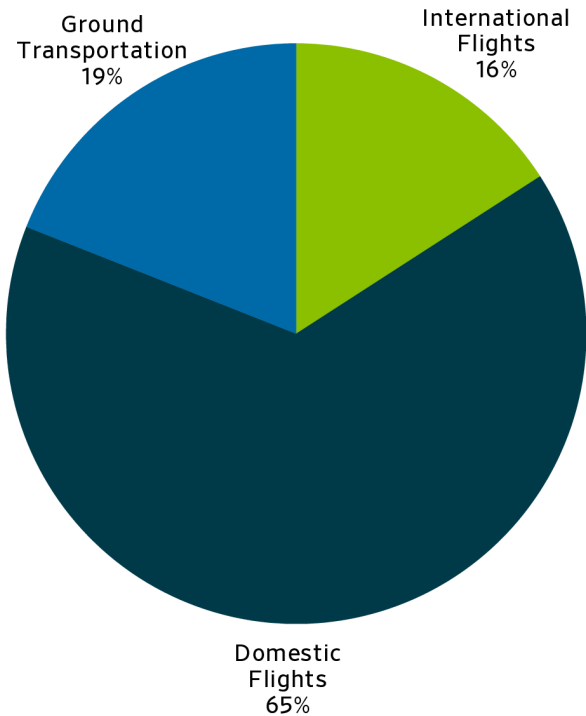
of attendees traveled from Minnesota

9%

of attendees traveled from California

5%

of attendees traveled from New York



21.23

MTCO₂e from 35 ASLA staff

2,509.75

MTCO₂e from 3,987 attendees

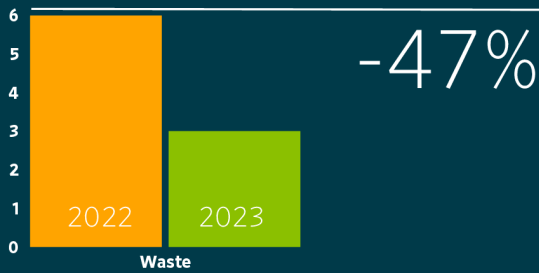
801.65

MTCO₂e from 1,307 exhibitors

There is an opportunity to ask in registration if participants have offset their travel to the conference to ensure ASLA does not double-up on purchasing credits for those trips already offset.

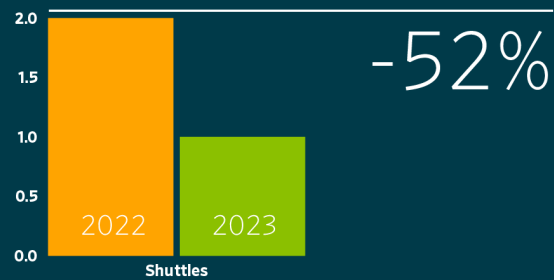
CARBON FOOTPRINT

Decreases to Note in Carbon Emissions Data



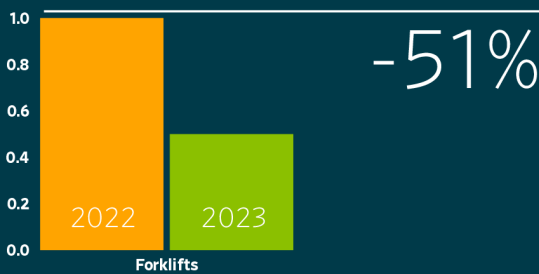
Waste

The 2023 conference generated less total waste. A larger percentage of the total were managed by recycling, compost, or reuse, which have lower carbon footprints.



Shuttles

The number of miles the shuttle buses drove in 2023 was much lower than 2022. In 2022, 1,553.8 miles were driven and in 2023, 743 miles were driven.

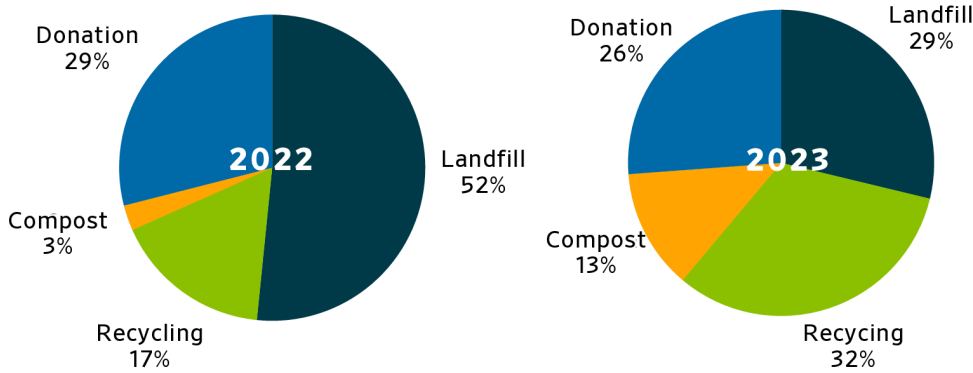


Additional Positive Carbon Contributions

- 1,226 carbon offset credits (1,226 MTCO₂e) were retired on behalf of ASLA.
- ASLA partnered with Green Minneapolis to provide attendees the opportunity to offset their carbon emissions associated with the conference. 100% of the contributions went to a project operated by the Minneapolis Park and Recreation Board. 23,755 trees were planted on public land in the City of Minneapolis, the first urban carbon sequestration project in Minnesota. These top-tier, ICROA-accredited, City Forest Credits-certified offsets are part of the Twin Cities Climate Resiliency Initiative.
- Green Minneapolis' offsets are generated from local projects that not only sequester carbon, but also mitigate heat islands, reduce energy consumption, reduce air pollution, and stormwater discharge -- directly improving environmental equity for people living in the Twin Cities.
- The lead sponsor of ASLA 2023 Conference carbon offsets was Bartlett Tree Experts.

WASTE

Waste is area of emissions and impact controlled by ASLA through procurement polices and regulations that cover what is brought into the EXPO by exhibitors.



	2022	2023	% Change
Total Waste	44.08	63.09	+43%
Landfill	14.3 landfill	16.41 waste to energy	+15%
Recycling	2.29	18.46	+706%
Compost	2.74	7.25	+165%
Donation	24.75	14.96	-40%
Waste Diversion Rate	68%	71%	+4%
Total MTC02e	6.28	3.35	-47%

Waste quantities in this table are reported in US tons unless otherwise noted

Practices at the Minneapolis Convention Center (MCC)

- MCC burns trash for energy, which has a lower carbon footprint than landfill. The chart lists this as landfill waste measured in tons, but adjustments are made in calculations for the lower emissions factor.
- MCC recycles cardboard, paper, cans, bottles, pallets, kitchen grease, construction materials, and plastic wrap.

Recommended Next Steps

Procurement

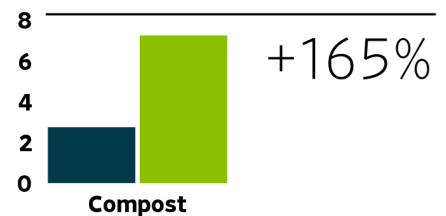
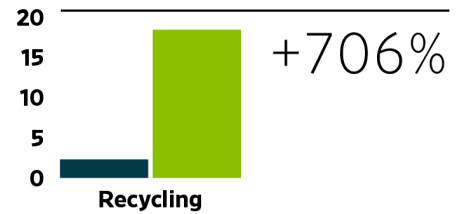
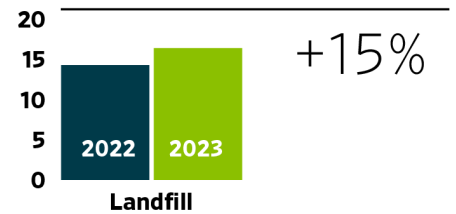
Implement a Zero Waste Policy for all ASLA-procured items.

Exhibitors

100% participation requirement for Exhibitor Climate Commitment.

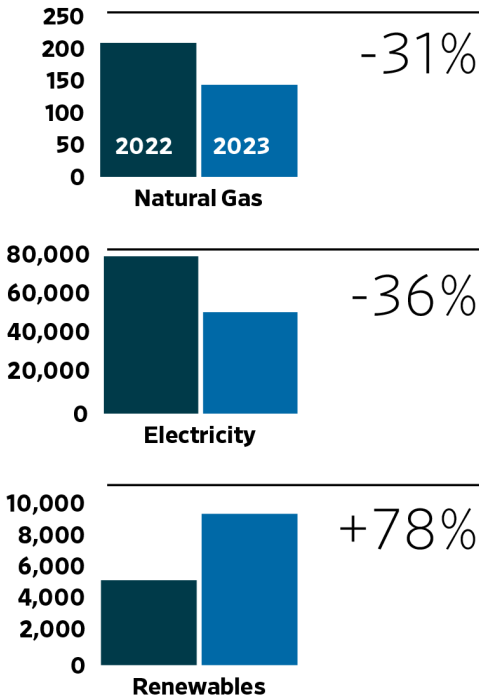
60%
of total trash came from exhibits on the EXPO floor. Booth audits can proactively reduce this financial and environmental cost.

Pallets wrapped with excess, hard to recycle materials (Image Credit: Honeycomb Strategies)



ENERGY

The Minneapolis Convention Center is powered through Xcel’s Green Tariff program, Renewable Connect. All electricity from the grid for the ASLA 2023 Conference was 100% renewably generated from off-site solar and wind resources. Renewable energy certificates (RECs)* are retired on behalf of the venue.



	2022	2023	% Change
Natural Gas: Terms	208.2	143.14	-31%
Electricity: kWh	78,368	50,489	-36%
Steam: MMBtu	.08	699.01	+873,663%
Chilled Water: Ton-Hr	0	11,749.2	
Renewables: kWh	5,208	9,280	+78%
Total MTCO2e	18.19	66.22	+264%

Electricity consumption GHG emission factors vary by state due to the energy source mix. In Minnesota, the emissions factor is 377.2 g CO₂e/Kwh. This is higher than California (site of 2022 conference) at 217.9 g CO₂e/Kwh. The Minnesota Convention Center reported 207,639 kWh of energy use, and the Hilton reported 50,489 kWh. The higher coefficient for Minnesota emissions in part explains the increase in energy numbers for 2023.

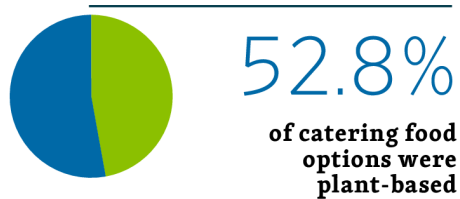
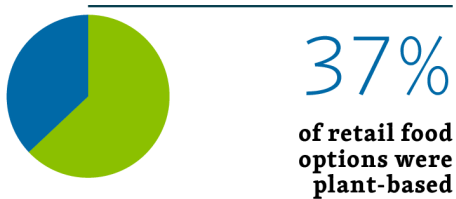
**A renewable energy certificate, or REC, represents one megawatt-hour (MWh) of electricity generated and delivered to the electricity grid from a renewable energy resource. It is a market-based instrument that represents the property rights to the environmental, social, and other non-power attributes of renewable electricity generation since electricity received through the utility grid doesn't indicate origin or how it was generated.*

Recommended Next Steps

Venue Selection

Maintain partnerships with venues implementing renewable energy technology and energy-saving practices as part of their standard operating procedure.

FOOD AND BEVERAGE



100% compostable serviceware was used for all food and beverage functions with single use serviceware

Recommended Next Steps

Packaging

Choose food and beverage that do not require additional packaging, like pre-packed chips and condiment packages. Include this requirement as part of vendor agreements.

CARPET AND FLOORING

There was a noticeable increase in the use of vinyl and custom flooring used by exhibitors and not ordered through Freeman. Multiple brands on the EXPO floor indicated that reusable flooring is part of their product offerings and wanted to showcase them. They reported that their custom flooring is packed and reused at the next EXPO. There is an opportunity to use vendor partners from within ASLA membership to supply sustainable booth flooring.

8,000

Sq ft of Visqueen used to protect flooring before the EXPO opened

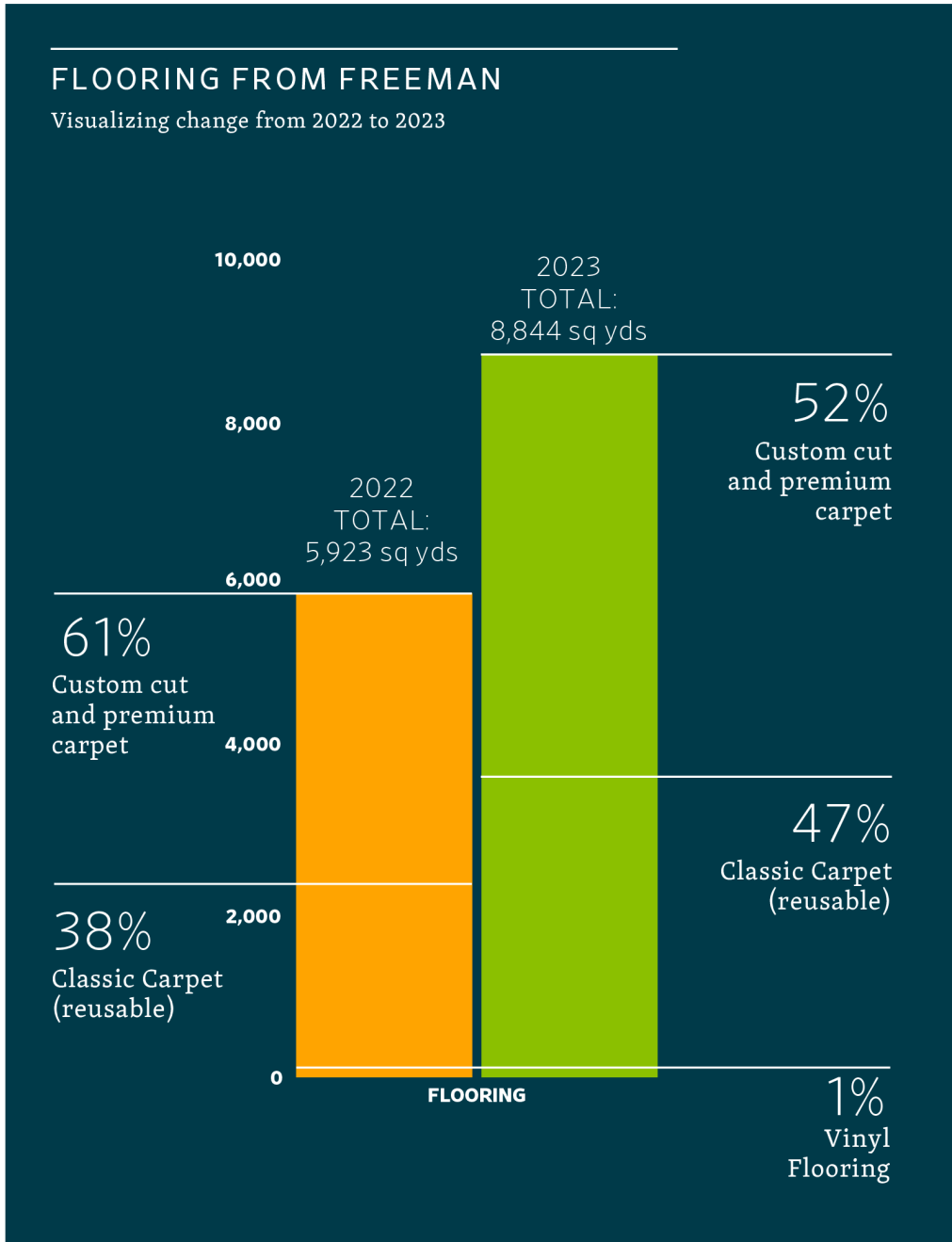
200

Lbs of soft plastic was baled to be recycled

3,115

Total sq yds of carpet padding

Use of classic carpet (a reusable offering) increased 9% from ASLA 2022.



Recommended Next Steps

Curate Flooring Offerings

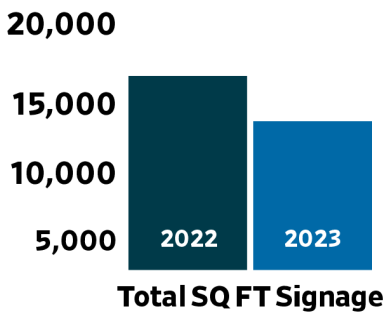
Work with Freeman to include only zero waste flooring options in the exhibitor kit.

Industry Partnerships

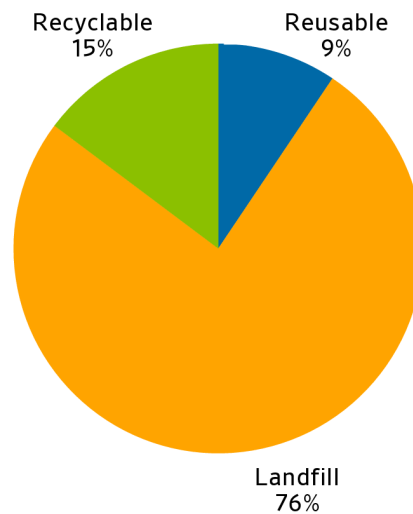
Connect member companies who manufacture or sell sustainable floor options to other exhibitors.

GRAPHICS AND SIGNAGE

	2022	2023	% Change
VINYL DECAL	24.00	274.50	+1,044%
FABRIC	2,125.94	1,929.10	-9%
HONEYCOMB (PAPER BASED)	3,937.19	1,619.55	-59%
PAPERBOARD	424.15	104.96	-75%
WALK & WALL DECAL	394.23	73.44	-81%
POLYFOAM	264.26	132.46	-50%
PVC	6,630.31	6,051.61	-9%
VINYL BANNER	1,500.00	1,500.00	0%
TOTAL SQ FT	15,323.14	11,685.63	-24%



-24%
Reduction in total signage printed in 2023



9%
of signage saved for reuse

Recommended Next Steps

Signage Audit

Work with the General Services Contractor to evaluate what can be designed for reuse. For signage using vinyl, polyfoam and PVC, determine if a different substrate can be substituted.

United Nations Sustainable Development Goals

United Nations Sustainable Development Goals

The ASLA Conference supports many of the United Nations Sustainable Development Goals (UN SDGs) with opportunities to act on all 17 goals. ASLA is a signatory of the IFLA Climate Action Commitment, which includes a commitment to advancing the SDG that calls for “accelerating our work to repair global ecosystems.” Landscape architects contribute to achieving these goals through their planning and design efforts.



THE GLOBAL GOALS

ASLA Legacy Project

Maxfield Elementary School, located in the heart of the historically Black community of Rondo in St. Paul, MN, was the focus of the 2023 ASLA Legacy Project, led by the ASLA Minnesota Chapter. This school, which was moved for the construction of Interstate Highway 94, serves students from diverse cultural backgrounds in Pre-K through Grade 5. The project will update Maxfield’s schoolyard, in partnership with the community, Trust for Public Land (TPL), Urban Farm, Garden Alliance, and Gordon Parks High School.

Upgrades to the playground will improve the functionality and safety of the space. In addition, by enhancing the green space the playground will create a healthier environment so that the community and Maxfield teachers will be able to tap into students’ curiosity, enthusiasm, and imagination to engage them fully in learning. The project will be completed and installed after the conference.



UN SDGS



No Poverty

As the climate crisis escalates, Indigenous cultures and underserved and underrepresented communities will be disproportionately affected. There is an opportunity for ASLA to partner with local Indigenous communities to identify opportunities to reduce poverty through community-led programs.



Zero Hunger

475 pounds of food rescued for donation to People Serving People.



Good Health and Well Being

Field sessions, including Tour De Minneapolis Bike Infrastructure, enabled attendees to tour the local bike infrastructure. Another session on mental health provided tools for practitioners, students, and firms.



Quality Education

ASLA offered nearly 150 education sessions for professional development hours (PDH) that covered almost every UN SDG.



Gender Equity

57% of speakers identified as female. (83% of speakers reported gender).



Clean Water and Sanitation

The Minneapolis Convention Center diverts an estimated 5.4 million gallons of runoff rainwater annually from the river and redirects it to an underground storage system for the facility's irrigation.

Schedule Highlight: Green Stormwater Infrastructure Tour: Planning, Design, Equity, and Environment



UN SDGS



Affordable and Clean Energy

All electricity from the grid at The Minneapolis Convention Center was 100% renewably generated from off-site solar and wind resources.



Decent Work and Economic Growth

There is opportunity to work with local entrepreneurs in the procurement process.



Industry, Innovation and Infrastructure

Encourage exhibitors to communicate certifications such as point of origin for materials.



Reduced Inequalities

ASLA provided five complimentary registrations for Twin Cities-based climate equity and justice leaders to attend the conference. Ten complimentary conference registrations were awarded to WxLA scholarship winners (emerging and mid-career women in the profession) and four Council of Fellows student scholarships (\$25,000 total).



Sustainable Cities and Communities

The conference provides education to attendees highlighting landscape architecture design solutions that improve resilience, sustainability, and quality of life.



Responsible Consumption and Production

There is an opportunity to introduce procurement policies that require all ASLA-purchased items be reusable and produced with responsible sources, and/or compostable or recyclable.





Climate Action

ASLA provided the opportunity for attendees to offset their emissions from their participation in the Conference.



Life Below Water

Kitchen areas and restrooms at the Minneapolis Convention Center have been upgraded with fixtures that use 50% less water than previous models. There is an opportunity to work with the food and beverage provider on water-wise menu designs.



Life on Land

ASLA partnered with Green Minneapolis and the Minneapolis Park and Recreation Board to support the first urban tree sequestration project in Minnesota.



Peace, Justice and Strong Institutions

Highlight sessions on shaping policy, planning, building, and setting standards so that cities are created with all in mind.

Schedule Highlight: The Twin Cities' Contested Landscapes, Design Justice, and Community-owned Public Spaces



Partnerships for the Goals

The ASLA Climate Action Field Guide, focused on solutions and toolkits to address the interconnected climate and biodiversity crises, helps landscape architects and students become better climate advocates individually and through collaboration.

Conclusion



ASLA has the opportunity to create and implement strong policies for the conference that can lead the industry in sustainable event planning. These include mandatory guidelines for zero waste operations, material procurement evaluations, and booth audits. Exhibitors want to participate in the collective effort to move the ASLA Conference towards a lower carbon footprint and to meet the goals set out by the Climate Action Plan. To mobilize ready and willing participants, ASLA can build the frameworks for empowered action.

Tour de Minneapolis Bike Infrastructure
(Image Credit: ASLA)

BOUNDARIES & QUANTIFICATIONS

Energy Use

The energy boundary consists of energy consumed during ASLA 2023 Conference on Landscape Architecture and corresponding move-in/move-out periods.

- The Minneapolis Convention Center: Total energy consumption includes purchased electricity, including renewables, and was reported from a proportioned bill.
 - Natural Gas, District Steam and District Chilled Water were also reported.
- The Hilton: Total energy consumption was provided in KBTUs and was reported as a percentage of the total energy use of the hotel. The percentage of the hotel contracted by ASLA was proportioned from this total.
- Energy use from 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 are included in the GHG emissions calculations).

Carbon Emissions

Included in the total carbon footprint number reported.

- Travel to the destination by 5,329 registered attendees and ASLA staff members
 - Participants were assigned a round trip distance based on the characteristics and layout of departure city. Mode of travel includes car and plane (domestic, mid-range, international, international with second leg of flight).
 - Ground transportation by participants from airport(s) to the Minneapolis Convention Center
- Ground shuttles for travel for offsite event and event staff
- Estimated mobile fuel combustion of freight:
 - General contractor/show management deliveries
 - Exhibitor freight sent from advanced warehouse to the Minneapolis Convention Center
 - Marshaling yard trucks and trailers used to support ASLA
 - Propane used by forklifts during ASLA
- GHG emissions per occupied room for hotels within the contracted block
- GHG emissions for waste streams from data provided by the Minneapolis Convention Center
 - An adjustment was made to 2022 waste data to include donation weights provided
- The number of vegetarian and non-vegetarian meals catered by ASLA
- Printed paper consumption reported by ASLA for on-site materials

Quantifications

- Energy emission factors obtained from US EPA "Emission Factors for GHG Inventories" (March 2023 update)
- Electricity emission factors obtained from EPA eGRID Year 2021 summary tables
- Fuel emission factors obtained from US EPA: Emission Factors for Greenhouse Gas Inventories, Table 8 (March 2023 version)
- Waste emission factors obtained from UK Govt. GHG Conversion Factors for Company Reporting (2023 version)
- Lodging emission factors obtained from "CHP in the Hotel and Casino Market Sectors", a report prepared by EEA Inc. for the US EPA (2005) based on the energy use of an average and upscale hotel room
- Food emission factors obtained from "NZCE Measurement Methodology (draft version, pg. 26)" cited from USDA MyPlate program
- Paper emission factors obtained from the Environmental Paper Network Paper Calculator
- Honeycomb Strategies partner, Aclymate, calculates travel based on DEFRA standardized data in accordance with ICAO and the GHG Protocol. The nearest commercial airport is automatically calculated for the attendee and the event, and then a great circle route is calculated with a 10% variance factor for terminal flight operations. Altitude-based radiative forcing is not included.
- Other attendee carbon offsets were calculated separately from the total GHG emissions value



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