

ORACLE
OPEN
WORLD

Event Sustainability Report

SAN FRANCISCO
2019

ORACLE



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Oracle OpenWorld 2019

EVENT DATES

San Francisco, California
September 16-19, 2019

Core OpenWorld Venues For Event Programming

Moscone Convention Center

San Francisco Marriott Marquis

Chase Center

St. Regis

InterContinental San Francisco

Yerba Buena Center for the Arts

When Oracle OpenWorld first began measuring its sustainability impacts a decade ago in 2009, our vision was to model actions that supported a sustainable future for our communities and our planet. Now in 2019, we are excited to align many of our current and long-standing initiatives with those priorities outlined in the United Nations Sustainable Development Goals (UN SDGs). These global goals offer us a roadmap to a more sustainable future, and our linkages to these goals will be highlighted throughout this report.



Sustainability Partners



Oracle's sustainability efforts at Oracle OpenWorld would not be possible without the ongoing collaboration with our San Francisco destination partners and agencies. In particular we would like to thank and recognize both Moscone Center and Hartmann Productions

for going above and beyond in being true partners towards supporting and our sustainability goals!

“I regard Oracle's OpenWorld as one of the standard bearers for large event sustainability thanks to its tracking of waste by material and its consistent annual goal setting to reduce non-recyclable materials and its comprehensive planning and sustainable practices.”

NAINA AYYA, *Communications Manager, Moscone Center*

“As Oracle Corporation's global show management for OpenWorld, Hartmann Studios supports Oracle's green standards through all stages of planning and execution. Beginning with exhibition floor and booth design, signage material selection, and food and beverage menu planning, we strive to find the most green options within each facet of the conference.

As the show comes to a close, we partner with various local agencies to donate and recycle as much as possible. We recycle carpet, donate leftover food to local food banks, and donate furniture and other trade show elements to groups including Habitat for Humanity, TekTailor and Mystic Midway.

We at Hartmann Studios are proud to partner with a company that prioritizes sustainability and look forward to continuing to support Oracle as they raise the bar of corporate event green standards.”

ANNE MANNING,
*Executive Producer,
Hartmann Studios*

Sustainability Overview

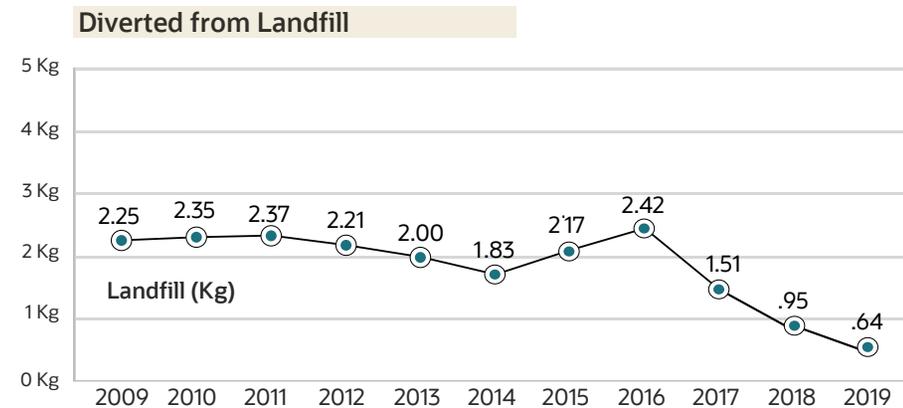
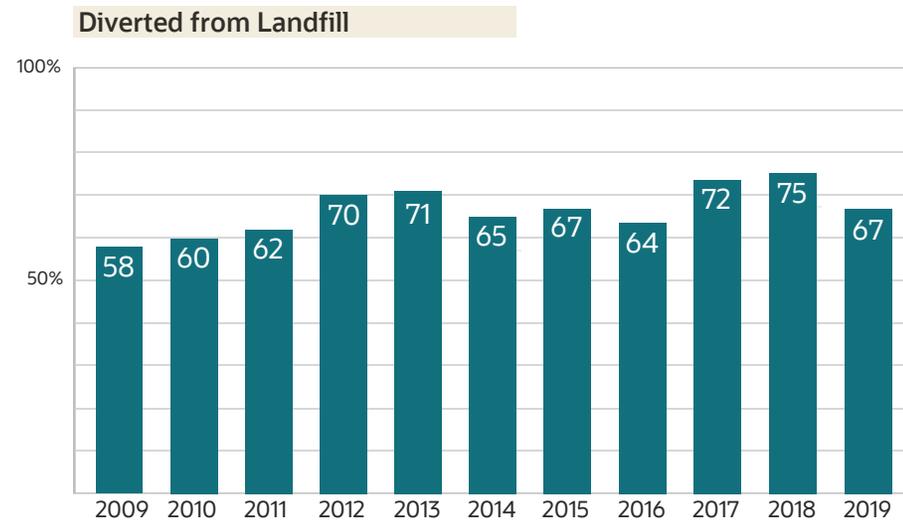
GOAL ONE Promote Zero Waste

Target Zero Waste To Landfill

Much has changed since Oracle OpenWorld began measuring its event waste in 2009. Major changes for 2019 included keeping Howard Street open and uncarpeted for the first time in recent years as well as the move of CloudFest 19 to the brand-new Chase Center.

Although on the surface it would appear that our event-wide diversion rate dipped slightly this cycle, when adjusted for an "apples to apples" comparison of metrics at Moscone Center, our primary venue, **Oracle's landfill diversion rate at this location actually improved significantly in 2019 from 56% to 67%: an increase of 11% over 2018 .**

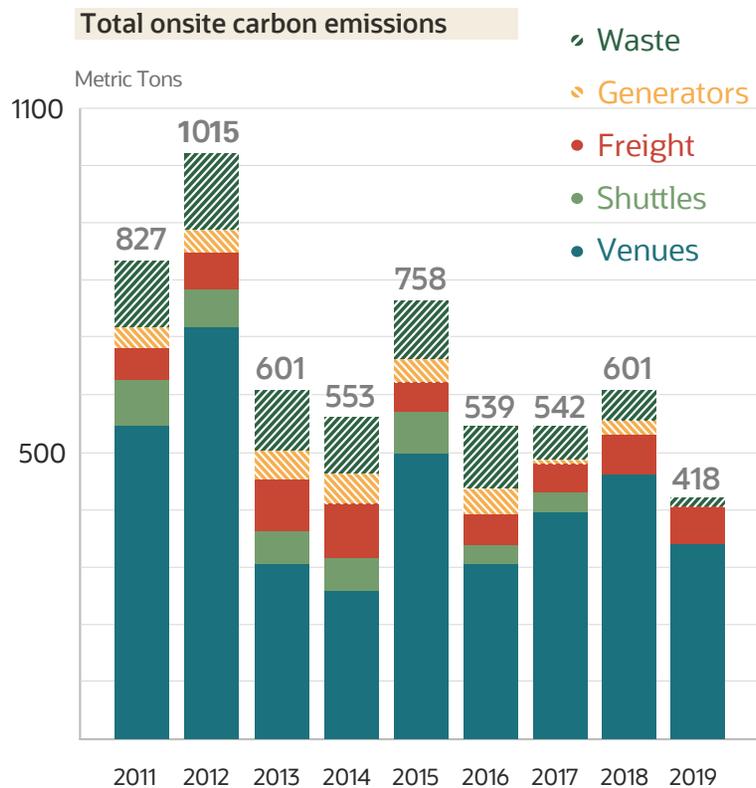
As a result, **overall waste to the landfill decreased by 24,280 pounds in 2019 and our per person waste to the landfill reached its lowest levels recorded.**



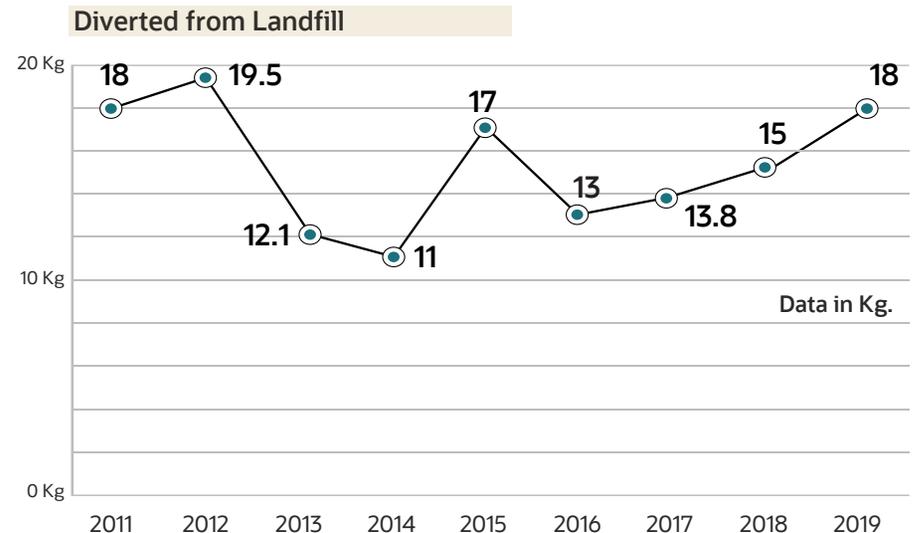
Sustainability Overview

GOAL TWO Model Carbon Reduction and Responsibility for Corporate Events

Target: Reduce 2012 onsite emissions by 50% by 2019



One exciting milestone for Oracle OpenWorld 2019 was **achieving our goal of a 50% reduction in onsite carbon emissions from 2012**. While factors such as the elimination of Howard Street and a streamlined core hotel portfolio played a part, the central role carbon accountability plays in Oracle event planning decisions remains the primary driver for our continuous improvement in onsite emission reduction.



Sustainability Overview

GOAL THREE Catalyze legacies to benefit host destinations

Target: Capture results

One of the best ways to reduce poverty in our communities is to donate what we don't use. Whatever Oracle cannot reduce from the outset, or reuse the following year, we make sure it reaches organizations in the Bay Area that can support those in need.

1,620 pounds of event food was recovered by Savor Moscone and donated to City Impact. This translates to 1,350 meals reaching food insecure members of our community.

1,135 pounds of event furniture was salvaged and donated to Habitat East Bay Silicon Valley ReStore.

1,268 pounds of backpacks, socks, toiletry bags, lanyards, and office supplies were donated to local agencies/charities.

OpenWorld hotels did their part as well with over **150 pounds of room amenity soaps and hygiene items** were collected by the St. Regis Hotel and donated through Clean The World.

GOAL FOUR Inspire attendees through engaging sustainability experiences

Target: Capture results



A quality education is the foundation for improving lives. Oracle OpenWorld helped inspire the next generation of developers through its **JavaOne4Kids** program onsite that positively influenced 319 student attendees.

Similarly, the **Oracle Education Foundation** helped support young innovators and designers through showcasing their work and the opportunity to engage with attendees onsite outside the Exhibit Hall Exchange.

Well-being and healthy lives are essential for a sustainable future. Oracle's exciting new **Be Well Hub** offered a unique destination to learn more about health and wellness opportunities at OpenWorld 2019.



Oracle OpenWorld 2019 **BY THE NUMBERS**

91,932: Total square feet of carpet reduced from 2018.

1,352: Five-gallon reusable water station refills consumed by attendees at Moscone Center, eliminating more than 54,159 sixteen ounce single-use plastic bottles.

24,280: Pounds of overall event waste reduced at Moscone Center when compared to 2018.

60: Green Angels hired over the course of the event to help attendees sort their waste.

199,601: Square feet of carpet was saved for reuse after the event.

2,603: Weight in pounds of event material donations generated by Oracle OpenWorld.

38: Weight in metric tons of compost diverted from landfill at Moscone Center during Oracle OpenWorld, enough to fill more than 3 garbage trucks.

55,115: Pounds of CO2 reduced in 2019 by the elimination of portable generators on Howard Street and CloudFest.

10%: Estimated percentage of total Moscone Center energy generated onsite by roof-top solar panels. Based on energy usage, this would be approximately 70,916 kWh of solar energy produced during Oracle OpenWorld.

3,500: Weight in pounds of Oracle OpenWorld banner fabric collected for upcycling by TekTailor in Santa Rosa, CA.

709,169: Kilowatt hours of renewable energy generated by hydropower from Hetch Hetchy Power, making Oracle OpenWorld's energy consumption 100% greenhouse gas-free.

1,621: Number of meals donated event-wide to organizations serving those in need in the San Francisco area.

144,632,635: Pounds CO2 offset by Oracle OpenWorld over the past 9 years. This is equivalent to the the CO2 emissions from 7,570 homes' energy use for one year or the greenhouse gas emissions from 162,789,726 miles driven by an average passenger vehicle.

100%: Percent of onsite carbon emissions offset by Oracle OpenWorld.



Sustainability Planning Process

Oracle helps drive continuous improvement in its sustainability programs through following these steps each planning cycle.

Pre-Event

- Confirmation of sustainability stakeholders.
- Reviewing opportunities from previous event cycles.
- Engaging Oracle partners and communicate targets.

Onsite

- Execution of sustainability plans.
- Measurement.
- Onsite verification.

Post-Event

- Continuous improvement assessment.

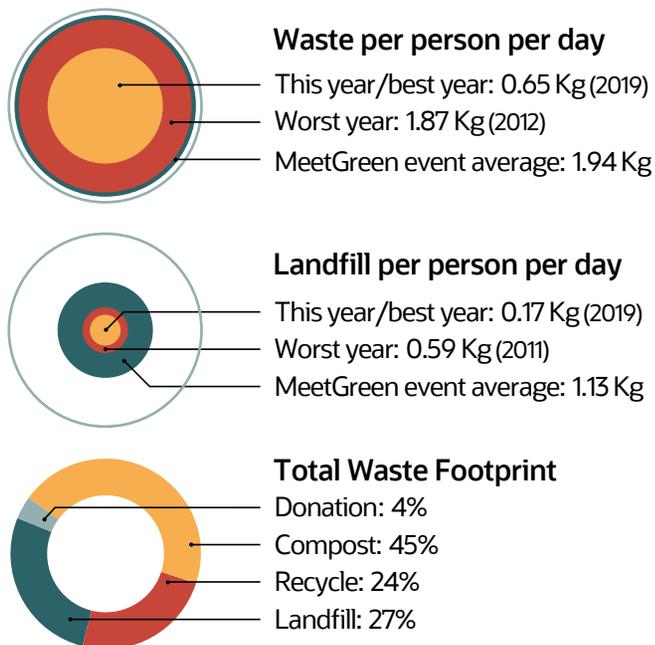


Goal One: Waste Not

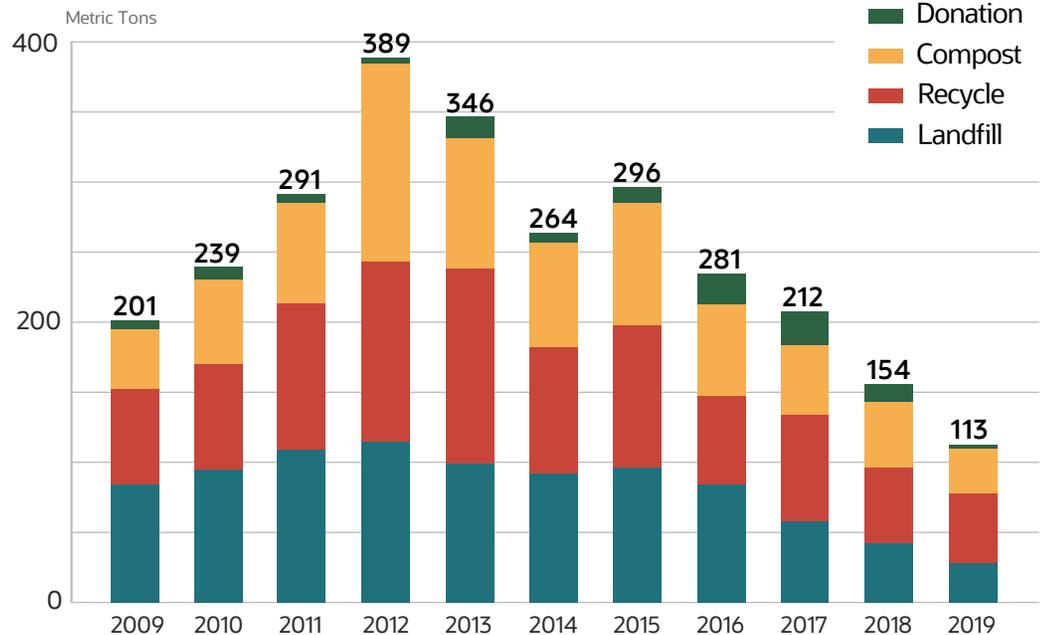
Goal One Status

Balancing industry leading attendee experiences with the goal of zero waste is foremost on our minds each planning cycle. When expanded to include data available from activities outside Moscone Center such as CloudFest 2019, **our total waste volume this cycle remains at its lowest to date.** There are a number of factors that contributed to a significant reduction in waste in 2019, and the following pages explore in greater detail how we worked to achieve it.

Waste Footprint Per Participant



Waste History



Goal One: Zero Waste

Sustainability Wins

The 4 Rs (Reduce, Reuse, Recover, Recycle)

Reduce >

Howard Street: Waste reduction is at the heart of Oracle OpenWorld, and our favorite way to reduce it, is not to make it in the first place! By keeping Howard Street open to vehicles in 2019, we eliminated 50,000 square feet of outdoor carpet being produced and used. This reduction choice alone saved approximately 240 metric tons of greenhouse gas emissions. That is equivalent to reducing the impact from 28 average homes' energy use per year.

Carpet Reduction Moscone Internal: Through careful tracking of carpet usage on the internal areas of Moscone Center, Oracle was able to reduce its overall show carpet within the three Moscone buildings by 41,932 square feet in 2019. Similar to Howard Street, we estimate this to have reduced our upstream carbon impact by 201 metric tons.

Reduction In Styrene-Based Substrates: While styrene-based substrates like foamcore and UltraBoard have been eliminated from our signage applications, they are still used in some hard-panel



applications throughout the show such as registration counters and kiosk kick-panels. By continuing to innovate new ways to fabricate these elements Oracle achieved a 17,430 square foot reduction in styrene-based substrates in 2019.

Vinyl Banners: Though not always widely thought of in this context, vinyl banners are comprised of polyvinyl chloride (PVC), and are considered another form of single-use plastic onsite unless reused or donated. For 2019, Oracle OpenWorld reduced its onsite vinyl use by 13,799 square feet.

Goal One: Zero Waste

Sustainability Wins – The 4 Rs (Reduce, Reuse, Recover, Recycle)

Reuse >

● **Carpet Reuse:** What Oracle cannot reduce upstream we look to reuse. One of the most intriguing windows into the impacts of reuse occurs through carpet. In 2019 our general contractor teams reported saving 199,601 square feet or 95% of Moscone Center carpet for reuse. When this amount is converted to a weight by following EPA conversion guidelines, it amounts to 326,016 pounds of carpet saved!

● **Water Stations:** One of the most prevalent forms of single-use plastic at events is disposable water bottles. By eliminating these bottles from our catering and assuming that each attendee would have consumed 1 over each of the 4 days, this action alone saved 160,000 single-use 16-ounce plastic bottles from being used onsite. When viewed in a life-cycle context, it was responsible for the elimination of 70,400 kg of CO2 in upstream production which is equivalent to the carbon sequestered by 83 acres of forest in one year!



● **Waste Diversion:** In waste diversion accounting for 2019, Oracle chose not to include carpet reuse in its diversion rate calculations. Although industry guidance does support inclusion of this data, our teams opted not to opt out of an abundance of transparency and caution against the appearance of “padding numbers”. If Oracle had included carpet reuse in its diversion calculation our diversion rate would have increased at Moscone Center to 89%, a shift upwards of 22%. This example helps dramatically illustrate the power of reuse and front-end planning surrounding event carpet.

● **Backpacks:** 756 pounds of Oracle backpacks were saved and will be used at Oracle Code New York in 2020.

Goal One: Zero Waste

Sustainability Wins – The 4 Rs (Reduce, Reuse, Recover, Recycle) cont.

Recover >

Signage: Print signage has value in the community as well. More than 70 pounds of MeterBoard signage was recovered by the San Francisco-based Mystic Midway, a community of artists, dedicated to creating deeply engaging, entertaining and meaningful social spaces.



Recycle >

Zero Waste Food And Beverage: 100% of Oracle's core lunches served to attendees were compostable by local Recology standards and sent to the "organics" waste stream. To help support this process, 12-15 Green Angels were stationed daily from 11AM-2PM at key receptacles near lunches to educate attendees and control waste flow. These efforts helped boost compost collection by 41% for 2019.



Banners & Fabric: In the events industry, recovery refers to donation of materials. By design, one of the substrates Oracle increased this cycle was the use of fabric. In 2019 OpenWorld used 33,824 square feet of fabric instead of vinyl and UltraBoard for applications such as banners, column wraps, and even stretched over wire-frames as walls or kiosks. All fabric was collected post-event with over 3,500 pounds donated to the Tek Tailor in nearby Santa Rosa, CA where it will be upcycled into future items such as handbags and laptop cases.

Goal One: Zero Waste

Sustainability Opportunities

Next Tier Materiality: Oracle has made remarkable strides redesigning and reimagining their event spaces with sustainable materials, but one exciting next step opportunity is targeting non-recyclable materials like UltraBoard that are presently used in registration counter faces and kiosk kick-panels. High-density paper-based substrates that have emerged in the past year like Neenah Converd Board may be offer a path forward towards total elimination of PVC in Oracle exhibit fabrications.

Adhesive Cling Reduction: While we continue to search for products that can both perform to our standards while being cleaner to our environment, one of our goals for 2020 is targeting a reduction in the amount of clings used onsite. A potential opportunity on this front would be targeting a 25% reduction in the use of exterior clings during our next cycle.

Waste Related Sponsorship: While often less visible to attendees or the general public, enhanced waste management practices such as back of house sorting, special multi-stream



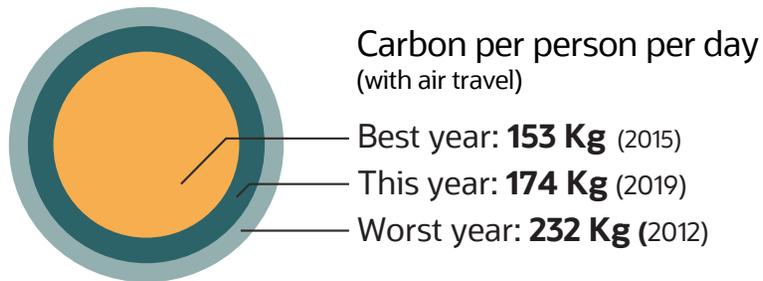
bins, and the Green Angel teams, all are financially intensive. One potential solution is to view waste operations with the same mindset towards sponsorship as other areas of the show. While it may not be easy initially to create a value proposition in this domain, there is no question that the future is increasingly moving towards a meeting of sustainability and sponsorships.

Exhibitor Engagement: While Oracle has limited control regarding the material selections of its many exhibitors, it does have the opportunity to re-energize and engage this audience in new ways such as greater exhibitor education and resources or even a green exhibitor challenge.

Green Booth Option: A potential business opportunity related to the greening of exhibitors and overall consistency around materiality could be the creation of a green-booth rental option from Oracle's Exhibit Hall General Contractor. If Oracle could count on more booths of a similar sustainable material set, it could dramatically improve post-event diversion.

Goal Two: Be Cooler

Carbon Footprint Per Participant



For the second consecutive year, since dramatically increasing its financial commitment to carbon offsetting in 2018, Oracle OpenWorld 2019 neutralized 15,600 metric tons of event related carbon emissions. This represents 100% of onsite carbon emissions at the event and a 12,174 MT CO₂ offset increase from 2017.

Since 2011 Oracle has now offset 144,632,635 pounds of greenhouse gas emissions at OpenWorld, a figure we believe to be one of the highest across the entire events and conventions industry. This offset is equivalent to eliminating the greenhouse gas emissions from 13,929 passenger vehicles driven for one year or the carbon sequestered by 1,084,780 tree seedlings grown for 10 years.

Highlights for 2019 include saving 25 MT of CO₂ through decisions to eliminate generator use. Moscone Center, now in its first cycle after major renovations to its core and shell, also reported **300,992 kWh less energy consumed than in 2018.**

Another intriguing result of our climate focused approach at OpenWorld, is that some impacts and savings around greenhouse gases do not all neatly fall into standard models of Scope 1, 2, and 3 emissions. Many of these initiatives focus directly on reduction of transport miles and increased proximity of products and services. In this manner, **all event signage was produced either locally in San Francisco or regionally, within 500 miles.** All vegetables found in OpenWorld lunches were grown in the nearby Central Valley, while bread for sandwiches and event cookies were sourced from San Francisco, just minutes from Moscone Center.



Lastly, all speaker water at OpenWorld 2019 was served in Boxed Water carton containers for the first time. Boxed Water uses 80% less plastic in its construction than a standard single-use bottle. **As a result, this yielded 64% less carbon and 43% less fossil fuel to create when compared to its plastic counterparts.**

Goal Two: Be Cooler

Sustainability Wins

By funding emission reduction, Oracle is supporting local communities, reducing greenhouse gases, and helping to move toward more renewable energy sources. Projects being supported through this year's initiative are:

The Clinton Landfill Gas to Energy Collection System, consists of 50 wells, and helps to improve public safety by mitigating the risk of underground gas migration and groundwater pollution that could result from material deposited in the landfill.

The Crow Lake Wind Project is the largest owned solely by a cooperative in the United States and consists of 108 1.5-megawatt turbines used to generate energy. The turbines at Crow Lake are also used to educate future wind technicians.

The Garcia River Forest Project in Mendocino County has the goal of restoring streams and forests while providing economic benefits to the community. It also helps reduce carbon emissions, which contribute to climate change. The 23,780-acre forest has become a model site for demonstrating the important role forests play in addressing climate change.

The McCloud Forestry Project is located 20 miles southeast of Mount Shasta in Northern California. This project is over 9,000 acres and comprises the largest working conservation easement west of the Rocky Mountains.



Sustainability Opportunities

As with nearly all events, travel, particularly air travel to the event site, is by far the largest contributor to Oracle OpenWorld's carbon footprint. An assessment of travel data for 2019 shows an increase of 1,580 international flights when compared to 2018. Oracle has done its part in recent years to increase access for its attendees across the globe through OpenWorld Europe, Latin America, Middle East, and Singapore, however the challenge remains of finding the "sweet spot" where the least amount of attendees will need to travel long distances.

A second area that OpenWorld planning teams are aware of and targeting over the next five years is augmenting their financial offsets with sponsor funds, particularly around travel. Examples of such offset sponsorships are slowly emerging in the airline and events industry, and is a potential horizon that Oracle is excited to explore with its stakeholders and partners.



Goal Three: Give Back

Sustainability Wins – Food And Material Donations

1,135 Pounds of Collected Event Furniture

Donated to Habitat for Humanity East Bay/Silicon Valley

1,268 Pounds of Backpacks, Socks, Toiletry Bags, Office Supplies

Donated to local agencies/charities

1,621 Pounds of Moscone Center Food

Donated to Food Runners San Francisco

150 Pounds of Lightly Used Soaps and Room Amenities

Donated to Clean The World by the St. Regis San Francisco



Sustainability Opportunities

While Oracle's donations programs operated at a high level in 2019, we continue to seek avenues to better drive participation and accountability around food donation at Oracle partner hotels, particularly those with contracted Food & Beverage. Enrolling greater engagement around sustainability and food and material donations remains a top-tier opportunity for 2020.



Oracle has proudly supported Save the Redwoods League since 2001. For more than 100 years, the League has protected and restored California redwood forests and

connected people with their peace and beauty. Working together with Oracle at OpenWorld, the shared goal is to inspire the next generation of environmental stewards and citizen scientists who will understand, care about, and protect the natural world.

The League served as a user group in Oracle Education Foundation's Chatbots for Good class, helping students develop a Chatbot that enables users of the League's website to plan a trip to the redwoods. Staff members from the League joined these students at Oracle OpenWorld 2019 to showcase the prototype and educate conference goers on redwood conservation and restoration.



Goal Four: Have Fun

CloudFest 19 After a week of engaging sessions, keynotes and comradery, OpenWorld attendees were treated to a night of festivities and fun with music artists John Mayer and FLORida at CloudFest19. This year's celebration was held at the newly opened Chase Center in the Mission Bay neighborhood of San Francisco.

Highlights from CloudFest were: the **donation of over 200 pounds of leftover food to San Francisco food outlets post-event**, 100% compostable service-ware for Oracle Food & Beverage, and back of house waste sorting by 4-6 staff during event actives. We believe this marked the first post-event food donation at this venue.

Be Well Hub Healthy lives are essential for sustainable development and activities at the Be Well Hub helped attendees strike a balance between work and play and promoted wellness and healthy actions throughout the week. This included Movie Night at Oracle Park, where the venue was turned into a private movie theater for OpenWorld attendees, FitFest 19 with complimentary workout and fitness classes and **Oracle Park Tours which included a total of 18 tours over 4 days of OpenWorld.**



Alignment with UN Sustainable Development Goals

Oracle OpenWorld shared its alignment with SD3 Good Health & Wellbeing and SDG15 Life On Land on Meter-Boards near lunch locations.

Opportunities Two of the biggest opportunities on the table for 2020 are increasing visibility of Oracle sustainability to attendees, as well as contractually requiring post event data to be provided by future CloudFest venues.

A final way Oracle OpenWorld assesses its sustainability efforts is through the MeetGreen® Calculator 2.0. This tool allows organizations to benchmark their progress against their own efforts and other events of similar size and type.

With over 500 question combinations across 14 event related categories, it is one of the most rigorous assessments in the industry. Starting in 2019 MeetGreen transitioned from a numerical to tiered scoring approach. The rating categories progress from Change Agent, to Champion, to Leader and to Visionary. **MeetGreen is proud to present Oracle OpenWorld 2019 with its highest level of achievement: Visionary.** When viewed in context over the year, this event ranked as one of only four Visionary badges awarded.

A VISIONARY: *Leads within their own industry, prioritizes measurement and works to move the sustainability dial. Researches and develops new initiatives to improve environmental performance and uses the organization's buying power to drive change with venues and vendors.*



Acknowledgements

Thank you to the following report contributors:

Chase Center, Hartmann Studios, Intercontinental San Francisco, Marriott Marquis San Francisco, Moscone Center, Savor, St. Regis San Francisco. *Photos:* Oracle, MeetGreen, Moscone Center

Data sourcing and scope

SCOPE: Carbon calculations include: Venue energy use, guest room energy use, all participant travel to and from the event, ground shuttles, show management freight, portable generation and waste to landfill. Waste metrics include: venue landfill, recycling, compost and donation (any event discards from the tradeshow, meetings, special events and banquets), as well as materials taken back by agencies for recycling at their warehouse if not recyclable at venue. Guest room waste is not included, to the extent possible. Supply chain verification includes: venues, hotel, caterer, general services contractor, audio-visual supplier, and event management agencies. Water metrics include event space and catering at venues.

BASELINES: Baseline year may vary depending on indicator and is noted in each section.

DEFINITIONS: “Local” is assumed to include goods purchased within 400 km or 250 miles of the event site. “Organic” and “fair trade” must include verification or certification by a third party, such as USDA or Equal Exchange. “Green” cleaners must bear a third-party certification, such as Green Seal. “Compostable” and “biodegradable” must be verified using certification and/or testing. “Landfill” is waste to landfill (no recovery). “Waste” includes landfill, recycling, compost and donations that are discarded from the event.

SOURCE: All metrics direct-reported by vendors through metering, hauling records and procurement analysis. All reports are checked in comparison with historic and external baselines and onsite observations to validate and error-check data. Carbon footprint estimated by Nancy Bsales using guidance from the Hotel Carbon Measurement Initiative (guest rooms/meeting space), DEFRA (mobile fuel sources), and USEPA (waste). Radiative forcing is not applied to air travel emissions. Carbon equivalencies provided by the USEPA Greenhouse Gas Emissions Calculator. All MeetGreen averages calculated directly from event data and metrics in the MeetGreen[®] Calculator 2.0.

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