



3R Toolkit

for the
**Meetings,
Incentives,
Conventions &
Exhibitions
Industry**

Supported by:



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The MICE 3R Toolkit is an initiative of the MICE 3R taskforce comprising the National Environment Agency (NEA), the Singapore Tourism Board (STB) and members of the Singapore Association of Conference and Exhibition Organisers and Suppliers (SACEOS) to provide guidance on 3R initiatives for the MICE industry.

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5.88 million tonnes of waste was generated in Singapore in **2020**. If waste output continues to grow, more incineration plants will have to be built and **Semakau Landfill** will run out of space by **2035** or earlier.

Resources such as water and energy are conserved when we reduce, reuse and recycle. We have the chance to reduce waste and save limited natural resources.

We can make the choice.

WHAT IS YOUR COMMITMENT?

RECOMMENDED 3R PRACTICES



for

- ◆ Meetings
- ◆ Incentives
- ◆ Conventions
- ◆ Exhibitions

DONATE

Donate items in good condition for repurposing, e.g. donate banners to local charities or schools to be made into bags, etc.

Applies to

- ◆ Organisers
- ◆ Venues



for

- ◆ Meetings
- ◆ Incentives
- ◆ Conventions
- ◆ Exhibitions

CARPET

Avoid using carpet.

If carpets are required, use carpets made of recycled content, and reuse them at future events if possible.

Repurpose carpet tubes into useful products for the event, such as benches and mobile charging stations.

Applies to

- ◆ Carpet suppliers
- ◆ Organisers
- ◆ Venues



for

- ◆ Meetings
- ◆ Incentives
- ◆ Conventions
- ◆ Exhibitions

PAPER

Use mobile event technology, such as e-signages, e-directory, soft copy documents, event mobile application, e-registration, to reduce paper use.

Encourage exhibitors to leverage the online platform to disseminate content using a stick and carrot approach.

If collaterals need to be printed, use FSC-certified paper with 100% recycled content.

Applies to

- ◆ Exhibitors
- ◆ Organisers

RECOMMENDED 3R PRACTICES



for

- M Meetings
- I Incentives
- C Conventions
- E Exhibitions

BEVERAGES

Eliminate bottled water and disposable cups by providing water refill stations and reusable mugs/glasses.

Recycle wine bottles, PET bottles, drink cans, etc.

Applies to

- ◆ F&B caterers
- ◆ Organisers
- ◆ Venues
- ◆ Suppliers



for

- M Meetings
- I Incentives
- C Conventions
- E Exhibitions

DISPOSABLES

Use reusable crockery and cutlery instead of disposable ones.

For trade shows, provide reusable bags only upon request.

Applies to

- ◆ F&B caterers
- ◆ Organisers
- ◆ Venues



for

- M Meetings
- I Incentives
- C Conventions
- E Exhibitions

FOOD

Get event participants to RSVP in advance for your event, so that you know how much food to plan for.

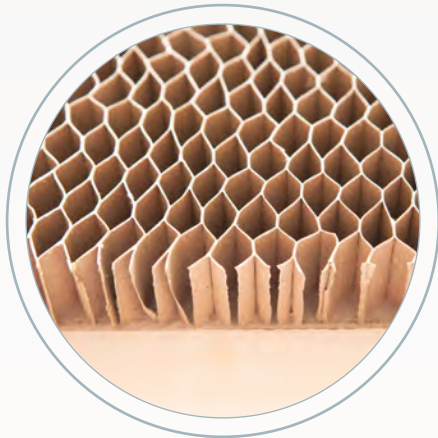
Provide the option to replace buffets with plated events, if feasible (buffets generate twice as much food waste as à la carte).

If there are excess non-cream cakes, pastries without filling and plain bread, donate them to food distribution organisations.

Applies to

- ◆ F&B caterers
- ◆ Organisers
- ◆ Venues

RECOMMENDED 3R PRACTICES



for

- M Meetings
- I Incentives
- C onventions
- E xhibitions

BOOTH MATERIALS

Consider materials that can be reused for other events, e.g. modular systems, reusable furnishings.

Use products with less or recyclable material, e.g. use of Re-board®, Falconboard®, Freeman Honeycomb for stands and booth structures.

Applies to

- ◆ Organisers
- ◆ Stand builders



for

- M Meetings
- I Incentives
- C onventions
- E xhibitions

RECYCLING BINS

Require the co-location of any waste bin with a recycling bin. For trade shows, place a recycling bin at every booth.

Recycling bins should be properly labelled and placed at strategic locations (with high visitor traffic) with waste bins.

Venues to provide space for backend sorting during trade show days.

Applies to

- ◆ Organisers
- ◆ Venues



for

- M Meetings
- I Incentives
- C onventions
- E xhibitions

WOOD (from customised booths)

Recycle waste wood – ensure that your waste collector collects waste wood separately and sends them for recycling.

Applies to

- ◆ Organisers
- ◆ Stand builders
- ◆ Venues

RECOMMENDED 3R PRACTICES



for

- M**eetings **I**ncentives
- C**onventions **E**xhibitions



for

- M**eetings **I**ncentives
- C**onventions **E**xhibitions



for

- M**eetings **I**ncentives
- C**onventions **E**xhibitions

E-WASTE*

Select technical components that reduce the amount of E-Waste generated (e.g. choose rechargeable over single-use batteries, LED over fluorescent lamps).

Adopt [SS 587](#), the Singapore Standard for the management of end-of-life ICT equipment.

Engage the [Producer Responsibility Scheme Operator](#) for the collection and treatment of regulated e-waste generated from public event/activities.

Engage licensed e-waste recyclers to collect e-waste generated from non-public events/activities.

* Electronic and electrical waste

Applies to

- ◆ Organisers
- ◆ Venues

GREEN MEETING PACKAGES

Organisers or venues to provide cost-neutral green meeting packages with options to reduce waste, such as double-sided materials, minimal table set-up, and water jugs or water stations instead of disposable water bottles.

Applies to

- ◆ Organisers
- ◆ Venues

ENGAGEMENT

Influence different stakeholders to participate in the 3Rs:

Provide exhibitor kits on ways to reduce waste at the booth (e.g. segregate recyclables from general waste, eliminate the practice of giving out gifts and bags where possible, or source for sustainable materials from social enterprises).

Specify waste minimisation guidelines in exhibitor and stand builder Terms & Conditions, including the use of reusable booth structures or booth materials.

Make 3R requirements known to suppliers at the procurement/tendering stage.

Applies to

- ◆ Organisers
- ◆ Venues

RECOMMENDED 3R PRACTICES



for

- ◆ Meetings
- ◆ Incentives
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for

- ◆ Meetings
- ◆ Incentives
- ◆ Conventions
- ◆ Exhibitions

CERTIFY

Certify MICE events with ISO 20121:2012 Event Sustainability Management System or Singapore's [MICE Sustainability Certification](#) developed by SACEOS.

Applies to

- ◆ Organisers

TRACK

Track the amount of waste disposed and waste recycled for each event.

Applies to

- ◆ Organisers
- ◆ Venues

COMMUNICATE

Be proud of what you have done and communicate it!

Communicate your 3R efforts to stakeholders (employees, partners, clients, public) via blog posts, infographics, website, tweets, presentations, briefings, newspapers/newsletters, onsite notices, and get your stakeholders on board!

Publish a post-event report on waste generated and recycled.

Applies to

- ◆ Organisers
- ◆ Venues

For more information on 3R practices in the MICE industry, please refer to the [Sustainability Guidelines for the Singapore MICE Industry](#) [here](#).

CASE STUDY



Singapore Green Building Week

Organiser

Building and Construction Authority of Singapore

Event Organiser

Reed Exhibitions

Venue

Sands Expo and Convention Centre, Singapore

The annual Singapore Green Building Week features three anchor events – the International Green Building Conference (IGBC), Build Eco Xpo (BEX) Asia 2016 and Mostra Convegno Expocomfort (MCE) Asia 2016 – that look at environmental sustainability for the built environment. It is attended by international green building experts, policy makers, academics, built environment practitioners, tenants and end-users, including members of the public and students.

In 2016, Singapore Green Building Week achieved a waste recycling rate of 78%. Its recycling rate could be measured because Sands Expo Convention Centre played an important role in arranging for post-event segregation of waste for recycling.

HOW DID REED EXHIBITIONS DO IT?

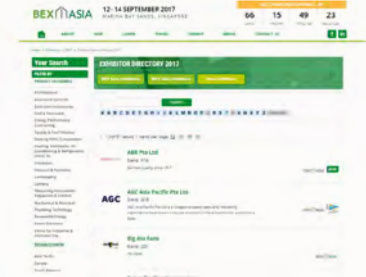
Reducing Paper Usage

To reduce paper usage for events, e-marketing channels were employed

Mobile applications were developed for events, which allowed exhibitors and visitors to conveniently obtain event updates and information on event details, exhibitor details and event directory, to reduce reliance on printed event guides and brochures.



Only **electronic event directories** were made available on the event website to avoid printing of hardcopy directories.



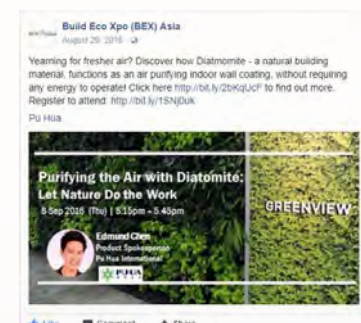
Homepage web banners were placed on websites of exhibitors and partners to reduce printed guide advertising.



E-invitation flyers were sent via email to reduce the printing of hardcopy invitations.



Social media marketing was used for event updates to reduce printing of hardcopy media materials.





Paper waste was reduced with the use of a sales lead scanner in the event app.

Online pre-registration and on-site registration via the mobile application or the self-registration kiosk were carried out to avoid printing of registration forms at the event itself. In 2016, IGBC and BEX-MCE achieved 100% paperless registration.

Event participants of BEX-MCE also made use of a **sales lead scanner** – a function incorporated into the event app – to obtain information of fellow participants by scanning the QR code on their badges, which reduces the exchange of name cards.

As part of the commitment to reduce paper wastage, mobile digital surveys were used to seek feedback to enhance their services.

Reducing Plastic Waste

Delegate badges were clipped directly onto lanyards. This eliminated the use of plastic holders for the badges.

Reusable cutlery and crockery were provided during the joint networking reception instead of disposable ware.

Reducing Food Waste

All excess unconsumed food from the networking reception was donated by Sands Expo and Convention Centre to charity organisations.

Bread and pastries were collected every afternoon by Food from the Heart, while unserved excess food from buffets was blast-frozen to -18°C which would then be collected by The Food Bank Singapore within 12 hours, for distribution to the less fortunate.

The remaining food waste was sent to the venue’s on-site digesters which convert the food waste into non-potable water within 24 hours.

Reducing Other Waste



Undated lanyards can be reused.

To reduce the use of carpets, the aisles of the BEX-MCE exhibition halls were not carpeted. Carpets that were used in the Green View or Mostra Xchange seminars were reused from past events.

Dates were not printed on the **lanyards** which allowed them to be reused for subsequent show editions. Collection boxes for **used lanyards** from delegates and exhibitors were placed at the exits of the show floor and conference hall.

Recycling



Visitors are encouraged to recycle at the Eco Love Machine placed in the exhibition hall.

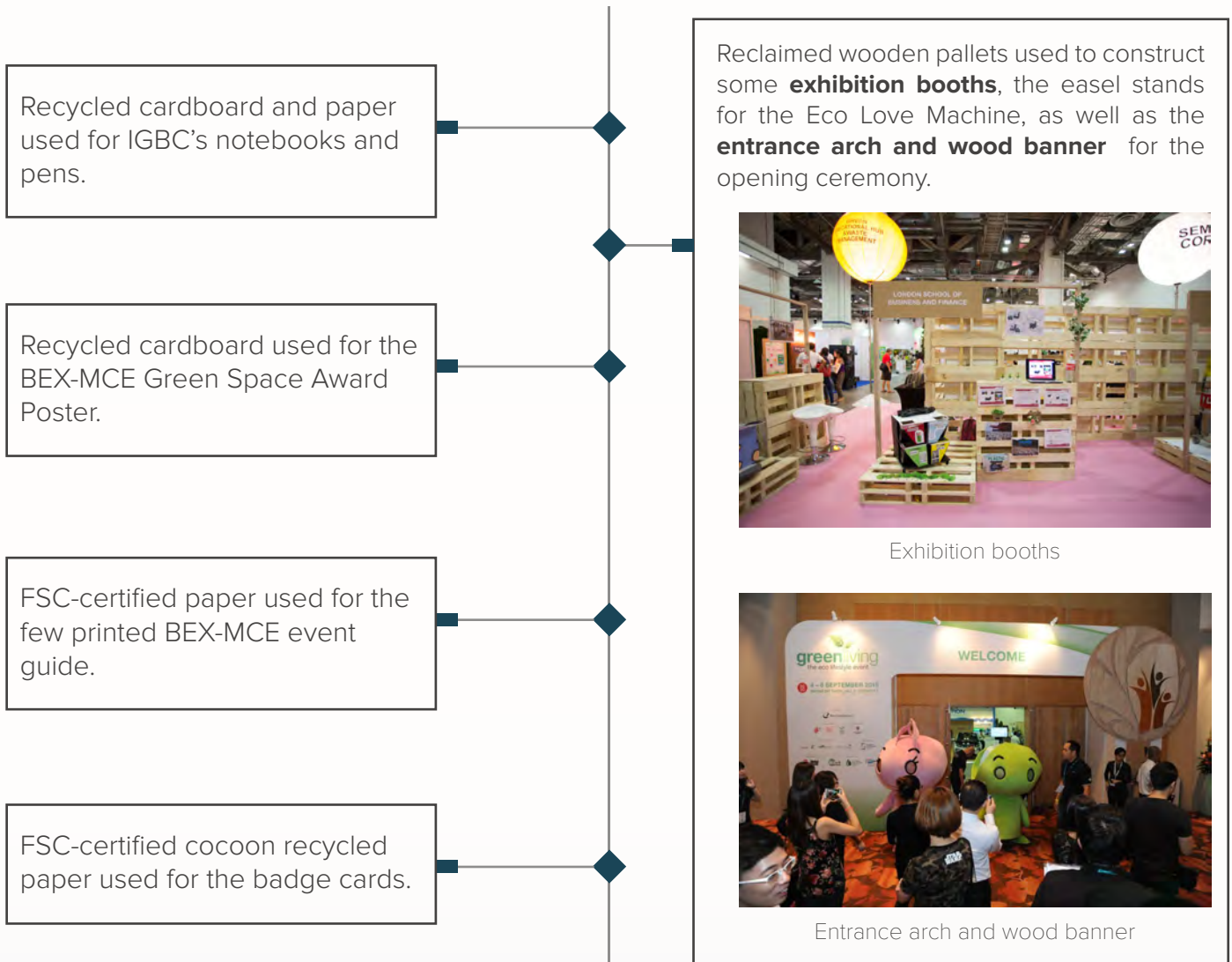
Other than the recycling bins provided in common areas by Sands Expo and Convention Centre, Reed Exhibitions arranged for recycling bins for plastic, paper, glass and metal waste to be placed along the perimeter of the exhibition halls to make it convenient for event participants to recycle.

To incentivise event participants to recycle bottles, an **Eco Love Machine**, which dispensed free gifts such as bamboo socks, fertiliser produced from food waste and seed packs in exchange for deposited recyclables, was placed in the exhibition hall. More than 3,500 free gifts were dispensed during the event.

Sands Expo and Convention Centre also provided coloured recycling bags, which could be obtained at dispensers placed around the exhibition hall, for exhibitors and the event organiser to sort their recyclable waste.

Eco-friendly Materials

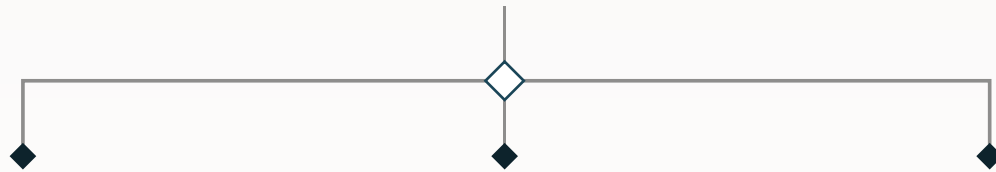
The materials, equipment and products used for the event followed a procurement policy of Reed Exhibitions, where environmentally-friendly, ethically and locally produced equipment, products and services are preferred. Examples of eco-friendly materials used in products include:



Exhibitor Engagement

Reed Exhibitions held a pre-event exhibitor briefing where several 3R suggestions were shared with exhibitors to encourage them to go green. The briefing slides were shared via email with exhibitors who were unable to attend.

3R suggestions for exhibitors:



Consider e-marketing for promotional materials and electronic collaterals, or print them on recycled paper.

Opt for useful or recyclable promotional or give-away items.

Use eco-materials, e.g. carpet tiles made of recycled materials, which can also be reused, LED lights that use 95% less energy in booth construction.

The efforts by exhibitors to use green and sustainable materials in their booth construction were also recognised by the annual **Green Space Award** presented by Reed Exhibitions. They were assessed on criteria such as:



Reed Exhibitions recognises exhibitors' green efforts with a Green Space Award

- ◆ Innovation in 3R application
- ◆ Demonstration of usage of eco-friendly/recyclable materials
- ◆ Engagement of visitors to go green as well

The judges were made up of independent industry individuals with relevant credentials in sustainability, architecture and/or interior design expertise.

CASE STUDY



Oracle OpenWorld

Organiser

Oracle Corporation

Event Organiser

Oracle Event Marketing

Sustainability partner and consultant

MeetGreen

Venue

Moscone Center, San Francisco,
USA

Oracle OpenWorld is an annual business and technology convention for partners and customers of Oracle which offers cloud applications and platform services. It is attended by business decision-makers, IT management and line-of-business end users.

Sustainability initiatives at Oracle OpenWorld began in 2007, and a Five Year Event Sustainability Policy and Plan was adopted in 2013 with four goals to improve sustainability at the event. They are:

- To promote zero waste;
- To model carbon reduction and responsibility for corporate events;
- To create legacies to benefit host destinations; and
- To inspire attendees through engaging sustainability experiences.

In working towards zero waste, the event achieved an overall waste diversion rate of 64% in 2016.

Reduce

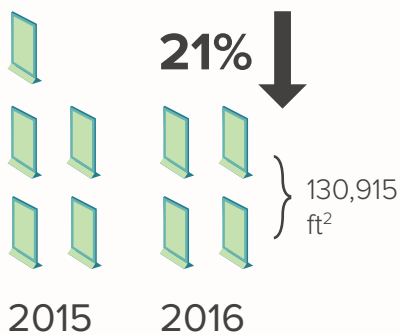
One of the first waste minimisation measures taken was to replace PET water bottles with water refill stations in 2007. Since then, more waste reduction measures have been implemented at the event.

“MeetGreen estimates that more than 1,287,000 water bottles were eliminated between 2011 and 2014 with the introduction of water stations at the event site.”

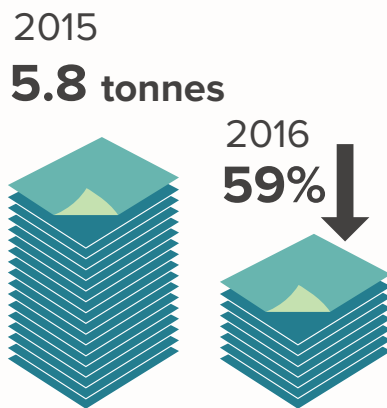


To raise awareness of food waste, the **Imperfectly Delicious food programme** was launched in 2014. In 2015, two lunch options were made from “imperfectly delicious” produce (i.e. imperfect looking vegetables that are not marketable in grocery stores), such as a cauliflower flatbread sandwich and a kale, wild rice and broccoli salad. This salvaged more than 100kg of food that would have gone to waste.

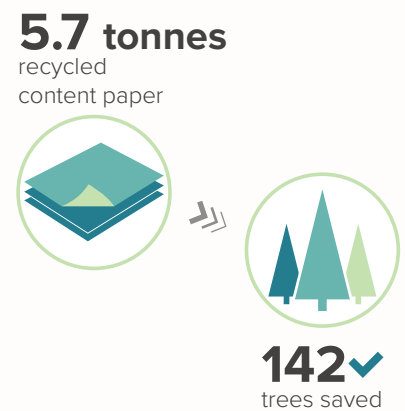
In 2016, Oracle OpenWorld achieved:



◆ 21% less signage used than in 2015, through the purposeful reduction of signage in the design phase by limiting their placement to strategic areas only.



◆ 59% less paper used onsite than in 2015, through the use of mobile event technology.



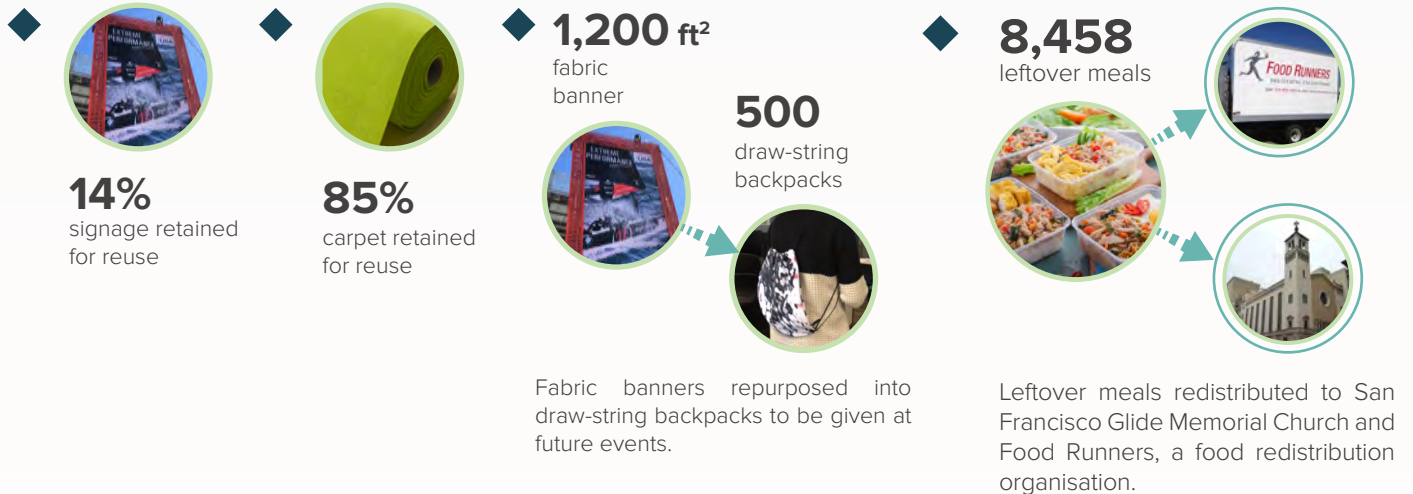
◆ 142 trees saved with 5.7 tonnes of FSC-certified post-consumer recycled content paper used for Daily Session Guides and small Pocket Guides.

Reuse

As an effort to reuse event materials to cut waste at source, furnishings such as chairs, café tables, sofa and benches were rented instead of constructing customised ones.

In 2015, Oracle OpenWorld enjoyed cost savings of USD 8,325 through the reuse of pallets and pallet boxes that contained attendee conference bags.

The show edition in 2016 also saw:



Recycle



Waste and recycling bins for exhibitors



Back-of-house waste sorting

Foam core signs were replaced with recyclable honeycomb cardboard signs in 2010.

To enable exhibitors to properly sort their waste for recycling, the waste bin that exhibitors ordered were accompanied with a **recycling bin** as well.

In addition, a **back-of-house waste sorting** programme was launched in 2015 for waste produced at Moscone Center during show dates. The venue provides space and waste sorters for sorting of waste for recycling, composting or landfilling.



To increase the participation of attendees in recycling, the **Green Angels programme** was launched in 2008. Trained Green Angels were stationed near waste stations during lunch to help attendees sort their waste for recycling, composting or landfilling.

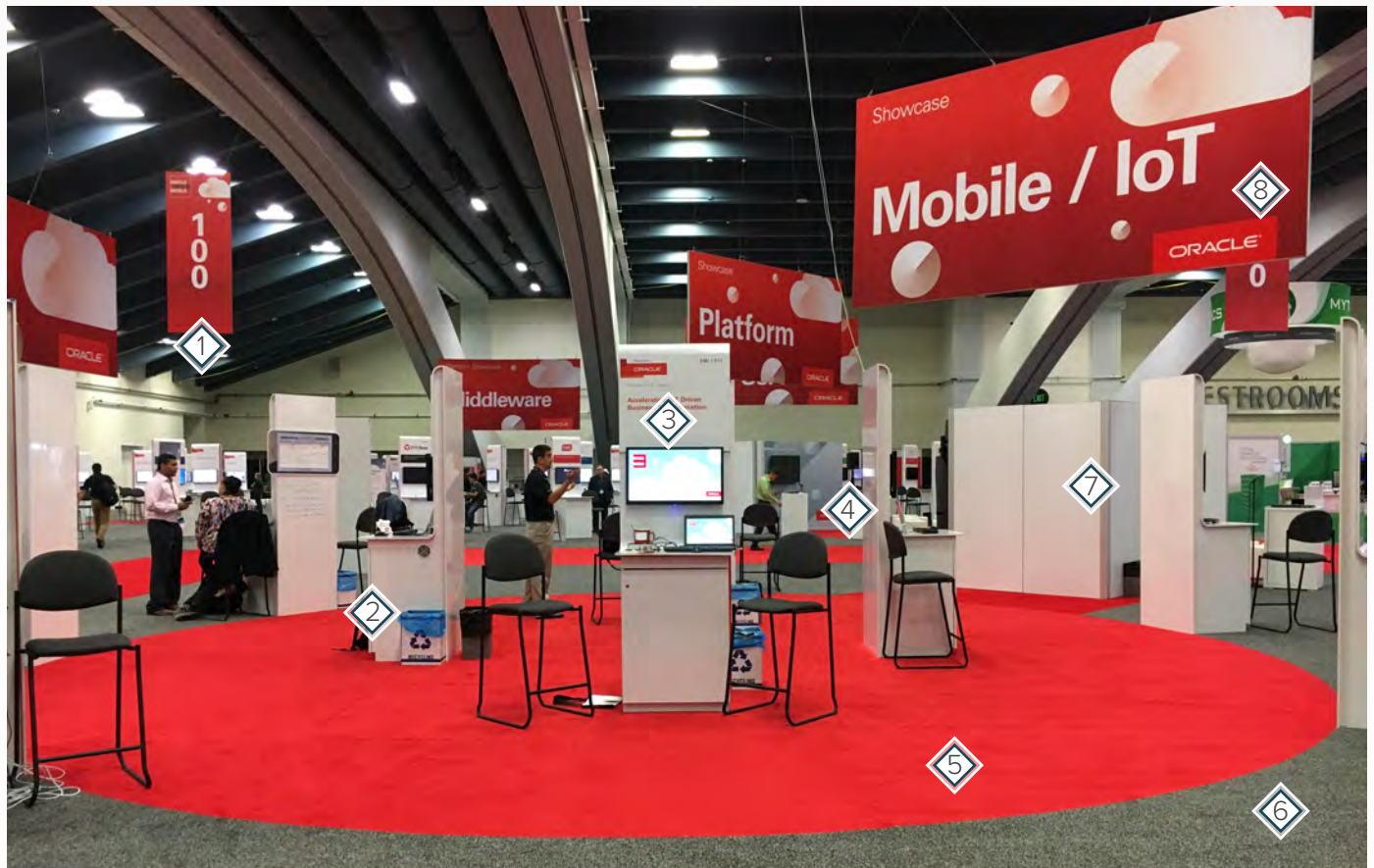


A **three-stream cardboard bin** system (recycling, compost and landfill) was placed in Oracle staff areas in 2016.

3R Measures In The Exhibition Hall

The Exhibit Green Booth programme, which was launched in 2015 with Oracle's partner, Freeman, provides a standard, cost-effective exhibition booth that uses all recyclable materials as a default option. Exhibitors rent booths and kiosks that are customised with removable graphics.

Examples of green materials used in an exhibition booth are:



- 1 Aisle signs are printed on cardboard, which can be recycled.
- 2 Two-stream waste bins encourage exhibitors and attendees to properly sort their waste.
- 3 These kiosks have digital displays, which minimise printed signage, and recyclable cardboard inserts that can be replaced each year.
- 4 Furniture, such as these chairs, are reused.
- 5 Carpet strips and curves result in trimmings, which are too small to be reused. Reducing these carpets cuts increase the potential for reuse.
- 6 Black, grey, and salt and pepper carpet colours indicate that the carpet is made of recycled content. Choose these colours, as far as possible.
Choose standard carpet sizes to increase the potential for reuse.
- 7 These exhibit booths are taken apart at the end of the event and retained for reuse.
- 8 The sign is made of reusable polyester fabric, not vinyl, and mounted on reusable aluminum frames. Because it does not indicate the year or destination, it can be retained for reuse.

Red carpet contains virgin content. Avoid or minimise these colour choices and choose carpets made of recycled content instead.

Improving Sustainability Measures

Oracle OpenWorld follows a process based on ISO 20121: 2012 Event Sustainability Management Systems to improve sustainability measures annually.

The planning cycle starts pre-event with meeting sustainability representatives from vendor partners, reviewing opportunities from previous event cycle, and engaging Oracle partners to communicate targets.

During the event, Oracle staff and vendors oversee the execution of sustainability plans while vendors collect key data to monitor the outcome of the plans. Inspections are also conducted by MeetGreen and opportunities for the next show cycle are identified. The process ends with assessment of areas that can be improved.

To understand the types and quantities of waste generated in the halls for targeted waste minimisation and recycling initiatives, annual waste audits for exhibit halls are conducted, starting from 2013. A post-event exhibit hall audit by MeetGreen was also started in 2015 to ensure that exhibitors do not leave event-related materials onsite. For materials that are left onsite and sent to landfill, Oracle can seek reimbursement for the cost of managing these from the exhibitor.

Sustainability programmes are communicated to exhibitors in a variety of ways, such as exhibitor kits and resource centres, monthly newsletters, onsite notices and terms & conditions. Sustainability training is also provided to Oracle's partners when needed.



WHO TO CONTACT

- Food Distribution Organisations, Local Recycling Facilities and Suppliers, please click [here](#).
- Licensed collectors and recyclers, please click [here](#).
- Singapore Green Building Council's Certified Products, please click [here](#).