

# Fact Sheet



## Sustainability

Marina Bay Sands' global sustainability strategy, Sands ECO360, guides the company in responsible operations to reduce its overall environmental impact. Sands ECO360 integrates the company's best practices, technologies and methodologies in the area of sustainability across all properties. It consists of four priorities: **Green Buildings, Environmentally Responsible Operations, Green Meetings and Stakeholder Engagement.**

In June 2019, Sands Expo and Convention Centre achieved the LEED® (Leadership in Energy and Environmental Design) Platinum, a global symbol of sustainability recognition. Marina Bay Sands is the first integrated resort (IR) in Asia Pacific to attain this certification for its MICE venue. The certification was a result of Sands Expo increasing energy efficiencies by 42 per cent more than other similar rated buildings in the world; adopting a rigorous waste management strategy; recycling over 50 per cent of operational waste; as well as responsibly sourcing over 60 per cent of office supplies and ongoing consumables.

### Fun Green Facts

#### **Reducing Energy Consumption**

- Since 2012, Marina Bay Sands has reduced its carbon footprint by 33 per cent.
- The integrated resort's S\$25 million Intelligent Building Management System has over 110,000 control points that allow automated controls over lighting, heating, air-conditioning and water supplies for the entire property. This system, along with other efficiency measures, has helped the integrated resort save over 7.4 million kWh of energy annually since 2012. The system is also capable of monitoring electricity usage and air quality.
- 90 per cent of Marina Bay Sands' property lightings (over 60,000 lightings) are energy efficient.
- The extensive glass façade across its property allows abundant natural daylight to illuminate indoor areas, displacing the need for energy-intensive lights. Photo sensors located at the hotel lobby and The Shoppes are able to detect the brightness of the sunlight, allowing indoor lights to be adjusted accordingly to reduce energy consumption.
- The property is connected to a District Cooling System. District cooling is an energy and cost-efficient method that produces and distributes chilled water via common service tunnels. Its air-conditioning makes use of water-cooled chillers, which are about 80 per cent more efficient than air-cooled models.
- Heat emitted from these chillers is reclaimed by heat pumps to provide hot water to the hotel and some restaurants to reduce energy consumption.
- The iconic Sands SkyPark is a 12,400 m<sup>2</sup> green oasis of more than 700 trees and palms, some over five metres tall. This massive 'green roof' helps to absorb and reduce heat entering the building, reducing the workload of chillers. "Green roofs" are also located throughout the property.
- To further improve energy efficiency, Marina Bay Sands installed a 145 kWp solar power system atop the Sands SkyPark – the highest location of solar panels in Singapore. Covering an area of

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880 m<sup>2</sup> atop the SkyPark walkway, the roof of the restaurant Spago, and the roofs on the elevator shafts of Tower 1 and Tower 3, the 536 solar panels are targeted to generate enough energy to power all lighting on the Sands SkyPark. This helps Marina Bay Sands reduce carbon emissions by 70 tonnes every year.

- Large scale art installations across the property – called the Art Path – also play a role in Marina Bay Sands' sustainability efforts:
  - *Rain Oculus* (The Shoppes at Marina Bay Sands and ArtScience Museum): The water feature collects rain water which is recycled and used to fill the canal at The Shoppes at Marina Bay Sands. At the museum, the curved shape of its roof collects rain water that cascades into a pool below. The water collected is recycled in the building's flush water bathroom systems.
  - *Wind Arbor* (Hotel Atrium Façade): The stainless steel net, comprising 260,000 aluminum metal flappers, reflects light when the flappers move. This sculpture acts as a shield from the sunlight, preventing the building's temperature from rising too rapidly. This cuts down the energy consumption needed to cool the building.

## **Environmentally Responsible Operations**

Marina Bay Sands' sustainable purchasing policy provides guidelines to its vendors, encouraging them to provide solutions, materials and goods that are eco-friendly.

Since October 2013, Marina Bay Sands no longer serves shark fin in restaurants it owns and operates. Shark fin dishes are also not offered at events held at Sands Expo and Convention Centre.

In October 2017, the integrated resort announced a landmark partnership with the World Wide Fund for Nature in Singapore (WWF) to improve responsible procurement within Marina Bay Sands and transform its supply chain. Under the programme, the integrated resort is supporting seven aquaculture farms in Malaysia in their journeys towards sustainable farming. By 2020, Marina Bay Sands aims to have 50 per cent of all seafood by volume sourced responsibly.

The integrated resort has its own Herb Garden located outside Rise Restaurant at Hotel Tower 1. Measuring 170 square metres, over 100 edible plants are specially grown at the herb garden. These herbs are used in restaurants owned and operated by Marina Bay Sands. A drip irrigation system, powered by solar panels, is used to water plants and shrubs, thereby avoiding wasteful spraying. Every day, 800 - 1,200g of herbs are harvested at the Herb Garden.

With the help of technology, Marina Bay Sands has enhanced its paperless hotel check-out options, saving over 20,000 sheets of paper a month.

Food waste is managed through five *anaerobic* digesters located across the property. In 2019, the integrated resort diverted a total of 800,000 kg of food waste from landfills.

In July 2016, Marina Bay Sands rolled out an innovative condensate water recovery project to collect and recycle water that drips from the 3,000 air-conditioning units across its three hotel towers. The project enables the integrated resort to save an average of 60,000 liters of water a day – four times the typical monthly water consumption in an average HDB flat in Singapore. The recycled condensate water is used for the water features around the property, exterior landscaping and to irrigate plants at the hotel.

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## **Green Meetings & Events**

Marina Bay Sands provides meeting organisers with sustainable options to achieve their green meeting goals through the Sands ECO360 green meetings programme, launched in 2013. In 2019, the integrated resort hosted a total of 378 sustainable events at Sands Expo and Convention Centre.

Several sustainable practices under the Sands ECO360 green meetings programme include:

- **Sustainable Event Advisory Services** to help clients develop sustainable meetings using the **Sands ECO360 Meetings Planning Tool**.
- A **Sands ECO360 Event Impact Statement** that provides a post-event sustainability report, capturing an event's sustainability highlights and a comprehensive summary of energy and water consumption.
- **Healthier Buffet Menu** (certified by Singapore Health Promotion Board, a government body), offers dishes prepared with healthier cooking oils, wholegrain staples, fresh fruits etc.
- The **sub-metering of MICE floors** allowing organisers to effectively track energy usage across specific areas.
- **Waste management** initiatives such as having recycling bins and sustainably disposing leftover food and materials.

## **Sustainability Education and Outreach**

- Marina Bay Sands has a company-wide education programme to raise greater awareness of sustainability and encourage environmentally-friendly behaviour. The programme includes paper reduction challenges, recycling drives, and eco-film screenings.
- The integrated resort also participates in Earth Hour, an annual worldwide event organised by WWF Singapore.
- Over at The Shoppes at Marina Bay Sands, several sustainability initiatives and programmes have been introduced to engage and educate tenants in going green. These include holding competitions such as the Tenant Recycling & Water Challenge in 2019 to raise awareness among tenants on the importance of recycling and water conservation, and arranging for the collection of recycled items from each tenant on a daily basis and providing them with a detailed waste assessment.

## **Other Green Accolades**

Marina Bay Sands, together with Las Vegas Sands in the United States (The Venetian and The Palazzo), forms the world's largest LEED-certified\* building. The properties are recognised globally for their innovative sustainability initiatives and continue to set new standards in sustainable business practices.

- **January to February 2020** – For the fifth year in a row, Las Vegas Sands Corp. was recognised by CDP, the international non-profit environmental disclosure platform, on Climate Change A List. The company was also on the Water A List for the second consecutive year, in recognition of its

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efforts in water efficiency and conservation. The annual A List recognises companies for their actions to cut emissions and mitigate climate risks, and is widely known as the gold standard for corporate environmental transparency.

- **June 2019** – Sands Expo and Convention Centre achieved the LEED® (Leadership in Energy and Environmental Design) Platinum, a global symbol of sustainability recognition. Marina Bay Sands is the first integrated resort in Asia Pacific to attain this certification for its MICE venue.
- **May 2019** – Marina Bay Sands was recertified under the MICE Sustainability Certification programme (Intermediate Level for venue). As the first venue in Singapore to achieve this certification in 2016, the integrated resort has met and gone beyond the basic certification criteria with its additional green efforts – such as providing event impact statements on energy and water consumption to its clients, as well as outfitting its venue with energy saving solutions. Awarded by the Singapore Association of Convention and Exhibition Organisers & Suppliers (SACEOS), this award covers six different categories such as waste, energy and water.
- **November 2018** – ArtScience Museum at Marina Bay Sands was awarded the prestigious LEED® Gold certification under the 'Existing Buildings: Operations & Maintenance' rating system, making it the first museum in Asia Pacific to be given this honour.
- **September 2018** – Las Vegas Sands Corp. was once again recognised by the Dow Jones Sustainability Indices (DJSI) for its industry-leading corporate sustainability efforts. Sands is the only integrated resort company included on the DJSI North America.
- **January 2018** – Marina Bay Sands received the ASEAN Green Hotel Award 2018-2020 and the ASEAN MICE Venue Award 2018-2020 at the 2018 ASEAN Tourism Standards Awards, in recognition of its green MICE initiatives and contributions to sustainable tourism.
- **2018** – Marina Bay Sands was recertified as a Green Mark Platinum building by the Building and Construction Authority.
- **October 2017** – The Shoppes at Marina Bay Sands was named a winner at the inaugural National Environment Agency (NEA) 3R Award for Shopping Malls, in recognition of its exemplary efforts in waste minimisation and recycling.
- **August 2017** – Marina Bay Sands was recognised as a leading sustainable organisation at the Singapore Green Hotel Award 2017-2018. Presented by the Singapore Hotel Association and supported by the Building and Construction Authority, National Environment Agency, Public Utilities Board and the Singapore Tourism Board, the award celebrates environmentally-friendly initiatives implemented by hotels in Singapore.
- **October 2016** – Marina Bay Sands was awarded the Distinction Award in the 3R Awards for Hotels by National Environmental Agency (NEA) and Singapore Hotel Association (SHA). The award recognises Marina Bay Sands for its innovative approaches to waste minimisation.
- **2016** – Marina Bay Sands was named a Grand Award Winner for its Sands ECO360 Meetings Programme in the Pacific Asia Travel Association (PATA) Grand and Gold Awards 2016.
- **2015** – The integrated resort clinched the prestigious 2015 UFI Sustainable Development Award by the Union of International Fairs (UFI) and the IMEX (Frankfurt) Green Supplier Award 2015.

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- **February 2014** – Marina Bay Sands was the first MICE facility in South East Asia to obtain the ISO 20121 Sustainable Events Management System certification.
- **2013** – Marina Bay Sands was the first MICE facility in Singapore to adopt the Singapore Tourism Board's sustainability guidelines for the MICE industry.

*\* The Leadership in Energy and Environmental Design (LEED) Green Building Rating System is the nationally accepted benchmark for the design, construction and operation of high-performance green buildings in the United States*