

# SANDS ECO360

Experience  
sustainable  
buildings

A NEW CLASSIC  
The Parisian:  
built for the future

2020 GOALS  
Fine-tuning our  
sustainability focus

PLAN ZERO  
Our first zero waste  
event in Asia



# Experience sustainable buildings

Sustainability is an ever-evolving conversation, and so are high-performance building strategies. Even as design preferences and available technologies continue to change, our ultimate goal remains the same – to create spaces that benefit the environment and provide enjoyable experiences for people who visit, stay, or work at our Integrated Resorts.

Our iconic properties are architectural masterpieces and all of them are also examples of functional sustainable design. They showcase the success stories of going green while underscoring the elegant feel with better lighting, cleaner air, and more comfortable indoor environments.

The Parisian Macao – our newest addition – epitomizes this belief: it is our most sustainable development to date. Find out more about the initiatives in place behind the scenes (p.6).



## Contents

3

### Welcome from our Chairman

Our renewed commitment to sustainable and responsible growth

4

### Sands ECO360 strategy

Our approach to sustainability

6

### Developing green buildings

A closer look at The Parisian Macao, our newest Integrated Resort on the Cotai Strip

8

### Running environmentally responsible operations

Discover a few of our favorite eco-friendly stories from the past year

10

### Hosting green meetings and events

Marina Bay Sands held Asia's first-ever zero waste to landfill event

12

### Expanding stakeholder engagement

The quest for one million Sands ECO360 actions got off to a strong start in 2016

14

### Global goals, our targets

Our new 2020 sustainability targets were developed with a global mind-set

16

### Environmental performance

Explore how we measure progress across a suite of environmental indicators

18

### Small steps, big changes

Despite infrastructure limitations, our Sands China Ltd. properties increased waste reduction initiatives

20

### Reinventing our classics

Our Las Vegas properties continued to lead the way on the Las Vegas Strip, achieving LEED Gold® recertification

22

### Everyday excellence

Marina Bay Sands partnered with WWF to procure sustainable seafood

24

### Enlightening the future

Sands Bethlehem promotes environmental awareness, crafting holiday wreaths from 100% recycled materials with local Donegan Elementary School

26

### Our stakeholders unpacked

Recognizing the value of diverse perspectives, many voices shape the foundation of our Sands ECO360 strategy

3

### Welcome from our Chairman

Our renewed commitment to sustainable and responsible growth

4

### Sands ECO360 strategy

Our approach to sustainability

6

### Developing green buildings

A closer look at The Parisian Macao, our newest Integrated Resort on the Cotai Strip

8

### Running environmentally responsible operations

Discover a few of our favorite eco-friendly stories from the past year

10

### Hosting green meetings and events

Marina Bay Sands held Asia's first-ever zero waste to landfill event

12

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Explore how we measure progress across a suite of environmental indicators

18

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22

### Everyday excellence

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24

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26

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# WELCOME

## FROM OUR CHAIRMAN

We are pleased to launch the 2016 Sands ECO360 report, marking 10 years of sustainability efforts at Las Vegas Sands Corp.

As the pre-eminent developer and operator of world-class Integrated Resorts, we recognize the opportunity we have to influence culture and set the standards for excellence – not only in elegance and luxury but also in what it means to be a responsible corporate citizen.

Since 2007, we've made it a strategic priority to become a more sustainable company. Following the conclusion of our previous five-year reporting cycle, we updated our Sands ECO360 sustainability strategy in 2016 to advance our commitment to minimizing our environmental impact and contributing to the communities in which we do business. Our revised sustainability strategy is also now aligned with the United Nations Sustainable Development Goals, with a specific focus on the objectives most material to our operations.

We are very proud of The Parisian Macao, our newest Integrated Resort that opened in September. Not only does The Parisian fulfill my vision for the Cotai Strip, but a host of innovative features make the property our most sustainable development to date.

While we continue to seek new development opportunities, we concurrently strive to minimize the footprint of our existing properties. This past year saw us complete 84 different energy efficiency projects across our portfolio of properties, which in turn are expected to save more than 31 million kilowatt hours of electricity use going forward.

Our Green Meetings program continues to propel the industry to a more sustainable future. Our iconic Marina Bay Sands hosted Asia's first ever zero waste to landfill event in November. Our revised strategy includes an expansion of our sustainable meetings program to encompass additional events and venues at all of our properties.

During the past year, our sustainability efforts have not gone unnoticed. We continued to earn extensive recognition for our achievements from external stakeholders, such as our inclusion in the Dow Jones Sustainability Indices (DJSI) North America, earning a position on CDP's Climate A List, and being named as one of *Fortune's* World's Most Admired Companies. These accolades would not be possible without the participation of our 50,000 Team Members worldwide. In the past year alone they have completed 264,000 ECO360 actions in support of our sustainability program. From carpooling to work, to installing water efficient fixtures at home, to building hygiene kits with repurposed amenities from our resorts, our Team Members have done it all.



As we close out the 2016 reporting year, we set our sights on a more sustainable future, with the continued success of our business built on a foundation of responsibility and transparency. I invite you to read more about our environmental commitment in this sixth annual environmental report, and hope you will share your thoughts with us.

### SHELDON G. ADELSON

Chairman of the Board and Chief Executive Officer and Treasurer, Las Vegas Sands Corp.

# SANDS ECO360 STRATEGY

Operating a sustainable business means focusing on the areas where we have the greatest impact and where we can make meaningful improvement through investments, partnerships, and scalable solutions.

## The way forward

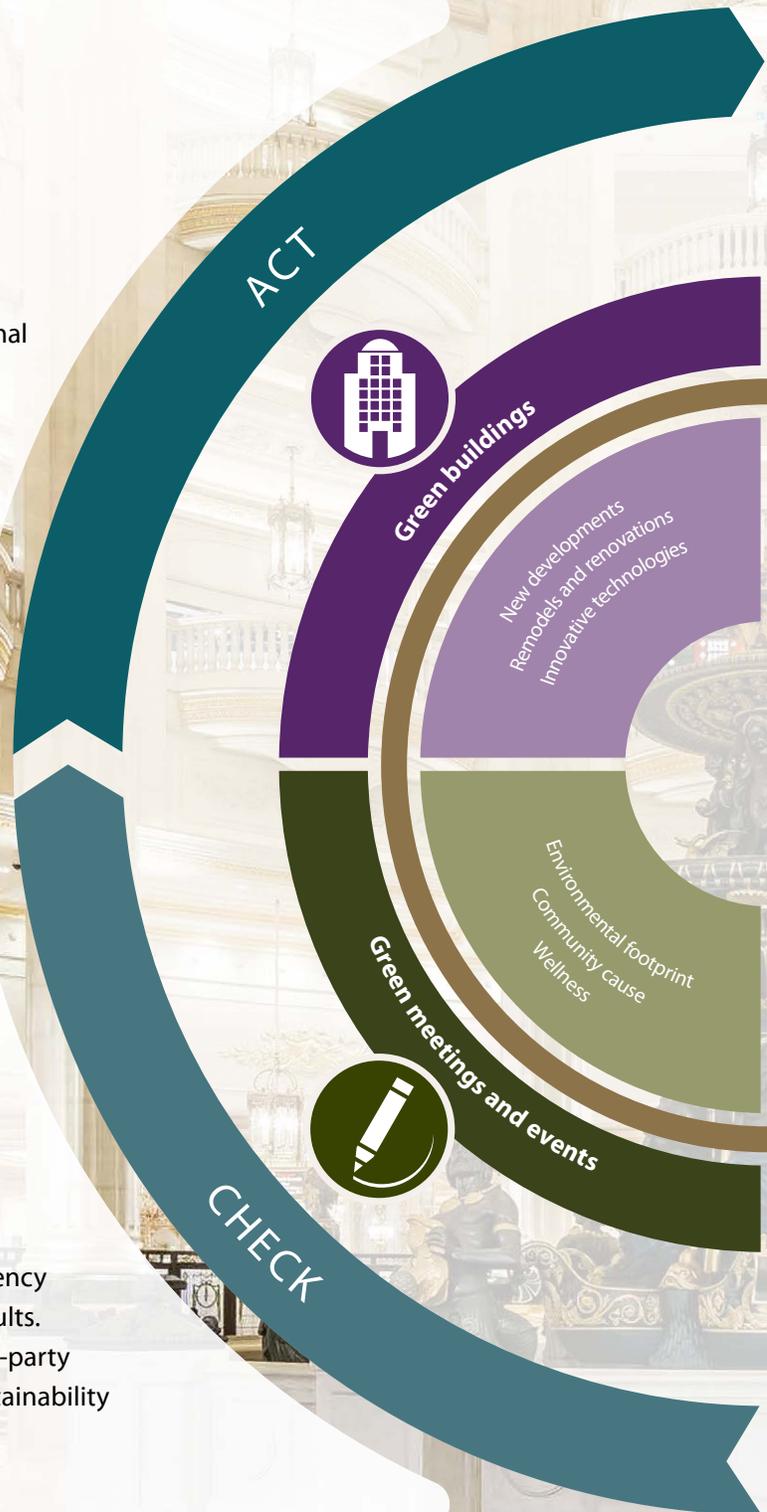
### Reframing our strategy

The Sands ECO360 strategy guides our sustainability efforts. In 2016, in response to stakeholder feedback and changing expectations, we updated the program. We are expanding our Green Meetings pillar to include events, offering additional environmentally conscious options in other venues such as the ArtScience Museum, theaters, and arena functions. Greater emphasis has also been placed on wellness-focused amenities, allowing guests to maintain their active lifestyles while traveling.

## Staying on track

### Reviewing our progress

Our Sands ECO360 strategy focuses on the impacts that are most material to our business, balancing short-term targets and long-term aims. We measure and manage our environmental performance by recording and analyzing utility data to improve our operations. To maintain transparency and accountability, we issue annual reports to share our results. Our commitment to sustainability is validated through third-party disclosure frameworks, such as CDP and the Dow Jones Sustainability Indices (DJSI).



# Environmental Management System

An environmental management system framework provides a means to identify the impacts of our operations, establish priorities, set performance goals, initiate projects, and continuously monitor and improve the Sands ECO360 program.



## Aspirational and attainable Resetting our goals

For us, a goal isn't simply a box to be checked; it's an objective worth achieving and exceeding. We surpassed nearly all our targets during our initial reporting cycle. Now we have set our sights on new challenges as we align our strategy with the United Nations Sustainable Development Goals. We've also set ambitious science-based greenhouse gas reduction targets, and are the first Integrated Resort company to have them approved by the Science Based Targets initiative.

## Ready, set, go Retrofitting for efficiency

From Green Buildings to Green Meetings, we seek to optimize our performance. We've created several tools to help us implement sustainability projects: we manage energy and water conservation through the EcoTracker platform, while the Top 10 Action Plan prioritizes our other initiatives. Property-level sustainability teams are instrumental in developing solutions, encouraging action, and building awareness.

## DEVELOPING GREEN BUILDINGS

Our goal is to develop resorts that become destinations and create everlasting memories for our guests. At the same time, we also try to do it with the utmost respect for our host communities. We all have a stake in protecting the planet's natural resources, which is why our team is working hard to design buildings with high performance and sustainability in mind.

### NEW DEVELOPMENTS

Each of our resorts starts from a vision, which grows into a spectacular reality. We continue evaluating new markets for landmark development. Using a forward-thinking approach, we make every effort to include the most innovative technologies and tailor our plans to support the local needs. From the dream stage to the construction phase, sustainability is systematically incorporated into the entire development process.

### REMODELS AND RENOVATIONS

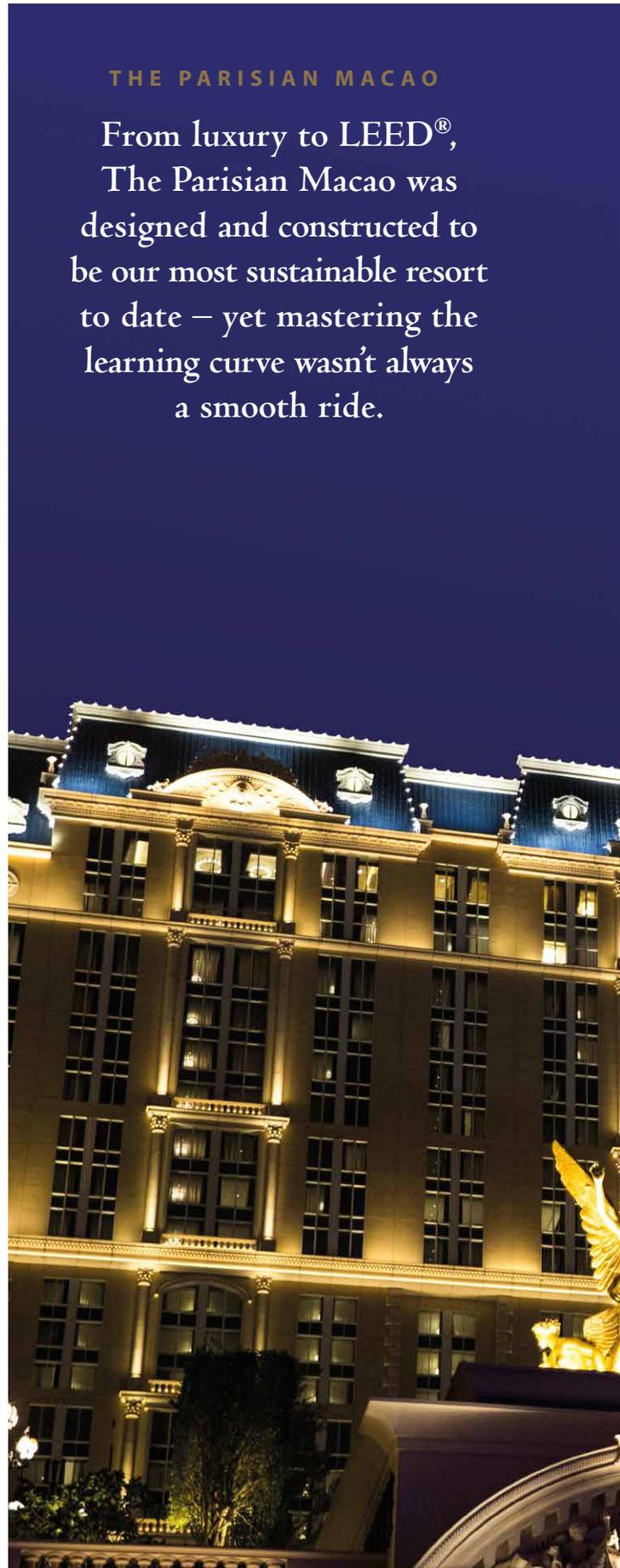
With a portfolio of 22,684 rooms and suites, hundreds of dining options, 10 theaters, and a variety of other spaces, we are always remodeling, rebuilding, or refreshing some areas. During these upgrades, we consider everything from energy efficient bulbs and appliances, to eco-friendly paints and carpets, low-flow water fixtures, and even integrated room controls.

### INNOVATIVE TECHNOLOGIES

Technology is advancing at a faster pace than ever before, and this is changing both the expectations of our guests as well as the way in which the hospitality industry as a whole conducts its business. From hydrogen fuel cells for forklifts to biogas waste to energy projects, new pilot technologies are constantly studied at our properties worldwide as we seek out ways to fine-tune our existing operations.

### THE PARISIAN MACAO

From luxury to LEED®, The Parisian Macao was designed and constructed to be our most sustainable resort to date – yet mastering the learning curve wasn't always a smooth ride.



When the sun sets on the famous Cotai Strip, onlookers are treated to thousands of lights illuminating the Macao sky.

Equipping The Parisian with 100% energy efficient LED bulbs, both inside and out, proved quite the task given the building's layout and size.

It is challenging to use current LED technology to illuminate the exterior of tall buildings because LEDs have limited reach. Finding lights that could shine up all 38 stories required a complete revamp of the conventional design, with lamps affixed at various levels throughout the façade.

The next issue came up during selection of the interior lighting. While the common

knowledge is that LEDs are the most energy efficient option, we realized that not all LEDs are created equal. After reviewing many samples provided by the contractors, we found that a lot of proposed LED bulbs didn't provide any meaningful energy savings. From then on, our specifications included not only the use of LED technology but also lumens per watt requirements for the lighting output efficiency.

Set against the grandeur of the Cotai Strip, our newest property affords breathtaking views of our other Macao resorts and the half-scale replica of the Eiffel Tower. Those same windows are specifically designed with a high-performance glazing material that reduces the solar heat gain, which in turn lowers the building's overall energy consumption.

Finally, we constructed The Parisian with an eye toward the future, recognizing that a building's lifespan far exceeds that of the systems used to service it. Given the speed of change in technology, we designed the resort's infrastructure to be adaptable to new sustainable solutions. When the Macao Water Supply Company pledged to provide reclaimed greywater for non-potable use in the coming years, we knew we had to capitalize on this valuable resource. Even though the distribution system is not yet online, we constructed The Parisian with two sets of pipes and storage tanks: one for potable water, and one for reclaimed greywater once it becomes available from the local utility.



The Parisian Macao

RUNNING

# Environmentally RESPONSIBLE OPERATIONS



When guests visit our Integrated Resorts, they are treated to elegantly designed spaces, celebrity chef restaurants, and exquisite customer service. But rarely do they realize what it takes to operate these mini cities behind the scenes. While our ultimate purpose is guest satisfaction, we also consciously aim to reduce our environmental footprint.

#### NATURAL RESOURCE CONSERVATION

In every part of our operations we are aware of the impact we have on the planet, both at a global and at a local scale. As our resorts continue to grow in popularity, we need to balance providing services to an increasing number of visitors and continuing to reduce our resource use. Our approach is focused on strategically selected energy, water, and operational efficiency projects.

#### WASTE MANAGEMENT

Managing Integrated Resorts comes with the complexities of an evolving waste stream. From coffee grounds to playing cards, and wood pallets to computer hardware, our properties capture it all. While waste prevention is our ultimate goal, the scale and scope of our business requires a comprehensive program that ensures waste is minimized upstream as well as diverted downstream.

#### SUPPLY CHAIN SUSTAINABILITY

Our resorts span three countries and two continents, making our operations truly dependent on a complex global supply chain to provide the products and services needed to run our business smoothly. We revised our Sustainable Procurement Policy to focus on three key objectives: conserving natural resources, materials, and energy; maximizing recyclability and recycled content of purchased goods; and reducing toxicity and harmful chemicals.

# 84

energy efficiency projects  
completed in 2016, conserving  
31 million kilowatt hours of  
electricity every year



# Turning responsibility into actions

## KEEPING COOL: Every drop counts in Singapore

Picture a cold glass “sweating” on a hot summer day. This is the same scenario that occurs when cooling an enormous Integrated Resort in a tropical climate. Rather than simply discharging this valuable condensation, Marina Bay Sands in Singapore implemented a recovery system that captures the excess liquid and reuses it for water features in the hotel lobby and irrigation of plants throughout the property.



## PRETTY IN PINK: The Parisian’s new CNG buses deliver more than just a smooth ride

In a region where air quality is a priority, we’ve invested in a new fleet of buses powered by compressed natural gas (CNG). CNG provides a cleaner-burning alternative to conventional fuel. Our U.S. properties have also enhanced their electric vehicle charging infrastructure to make it more convenient for guests, visitors, and Team Members to plug in their cars.

## TODAY’S SPECIAL: Fighting hunger in Las Vegas

We offer tasty hot meals 24 hours a day, seven days a week for 9,000 Team Members in Las Vegas. Because of changing employee schedules, extra unserved food is inevitable. A realization that one in seven southern Nevadans struggles with hunger inspired a brainstorm session at our annual supplier roundtable. The discussion led to a partnership between The Venetian | The Palazzo and Chefs to End Hunger, a regional not-for-profit organization that distributes leftover meals to local charities. The pick-ups are aligned with our produce deliveries so that after the drop-off, the same refrigerated trucks are refilled with food for donation, preventing an empty return trip. In 2016, this creative program donated more than 22,000 meals.



# HOSTING GREEN MEETINGS AND EVENTS

Destinations of the future need spaces for sustainable events.  
But how “green” can green meetings really be?

## ENVIRONMENTAL FOOTPRINT

With a few simple steps, we can help transform an event into a sustainable gathering. Many of our facilities have been awarded third-party environmental certification, providing a robust foundation for a successful sustainable meeting. Our customizable program offers our clients a variety of options to help them attain their event’s specific sustainability goals.

## COMMUNITY CAUSE

Thinking globally and acting locally, we collaborate with non-profit organizations to design custom volunteer experiences for our meeting clients to give back to the host city. Once the customers select their community cause, we help to connect them with our partners. Globally, we donate time, expertise, and resources to a wide array of charitable organizations, amplifying the effect of our property efforts into the larger communities in which we operate.

## WELLNESS

Despite their packed schedules, we know many meeting attendees want to maintain their healthy routines. With a selection of wellness offerings, it’s easier than ever for our guests to make smarter, more wholesome choices. From nutritious menus to fitness and stress-reduction activities, we make sure our clients and guests have everything they need to support their health and well-being, all under one roof.



### Green Meeting Concierge

When planners like to go above and beyond, our designated Green Meeting Concierge can customize their sustainable event.



### Post-Event Impact Statement

On request, we create data-based impact reports of events for clients that want to communicate their own progress and highlights to their stakeholders.



### Sustainable Food

Our chefs use only the freshest and responsible ingredients to craft healthy, sustainable, and delicious dining options.

# Plan Zero

ASIA'S FIRST-EVER ZERO WASTE TO  
LANDFILL EVENT FORESHADOWS THE FUTURE  
OF SUSTAINABLE GATHERINGS

Trying to host a zero waste event is the easiest way to learn how much waste is embedded in unexpected places. From tea bags to floor tape, stage decorations to sugar packets, waste comes in all shapes, sizes, and products. Some solutions are obvious – like using cloth napkins instead of paper ones, or digital communications over printed materials – but others are more disguised.

Large-scale conferences are generally resource-intensive in ways that are hard to predict. For instance, when organizers at Marina Bay Sands were planning the 5th Responsible Business Forum on Sustainable Development, hundreds of feet of cords and wires had to be secured to the ground without using floor tape. The solution involved an entire re-design of the event's audiovisual layout using reusable cable trays, where necessary, to make sure safety was not compromised.

Lunch came with its own challenges, since fluctuating attendance makes food waste or food surplus common at events. Chefs at Marina Bay Sands created a menu of ingredients that could be easily processed by the resort's on-site food digesters. Any ingredient with a shell, husk, pit, or stone was kept off the menu to ensure all leftover waste could be properly disposed of. Beverage stations were equipped with reusable cups along with tea bags without strings and labels. Individually wrapped sugar packets were swapped out for sugar cubes.

The path to zero waste can be difficult, but this target can be achieved by making a conscious effort to change the way we plan events.



Meeting room at Marina Bay Sands

# EXPANDING STAKEHOLDER ENGAGEMENT

Working in unison with our stakeholders, we can really make a meaningful difference – multiplying our positive impacts both now and into the future.

## TEAM MEMBER COLLABORATION

Team Members are truly our greatest assets and we strive to develop appreciation for the planet's finite resources through environmental campaigns and education events. Sustainability champions are crowned at all levels of our organization to help us integrate Sands ECO360 initiatives into the daily operations.

## PARTNERSHIPS

Sustainability challenges are often interwoven and multifaceted in nature. Diverse partnerships among various organizations and stakeholders can produce previously unimagined solutions. Our strategic partnerships, formulated on shared values and objectives, are aimed at creating transformational change in the regions and locales in which we operate.

## CERTIFICATIONS AND REPORTING

Measuring and communicating progress on key sustainability indicators is paramount. For five years we have published an annual Sands ECO360 report, highlighting our progress and the areas where we're working hard to improve. Our reports focus on the most relevant issues to our business and stakeholders, and show how we address our material challenges. Our commitment to sustainability is continually recognized through certifications, rankings, and awards. Performance reviews by sustainability research and rating agencies help us improve our strategy and policies.

# 264,458

Sands ECO360 actions  
completed in 2016





## One Million Actions by 2020

Participation is a great means for education. As we embark on our next five-year reporting cycle, we want our Team Members to play a significant and tangible role in our sustainability journey. We have around 50,000 Team Members worldwide, each with their own story and background; and together, we can leave a compelling sustainability narrative for generations to come.

**Our 2016 statistics show we are off to a great start!**

### 1 Clean the World

We assembled more than 100,000 hygiene kits with repurposed amenities from the hotel rooms to help improve the health and well-being of populations in need.

### 2 Meeting Green

Through Sands ECO360 Green Meetings program, our event attendees in Las Vegas took 1,829 actions, including recycling their badges, cleaning up local trail parks, and participating in the green actions selfie social-media contest.

### 3 Earth Hour

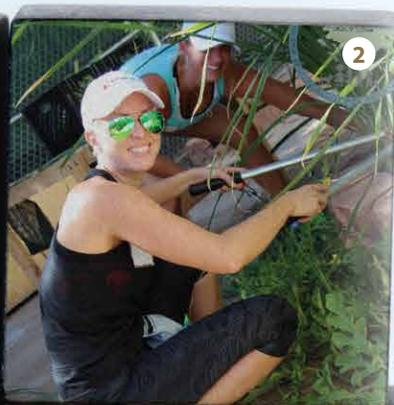
From planting trees and washing clothes in cold water to taking a sustainability quiz, our Team Members contributed more than 22,000 actions globally in correspondence with WWF's Earth Hour and our *I Will If You Will* campaign.

### 4 World Hunger Week

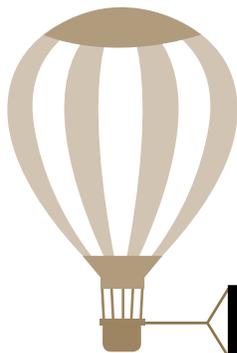
Our Team Members turned in more than 135,000 empty plates after meals during World Hunger Week to reduce food waste and increase awareness of global food scarcity issues.

### 5 "Clean the Office" Campaign

Forty-one different departments competed in a "Clean the Office" campaign, with the goal of reducing waste and increasing recycling at our Macao properties.



# Global goals, OUR TARGETS



## Our 2016–2020 targets

**The world has changed significantly over the past years. Our portfolio is growing and new challenges are emerging, but technology is also creating unprecedented opportunities. Business, government, and the public sector are joining forces on a global agenda for development. Two key developments stand out to us: the UN Sustainable Development Goals and science-based targets.**

In 2011, we started our first five-year environmental reporting cycle. After publishing the last report of the cycle in 2016, we have now set 2020 performance targets with 2015 as our new baseline. We've stuck to our actionable five-year timeframe, but our targets sit within a 2030 horizon, aligned with the Sustainable Development Goals.

### UN Sustainable Development Goals (SDGs)

The 17 global goals have been embraced by countries, cities, and companies since their launch in 2016. After reviewing and analyzing the framework, we identified three goals (SDG6 on water, SDG7 on energy, and SDG12 on responsible consumption) where as an organization we can make the most meaningful impact. Under each goal, we selected one or more targets that we are incorporating into our strategy through long-term external and internal targets. In some of these areas, we have a foundation to build on; in others, we are just beginning.

We aligned our 2020 targets with the following Sustainable Development Goals 2030 targets:

#### Emissions (SDG7 Affordable and Clean Energy)

- Double the global rate of improvement in energy efficiency.
- Increase substantially the share of renewable energy in the global energy mix.

#### Water (SDG6 Clean Water and Sanitation)

- Substantially increase water-use efficiency across all sectors.

#### Waste (SDG12 Responsible Consumption and Production)

- Substantially reduce waste generation through prevention, reduction, recycling, and reuse.
- Halve per capita global food waste.

### Science Based Targets

SDG7 calls for reduced emissions and improved energy efficiency. We used the science-based targets methodology to calculate proportionate carbon emission reduction goals. To best reflect our business, we separated our emissions by resort and ferry operations. Science-based targets provide companies with a clearly defined pathway to future-proof growth by specifying how much and how quickly they need to reduce their greenhouse gas emissions.

The key development for us was the opening of two new resorts. Our new reporting cycle includes The St. Regis Macao (508,000 sq. ft./400 rooms) and The Parisian Macao (3,800,000 sq. ft./2,951 rooms) for the first time. They are top-notch green buildings. By 2020, we aim to not only reduce the emissions at our existing operations but also offset any emissions of these two new resorts.

### OUR TARGETS

*Our companywide targets are aligned with the Sustainable Development Goals and science-based targets methodology. To support these efforts, we are also committing to 1,000,000 Sands ECO360 actions.*

### FUTURE PROJECTS

*We identified major projects and developed a roadmap to achieve our 2020 targets.*

### COMPLETED WORK

*The initiatives we implemented before 2016 reduced our electricity consumption by 247 million kWh and improved waste diversion by more than 10%.*



TEAM MEMBER ENGAGEMENT



7 AFFORDABLE AND CLEAN ENERGY

6 CLEAN WATER AND SANITATION

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

EMISSIONS  
RESORT OPERATIONS

**6%**

reduction in addition to offsetting the newly opened resorts

WATER

**3%**

reduction on a per square foot basis

**1,000,000**  
Sands  
ECO360 Actions

WASTE

**5%**

increase in diversion rate

EMISSIONS  
FERRY OPERATIONS

**6%**

reduction

Baseline food waste in operations	Explore new water technologies	Pilot new efficiency measures	
	Demand-side management	Internal consumption reduction	Leak detection and management

	Assess renewable power purchasing	Enhance submetering	Evaluate waste to energy technologies
Ongoing water audits		On-site renewable energy pilot projects	

300+ efficiency projects		Low-flow fixture policy	
	Installed 550,000 LED bulbs		Streamlined online utility reporting
Water audit and fixture inventory		Recycling and waste minimization	

	Innovative cooling tower technology		Continual building commissioning
Modeled weather impact on utility	Improved food waste diversion	Piloted renewable energy projects	
	Water reclamation projects		Waste audit

# ENVIRONMENTAL PERFORMANCE

As a growth-oriented company, we continue to open new resorts. Our goal is to both reduce the environmental footprint of existing properties and offset the impact of new developments. We began reporting our environmental performance six years ago and completed our first five-year reporting cycle in 2015. Then we reset the baseline and established 2020 targets. This past year marked the beginning of the latest reporting cycle.

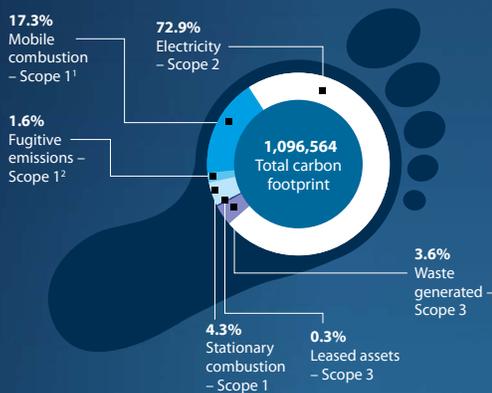
We have seen a positive trend in absolute emissions, water, and electricity performances among our existing buildings. Our teams have also steadily improved the waste diversion rate and upstream reduction efforts.

Nevertheless, the total companywide footprint increased due to the addition of The St. Regis and The Parisian in Macao. At the conclusion of our 2020 reporting cycle, we need to offset the impact of these two properties and reduce emissions by an additional 6%. To overcome this challenge, we must proactively manage our utility consumption, ensure disciplined execution of our efficiency projects, and explore innovative solutions.

## Companywide performance

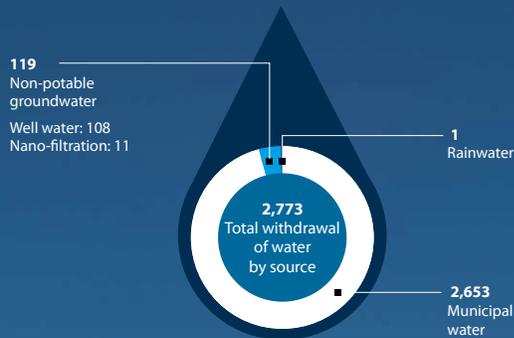
### CARBON FOOTPRINT

(MT CO<sub>2</sub>e)



### TOTAL WATER WITHDRAWAL

(MILLION GALLONS)



### ENERGY CONSUMPTION

(GIGAJOULES)



**Direct energy**  
3,354,566  
46%

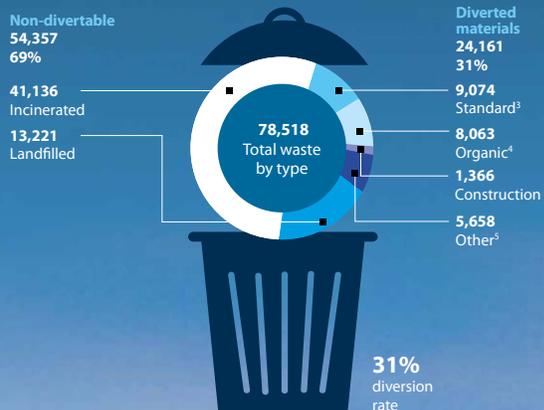
*By source:*  
Non-renewable  
Gasoline: 25,896  
Diesel: 2,386,343  
Jet kerosene: 42,588  
Natural gas: 661,441  
LPG: 231,549  
Renewable  
Solar thermal: 6,748

**Indirect energy**  
4,000,609  
54%

*By source:*  
Non-renewable  
Electricity: 3,711,547  
Heating: 9,605  
Cooling: 278,867  
Renewable  
Solar PV: 591

### DIVERTED MATERIALS

(SHORT TONS)



**Non-divertable**  
54,357  
69%

41,136 Incinerated  
13,221 Landfilled

**Diverted materials**  
24,161  
31%

9,074 Standard<sup>3</sup>  
8,063 Organic<sup>4</sup>  
1,366 Construction  
5,658 Other<sup>5</sup>

**31%**  
diversion  
rate

#### Notes

1. Includes gasoline, CNG, diesel, biodiesel, jet fuel, and marine fuel.
2. Refrigerants.
3. "Standard" includes: plastic, aluminum, cardboard, paper, glass, and metal.
4. "Organic" includes: food waste, food donations, horticultural waste, and cooking oil.
5. "Other" includes: recovered assets, batteries, e-waste, donations, light bulbs, soap, and shampoo amenities.



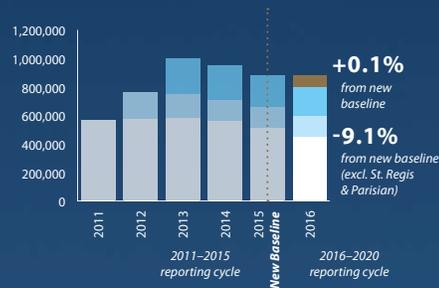
# Resort Operations

Excluding the newly opened St. Regis Macao and Parisian Macao, we reduced absolute Scope 1 and Scope 2 emissions by 9.1%, water consumption by 5.7%, and electricity consumption by 4.4% from 2015 at our existing resorts.

- Legacy properties<sup>6</sup>
- Marina Bay Sands & Sands Bethlehem
- Sands Cotai Central
- The St. Regis Macao & The Parisian Macao

## EMISSIONS ABSOLUTE

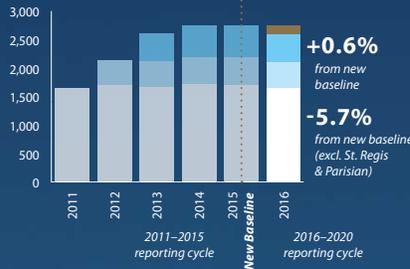
SCOPE 1 & SCOPE 2 (MT CO<sub>2</sub>e)



2020 target: 6% reduction from the 2015 baseline

## WATER<sup>7</sup> ABSOLUTE

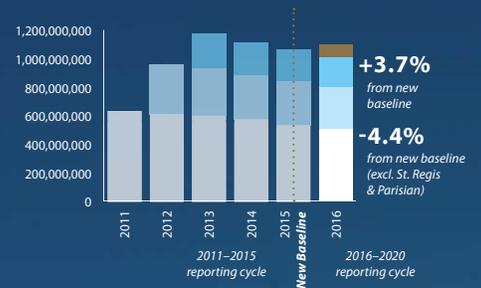
(MILLION GALLONS)



2020 target: 3% reduction from the 2015 baseline

## ELECTRICITY ABSOLUTE

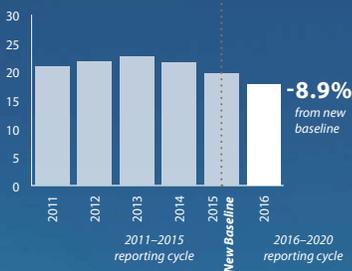
(kWh)



2020 target: 5% increase from the 2015 baseline

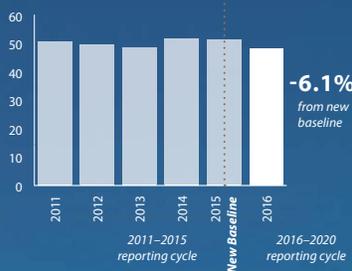
## EMISSIONS INTENSITY

SCOPE 1 & SCOPE 2 (MT CO<sub>2</sub>e/1,000 SQ. FT.)



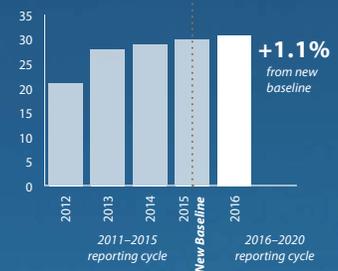
## WATER INTENSITY

(GALLONS/SQ. FT.)



2020 target: 3% reduction from the 2015 baseline

## WASTE DIVERSION RATE (%)



2020 target: 5% increase from the 2015 baseline

### Notes

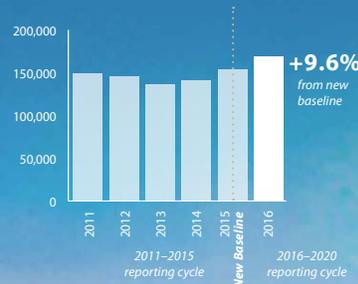
6. Legacy properties: those in operation prior to 2012, including The Venetian and The Palazzo, Sands Expo, Sands Macao, The Venetian Macao, The Plaza Macao, and Sands Aviation.  
 7. For our Las Vegas properties, 2016 serves as the new baseline year. Malfunctioning water meters in 2015 skewed our annual water consumption data.

# Ferry Operations

Given an increase in the number of voyages, the emissions of our Cotai Water Jet ferry service have gone up in recent years and we are planning to evaluate technologies to increase the ships' fuel efficiency.

## EMISSIONS ABSOLUTE

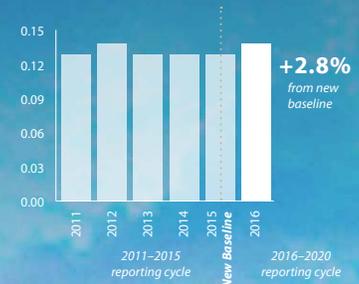
(MT CO<sub>2</sub>e)



2020 target: 6% reduction from the 2015 baseline

## EMISSIONS INTENSITY

(MT CO<sub>2</sub>e/NAUTICAL MILE)





PROPERTY INFORMATION

**Location:** Macao (SAR), China

**Year opened:**

Sands Macao (2004);  
 The Venetian Macao (2007);  
 The Plaza Macao/Four Seasons Hotel Macao (2008);  
 Sands Cotai Central (2012),  
 including The St. Regis Macao (2015);  
 The Parisian Macao (2016)

**Number of Team Members:** 26,048

**Number of rooms:** 12,749

**Meeting square footage:** 2.43 million

PROPERTY SPOTLIGHT:

# Sands China Ltd.

## Small steps, big changes

Given the limited land resources in Macao, waste management is a constant challenge. Yet even the biggest goals can be accomplished with small steps. Two McDonald's restaurants for employees in the Heart of House at The Venetian Macao and Sands Macao no longer provide unnecessary packaging such as beverage lids, tray liners, and burger boxes. Plastic and paper recycling bins are placed at trash collection points to encourage Team Members to properly sort their waste.

### AWARDS AND CERTIFICATIONS



Macao Green Hotel Gold Award, 2011 & 2014 (The Venetian Macao)



Macao Green Hotel Silver Award, 2012 & Gold Award, 2015 (Sands Macao)



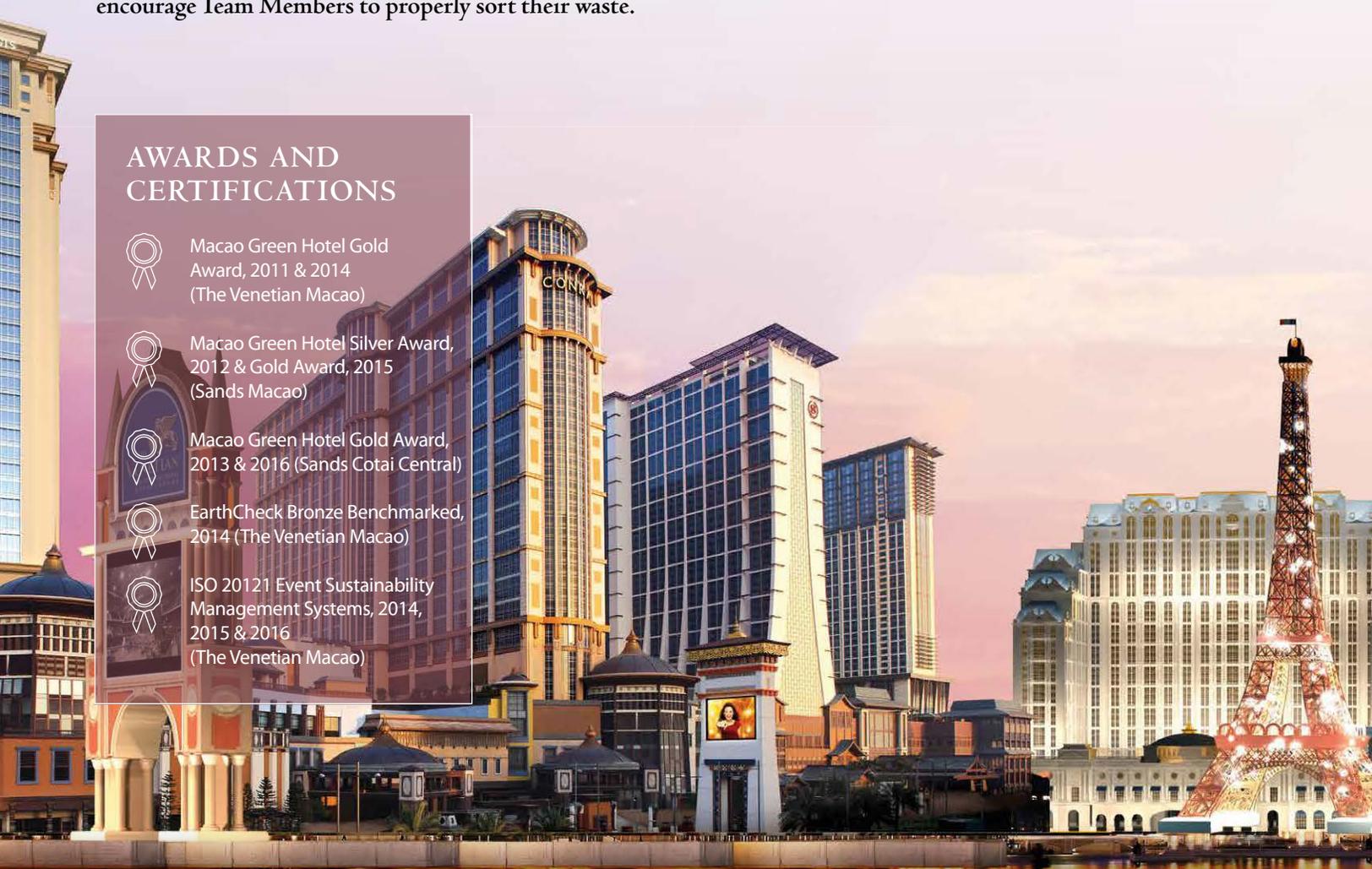
Macao Green Hotel Gold Award, 2013 & 2016 (Sands Cotai Central)



EarthCheck Bronze Benchmarked, 2014 (The Venetian Macao)



ISO 20121 Event Sustainability Management Systems, 2014, 2015 & 2016 (The Venetian Macao)



**Clean the Office**

The properties hosted a five-day “Clean the Office” campaign. More than 7,000 pounds of unneeded supplies were recycled or donated to local charities.



**Raising Awareness of Food Security**

One hundred Team Members participated in a memorable, interactive Oxfam Hunger Meal activity that brought hunger and poverty issues to life.



#62

For the second straight year, *Newsweek* magazine named Sands China Ltd. as one of the top green companies in the world, making the Integrated Resort developer the second-highest rated company within the Hotels, Restaurants, and Leisure category.

6.8%

INCREASE IN DIVERSION RATE

including a 3,300 ton reduction in waste sent to landfill.

**Clean Plates Aplenty**

Sands China marked World Hunger Day with three separate clean plate challenges, as Team Members returned nearly 118,000 plates with no food waste.



**International Housekeeping Week**

Celebrations culminated with a 3D model competition – utilizing only recycled materials – highlighting how creativity can reduce the amount of waste sent to the landfill.



“The team at Sands China Ltd. is very proud of their Sands ECO360 achievements. I am confident that with our ongoing focus we will continue to be a clear leader in Macao in this important aspect of corporate responsibility.”

MARK MCWHINNIE, SENIOR VICE PRESIDENT OF RESORT OPERATIONS AND DEVELOPMENT



## AWARDS AND CERTIFICATIONS



LEED<sup>1</sup> Silver<sup>®</sup> for New Construction<sup>2</sup>, 2008



U.S. Department of Energy's Energy Innovator Award, 2008



LEED Gold<sup>®</sup> for Existing Buildings, 2010



Best Recycling Program, Las Vegas Business Press Green Awards, 2013



APEX/ASTM<sup>3</sup> Venue Level Two, 2013 and 2015



TripAdvisor Green Leaders Gold Certification, 2013 and 2015



Water Hero Award, Southern Nevada Water Authority, 2014



LEED Gold<sup>®</sup> for Building Operations and Maintenance, 2016



Sustainability Leading Company Award, Nevada Hotel and Lodging Association, 2016

### PROPERTY INFORMATION

**Location:** Las Vegas, Nevada

**Year opened:**

Sands Expo (1990);  
The Venetian Las Vegas (1999);  
Venezia at The Venetian (2003);  
The Palazzo Las Vegas (2007)

**Number of Team Members:** 8,600

**Number of rooms:** 7,092

**Meeting square footage:** 2.08 million

“Our Team Members are an integral part of our Sands ECO360 program, as they are the ones championing our sustainability efforts and driving us to create a lasting positive change. Even the smallest of eco-friendly actions, when multiplied by thousands of Team Members, can have a transformative impact on our operations and culture.”

**ANNA SCHMID, VICE PRESIDENT  
OF ADMINISTRATION AND  
EVENT OPTIMIZATION**

<sup>1</sup> The U.S. Green Building Council's LEED<sup>®</sup> green building program is the pre-eminent program for the design, construction, maintenance, and operation of high-performance green buildings. Learn more at [usgbc.org/LEED](http://usgbc.org/LEED).

<sup>2</sup> The gaming floor is not part of the LEED certification.

<sup>3</sup> APEX/ASTM – The meeting industry's first set of standards for environmentally sustainable meetings, created through a partnership between the Accepted Practices Exchange and American Society for Testing and Materials.



**PROPERTY SPOTLIGHT:**

# The Venetian, The Palazzo and Sands Expo

## Reinventing our classics

Nevada is one of the leading states in green buildings in terms of LEED-certified square footage per capita. First certified in 2010, the Sands Expo Convention Center and The Venetian Congress Center achieved LEED Gold® re-certification for building operations and maintenance in 2016. This space alone represents 35% of the total LEED-certified area in Nevada that year.



**Green Caffeine Campaign**

The annual IMEX Travel Exhibition continues to drive sustainability through attendee engagement. This year, conference guests willing to say goodbye to disposable paper cups were rewarded with discounts or free coffee at eight coffee shops on property.

**5.6%**  
DECREASE IN  
GREENHOUSE GAS EMISSIONS

Reduced Scope 1 and 2 emissions by 7,041 MT CO<sub>2</sub>e, equivalent to the amount of carbon absorbed by 6,665 acres of U.S. forests in one year.

**From Paper to Pixels**

Keeping 7,092 suites spotless requires a surprising amount of paperwork. The resort's 2,000 housekeepers are now equipped with iPods for assignments and reporting issues – improving efficiency while saving trees.



**Sands Expo Streamlines Recycling**

Large volumes of waste are generated in a very short period during the move-in and move-out of a convention. A horizontal baler was installed to automate the process and compress more recyclables into commercial-scale bales.



**CANstruction Benefits Three Square**

To mark World Hunger Day, Team Members collected more than 28,000 food items for charity, while creating some remarkable art from the donations.

**13,699**  
SANDS ECO360 ACTIONS

To celebrate completing the most actions to combat climate change among its sister properties, Pete Boyd, Senior Vice President of Operations, jumped into the Grand Canal at The Venetian, fulfilling his part of the *I Will If You Will* challenge for Earth Hour.

REGIONS



SINGAPORE

PROPERTY INFORMATION

Location: Singapore
Year opened: 2010
Number of Team Members: 9,500
Number of rooms: 2,561
Meeting square footage: 1.06 million

PROPERTY SPOTLIGHT:

Marina Bay Sands
Everyday excellence

Green meetings were one of this property's focus areas in 2016. The resort piloted Asia's first zero waste to landfill event and also expanded its ISO 20121 sustainable event management systems into 15 non-MICE departments. Marina Bay Sands received a Grand Award in the Environment Category from the Pacific Asia Travel Association. The organization particularly praised the property for its industry-leading Sands ECO360 Green Meetings Program.

4.8%

REDUCTION IN WATER CONSUMPTION

The property lowered the water use from 2015, saving 20 million gallons. This was enough water to meet the daily consumption of 1,370 Singaporeans for an entire year.



Skyrocketing Sands ECO360 Participation

More than 90% of Team Members took at least one Sands ECO360 action in 2016, marking the highest participation level for the property to date.

Leadership in Packaging

The property attained the Merit Award at the National Environmental Agency's 3R Packaging Awards, in recognition of its reusable plastic basket and pallet exchange program. This program helps the resort's suppliers avoid the use of carton and Styrofoam boxes when making deliveries to the property.



Sourcing Sustainable Seafood

In partnership with WWF, the property hosted the Sustainable Seafood Business Forum and launched the Responsible Seafood Group, which commits to procuring sustainable seafood.

Engage Public Through Eco Films

The ArtScience Museum hosted the first annual Singapore Eco Film Festival to inspire the public and bring local environmental organizations together to foster more collaboration in protecting the environment.



1st

VENUE CERTIFIED BY SACEOS

The property became the first venue in Singapore to achieve the MICE Sustainability Certification, developed by the Singapore Association of Convention and Exhibition Organisers and Suppliers (SACEOS).

1 MICE: Meetings, Incentives, Conferences, and Exhibitions

“Ocean conservation is immensely significant to the food and beverage industry. We took the first step four years ago by completely removing shark fins from our kitchens and increasing sustainable seafood options. We have since deepened our commitment, working with WWF Singapore to assess our supply chain and pledging to remove highly vulnerable species from all of our offerings.”

CHRISTOPHER CHRISTIE, EXECUTIVE CHEF

## AWARDS AND CERTIFICATIONS



APEX/ASTM<sup>1</sup> Venue Level One, 2013 & 2015



EarthCheck Silver certified, 2014, 2015 & 2016



ISO 20121 Event Sustainability Management Systems, 2014, 2015 & 2016



Singapore BCA Green Mark Platinum, 2015



Distinction Award for waste reduction, 3R Awards for Hotels, 2016



40 offices certified under Eco-Office, and 15 retail outlets certified under Eco-FNB & Eco-Shoppe certifications, 2016



MICE Sustainability Certification, Singapore Association of Convention and Exhibition Organisers and Suppliers (SACEOS), 2016



Grand Award Winner for Environment, The Pacific Asia Travel Association (PATA), 2016

<sup>1</sup> APEX/ASTM – The meeting industry’s first set of standards for environmentally sustainable meetings, created through a partnership between the Accepted Practices Exchange and American Society for Testing and Materials.

“We all have a responsibility to care for the environment. The partnership with Donegan School personifies our commitment to sustainability, which extends beyond the boundary of our property to the local community.”

JULIA CORWIN, EXECUTIVE DIRECTOR OF BRAND MARKETING

## AWARDS AND CERTIFICATIONS



4 Keys in Green Key Eco-Rating Program, 2013



Ranked #7 nationally, among properties of similar size, in Clean the World donations, 2016



PROPERTY INFORMATION

**Location:** Bethlehem, Pennsylvania  
**Year opened:** 2009  
**Number of Team Members:** 2,400  
**Number of rooms:** 282  
**Meeting square footage:** 29,000



PROPERTY SPOTLIGHT:

# Sands Bethlehem

## Enlightening the future

Environmental education is a resource that transcends the classroom and helps schoolchildren understand how natural systems function, and equally importantly, how humans and nature are intertwined. Sands Bethlehem has teamed up with the Donegan Elementary School in an effort to provide students with the tools they need to be good stewards of the environment in their neighborhoods and communities.

**Recycling Benefits Local Community**  
 Following the remodeling of the casino's hotel, more than 18,000 square feet of carpet was donated to a local charity for repurposing into smaller rugs.

**'Tis the Season**  
 In December, Team Members representing 19 different departments created holiday wreaths using 100% recycled materials. Donegan Elementary School students, who received a lesson on recycling from the property sustainability team, judged the contest entries.

**LED Lighting Upgrades**  
 Over 6,500 lamps were retrofitted with LED bulbs, which is projected to save over 400,000 kWh of electricity per year.

**Colorful Reuse**  
 After the spring bloom, tulips have been traditionally pulled up and recycled at a local composting facility. This year, the plants were carefully removed and placed in a location where Team Members could pick them up for their own gardens. In three hours, all 9,000+ bulbs found a new home.

**19.8%**  
 DECREASE IN GREENHOUSE GAS EMISSIONS  
 The property lowered year-on-year Scope 1 and 2 emissions.

**Clean the World Rankings**  
 The Housekeeping Team doubled its Clean the World amenity collection of partially used shampoos, conditioners, and soap, ranking #7 nationally among similar-sized hotels.

# Our stakeholders UNPACKED

Today people say “partnership is the new leadership” and we believe collective action is essential for the transformation of our Sands ECO360 program. Expertise, knowledge, and passion of many different stakeholder groups contribute to identifying key material issues – in our case, energy, water, and responsible consumption – and thus help shape our approach to sustainability. Such feedback is a valuable first step in finding lasting successful sustainable solutions.



## ACADEMIC INSTITUTIONS

We exchange knowledge, participate in, and fund research projects, and provide learning opportunities to students.



## CLIENTS AND GUESTS

As more clients and guests expect strong environmental credentials and services, Sands ECO360 enables us to attract and retain these clients.



## GOVERNMENT AGENCIES

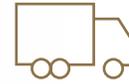
We collaborate with government agencies to develop and implement environmental policy.



## COMMUNITIES

They are home to our properties and our Team Members. Each of our destinations has different community needs and we work with local groups to make their area a better place to live.





**SUPPLIERS**

We continually partner with our suppliers by embedding sustainability into our procurement process.



**INVESTORS**

Our investors understand sustainability drives efficiency; they increasingly value the corporation's environmental and social responsibility.



**COMPANY EXECUTIVES**

The Sands ECO360 program is aligned with our corporate executives' strategic business vision and receives their full support.



**NON-GOVERNMENTAL ORGANIZATIONS (NGOS)**

Sharing best practices and building strong relationships with environmental NGOs inspires us and drives our innovation.



**TEAM MEMBERS**

Across the world, we employ nearly 50,000 Team Members; they contribute to our sustainability strategy and help deliver it every day.



#### **About Las Vegas Sands Corp.**

Las Vegas Sands Corp. (LVS) is the pre-eminent developer and operator of world-class Integrated Resorts that feature luxury hotels; world-class gaming, retail, entertainment, convention, and exhibition facilities; celebrity chef restaurants; and many other amenities. Starting with a single property in 1990, the reach of LVS now extends worldwide, from Las Vegas to Macao, and from Bethlehem (USA) to Singapore. Our Integrated Resorts have become premier destinations for travel enthusiasts around the world.

The Parisian Macao Lobby

# Sands

ECO360  
GLOBAL SUSTAINABILITY

#### **Experience Sands ECO360**

Our responsibility to the planet is as important to us as our commitment to the comfort and well-being of our guests and Team Members.

The Sands ECO360 global sustainability strategy is designed to help minimize our environmental impact. It reflects our vision to lead the way in sustainable building development and resort operations. Driven by an aspirational idea, made possible through the dedication and hard work of our Team Members, we continue our journey to a more sustainable future.

For more information, visit our website:

<https://www.sands.com/sands-eco-360.html>

Please take a moment to tell us what you think by contacting us at

[SandsECO360@sands.com](mailto:SandsECO360@sands.com)

