

# Behind the scenes

2014 Sands ECO360° Report Addendum

*Sands*  
LAS VEGAS SANDS CORP.





# Our properties

## 1 Las Vegas, NV

### The Venetian®

Opened: 1999  
Rooms: 4,028  
Employees: 8,707  
(The Venetian and  
The Palazzo)  
[venetian.com](http://venetian.com)

### The Palazzo®

Opened: 2007  
Rooms: 3,064  
Employees: 8,707  
(The Venetian and  
The Palazzo)  
[palazzo.com](http://palazzo.com)

### Sands Expo® and Convention Center

Opened: 1990  
Employees: 981  
[sandsexpo.com](http://sandsexpo.com)



## 2 Bethlehem, PA

### Sands® Bethlehem

Opened: 2009  
Rooms: 302  
Employees: 2,320  
[pasands.com](http://pasands.com)

## 3 Singapore

### Marina Bay Sands®

Opened: 2010  
Rooms: 2,561  
Employees: 9,408  
[marinabaysands.com](http://marinabaysands.com)

## 4 Macao, China

### Sands® Macao

Opened: 2004  
Rooms: 289  
Employees: 3,981  
[sandsmacao.com](http://sandsmacao.com)

### The Venetian® Macao

Opened: 2007  
Rooms: 2,905  
Employees: 10,394  
[venetianmacao.com](http://venetianmacao.com)

### The Plaza Macao

Opened: 2008  
Rooms: 376  
Employees: 1,789  
[theplazamacao.com](http://theplazamacao.com)

### Sands Cotai Central®

Sheraton® Macao Hotel  
Conrad® Macao  
Holiday Inn® Macao

Opened: 2012  
Rooms: 5,756  
Employees: 8,840  
[sandscotaicentral.com](http://sandscotaicentral.com)

# Welcome from our Chairman

To provide you an update on our company's sustainability performance and progress, we are pleased to release our 2014 Addendum to last year's Sands ECO360° report.

As in the past, we continue to closely monitor the trends that affect our organization. For example, advancement of emerging technologies improves the performance of our facilities. Changes in energy production impact our carbon emissions, both positively in some regions (i.e. moving toward cleaner energy) and negatively in others (i.e. increases in sourcing energy from fossil fuels). Additionally, we are expanding external partnerships with our clients, suppliers and other stakeholders to address sustainability issues.

As a developer of Integrated Resorts, our responsibility to the environment starts from the planning stage. We incorporated our comprehensive sustainable design and development standards into new development projects in Macao – the St. Regis and the Parisian – which, once opened, will be our most sustainable additions to date. Furthermore, we utilize internationally recognized standards such as LEED™, EarthCheck, ISO and CDP to validate and advance our program.

Operational efficiency remains our focus. Even with the growth of business, we managed to reduce our electricity consumption by 10.4% in existing operations and by 11% in our newly opened properties from their respective baselines. In 2014 alone, we completed 66 efficiency projects globally, which decreased electricity consumption by 112.5 million kWh. We have experienced several challenges in reducing overall water consumption and we are now directing our conservation efforts to address this issue.

It was another fruitful year for our Sands ECO360° Meetings program. We held more than 100 sustainable events across our global properties and The Venetian Macao received the IMEX GMIC Green Supplier Award for our leading green meeting efforts. We are committed to making our venues the world's premier green meeting destinations.

We were also named one of the world's most environmentally friendly companies in *Newsweek's* 2014 Green Rankings, holding the 18th spot on the U.S. 500 list, and the 28th position on the Global 500 list.

Sustainability is an integral part of our business strategy. Moving into 2015, we will work on overcoming our water reduction challenges, expanding waste recycling efforts, as well as improving the efficiency of our project implementation and reporting through a sophisticated energy management dashboard.

Thank you for your interest in our program and we are looking forward to sharing our 2014 highlights with you.

**Sheldon G. Adelson**  
Chairman and Chief Executive Officer, Las Vegas Sands Corp.



# ...it's a full circle

The four pillars of our Sands ECO360° strategy were identified as areas with the greatest environmental impact or opportunity. As with any approach, the key to remaining at the forefront of the industry is continual progression. Over the course of the year, we have worked behind the scenes developing new initiatives, addressing key issues, examining new technologies and continuing to lead by example. Below are some of our 2014 achievements.

## Green buildings

As we expanded and improved our building portfolio, we used internal and external standards and certifications to validate our efforts. In 2014:

- Marina Bay Sands became the first EarthCheck<sup>1</sup> Silver certified Integrated Resort in Asia, adding to the property's growing list of impressive achievements last year.
- Sands Cotai Central was awarded the Macao Green Hotel Gold Award from the Macao Environmental Protection Bureau and the Macao Government Tourist Office.
- Hotel suites at The Venetian in Las Vegas are being remodeled, including an upgrade to 100% LED energy efficient lighting, Energy Star equipment and appliances.
- We incorporated our comprehensive sustainable design and development standards into our new project in Macao – The St. Regis and The Parisian – which once opened, are on target to be our most sustainable facilities to date.

## Environmentally responsible operations

By integrating sustainability into our day-to-day business, we have made a lot of progress toward our efficiency goals. We implemented many improvements to reduce our resource consumption and enhance our waste recycling program. In 2014:

- Marina Bay Sands (MBS) implemented 29 Facility Improvement Measures (FIM) as a result of commissioning work.
- Our properties in Macao initiated a re-commissioning of all mechanical, electrical and plumbing systems to optimize efficiency, expecting an estimated 4.6 million kWh in energy savings annually.
- Sands Bethlehem was able to reduce 1 million kWh of electricity by replacing 1,215 fixtures in the parking garage with the latest LED lighting.
- The Las Vegas properties received the prestigious Water Hero Award for saving more than 10 million gallons of water in 2014.

## Green meetings

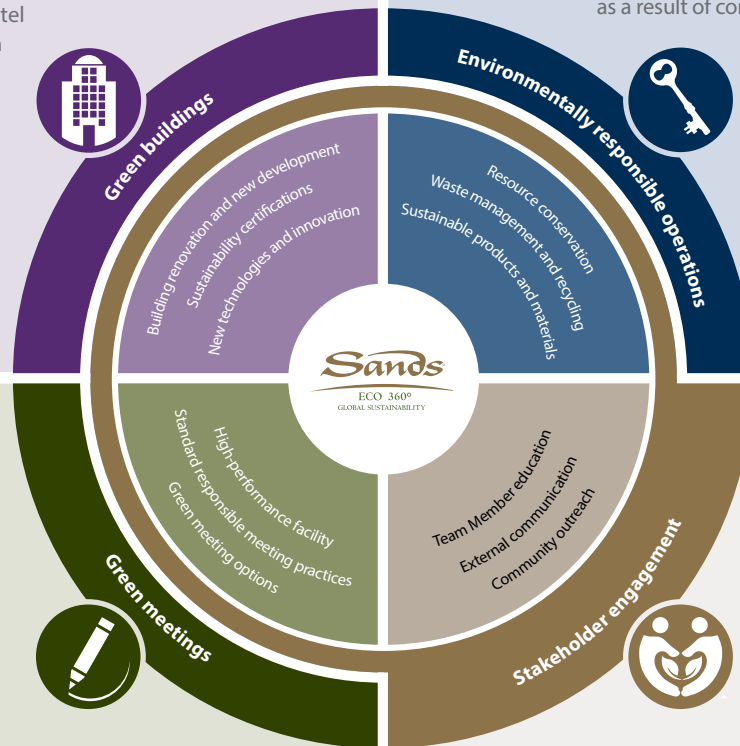
As part of our green meetings program, we partnered with our meeting clients to host a series of world-class sustainable events. Our personalized Green Meeting Concierge services allowed our clients to excel in accomplishing their event sustainability goals. In 2014:

- We held more than 100 sustainable events across our properties including IMEX and EMC in Las Vegas, Macao International Environmental Co-operation Forum & Exhibition, the Responsible Business Forum and ITB Asia in Singapore.
- Marina Bay Sands conducted the annual audit for its ISO 20121 certification. This process is an in-depth examination of its internal sustainable policies and procedures, ensuring that it continues to align with the ISO standard.
- As part of the IMEX annual conference, attendees and our Team Members volunteered to help The Shade Tree, a shelter for women and children in crisis. Together they built a healing garden to provide a peaceful area for the residents.

## Stakeholder engagement

We continued engaging our stakeholders by sharing the results of our efforts and encouraging our guests, Team Members, and community members to learn more about sustainability. In 2014:

- We received a letter of commendation from the Hong Kong Stock Exchange for being an inaugural participant in the Hong Kong Carbon Registry emissions disclosure.
- We were ranked 18th in the U.S. and 28th in the world by the *Newsweek* Green Rankings<sup>2</sup>, in recognition of our sustainability achievements.
- The Venetian Macao invited 65 Grade 4 students from The International School of Macao on a field trip which showcased the sustainability efforts at our Integrated Resort.
- The Las Vegas property launched a line of sustainable merchandise ranging from jewelry and clothing to designer gifts. These products are made from recycled or rapidly renewable materials such as glass bottles, plastic and bamboo.



1 For more information on EarthCheck, please visit [www.earthcheck.org](http://www.earthcheck.org).

2 The *Newsweek* Green Rankings comprehensively assess the environmental performance of the largest companies in the U.S. and around the world.

# Environmental performance

At Las Vegas Sands, we set our 2010 environmental performance as a baseline for existing properties to measure and track progress toward our targets. Because Marina Bay Sands and Sands Bethlehem were added to our resort portfolio later, we set the 2012 environmental performance at those properties as their baseline since it represents their first year of full operations.

We managed to reduce our Scope 1 and Scope 2 emissions in existing operations by 4.2%, despite the growth of our net revenue and the increase of the electricity emissions factor in Macao by 5.8%. The emissions factor change is due to higher levels of imported electricity sourced from coal-fired power plants in mainland China.

Our Scope 1 and Scope 2 carbon emissions in newly opened properties were reduced by 19.6% in 2014. Marina Bay Sands successfully dropped its electricity consumption by 12.4% thanks to the property's effective energy reduction measures. The property also benefited from a 12% decrease in electricity emissions factor in Singapore, as a larger share of natural gas (a cleaner source of energy) was added to the country's fuel mix.

Electricity continues to be Las Vegas Sands' primary focus because it represents 74.3% of total reported emissions. By implementing conservation projects we successfully decreased our consumption by 10.4% in existing operations and by 11% in our newly opened properties.

We have experienced several challenges in reducing our overall water consumption. As a result, we are now even more focused on water conservation projects to address this trend. We have completed comprehensive water audits at

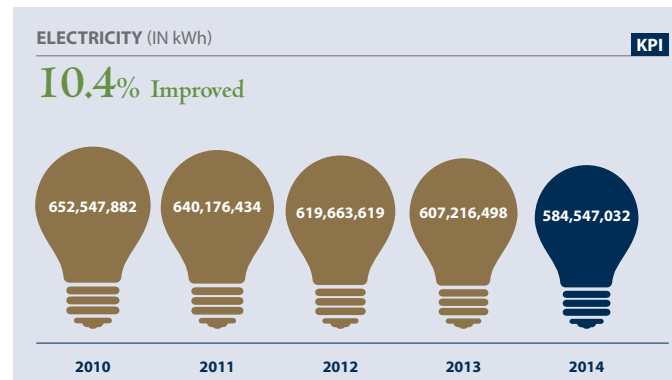
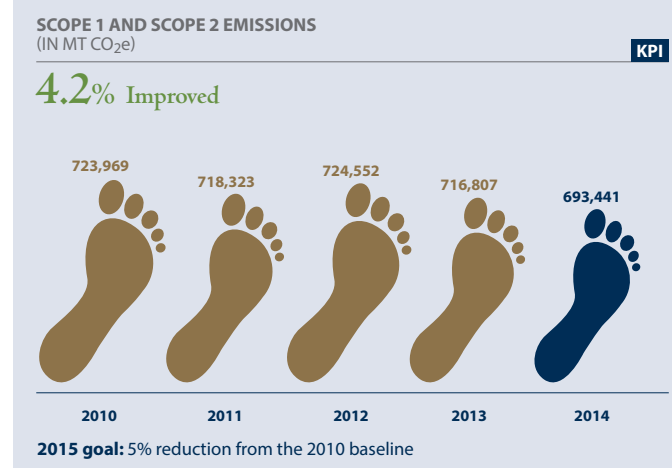
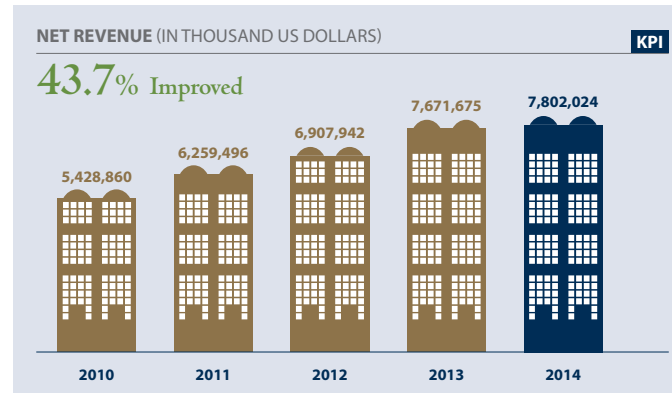
Notes:

**Existing operations** include The Venetian and The Palazzo, Sands Expo, Sands Macao, The Venetian Macao, The Plaza Macao, Sands Aviation, and Cotai Jet.

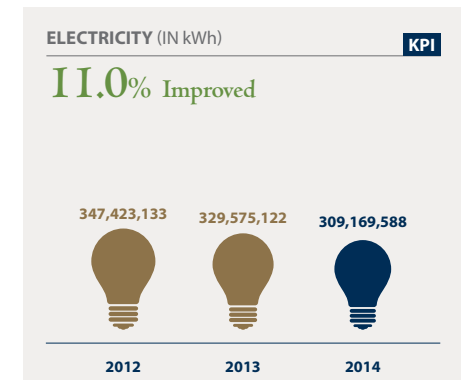
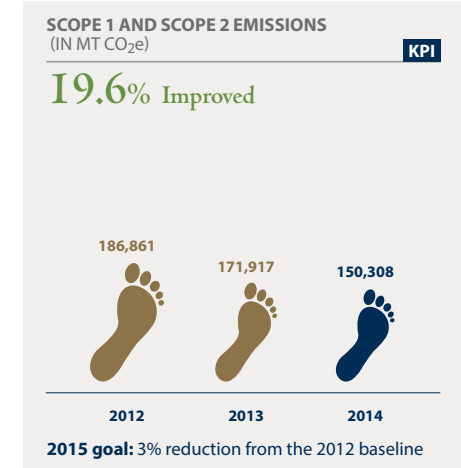
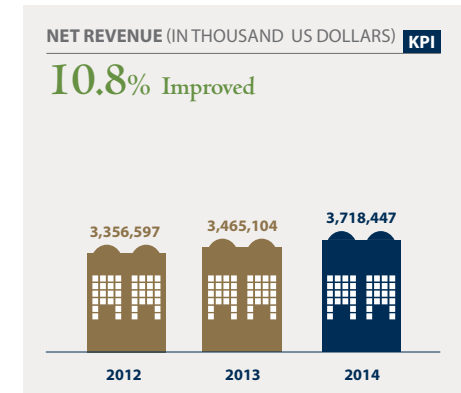
**Newly opened properties** include Marina Bay Sands and Sands Bethlehem. 2012 is the first year of full operation for these two properties; therefore, it is their performance baseline.

**Sands Cotai Central** was not yet open when we set our 2015 targets; therefore, the performance data above does not include Sands Cotai Central; however, it has made notable sustainability progress since its opening.

## Performance of existing operations



## Performance of newly opened properties



most of our properties to identify conservation opportunities. Based on the audit results, we developed three-year water reduction plans. Measures such as fixture upgrades and plumbing system maintenance are being implemented.

Finally, we have improved the waste diversion rate by 8.4% in our existing operations and 10.8% at newly opened properties. In 2014, our properties in Macao, Singapore and Pennsylvania introduced innovative food digesters to reduce food waste, which is a large portion of our waste stream.

**Notes:**

In 2014, we established an electronic dashboard to store and analyze all our historical utility consumption and emissions data. During the implementation process, we made the following adjustments:

**Sand Bethlehem:** we deducted discharged sewage water amount from the water consumption. The original water consumption included both water produced by the utility company and sewage water discharged, which resulted in double counting.

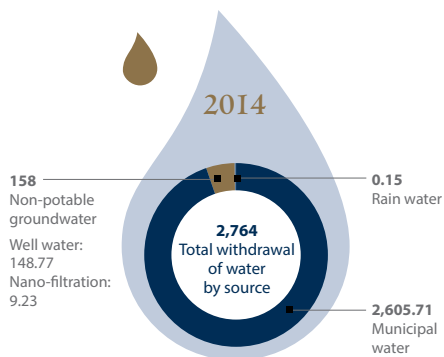
**Marina Bay Sands:** we added NEWater (treated used water) to the 2012 water consumption as it was not originally captured. The property's recycling vendor overstated the recycling rate historically, and we corrected our recycling rate for 2012 and 2013.

We also updated our scope 2 emissions for our Macao properties (2010–2014) based on a restatement for electricity emissions factors by the local utility due to changes in its internal methodology.

**2014 companywide performance**

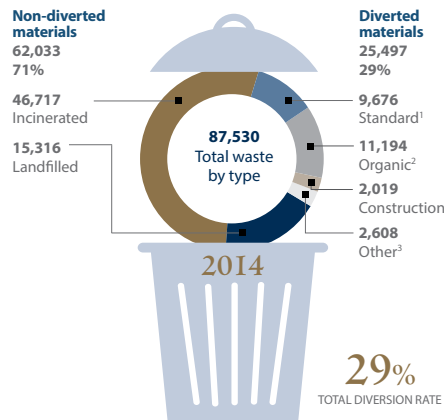
**2014 TOTAL WATER WITHDRAWAL BY SOURCE**  
(IN MILLION GALLONS)

KPI



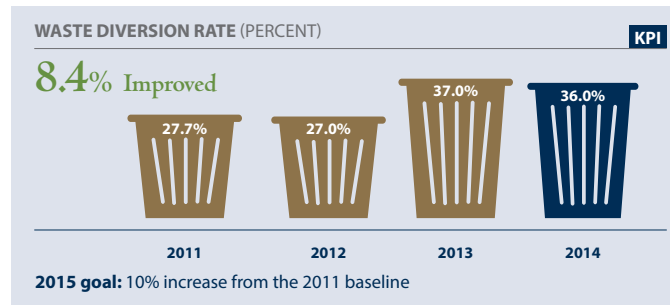
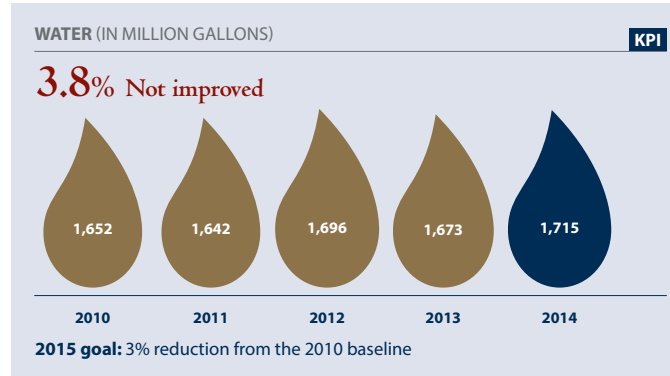
**2014 DIVERTED MATERIALS**  
(IN SHORT TONS)

KPI

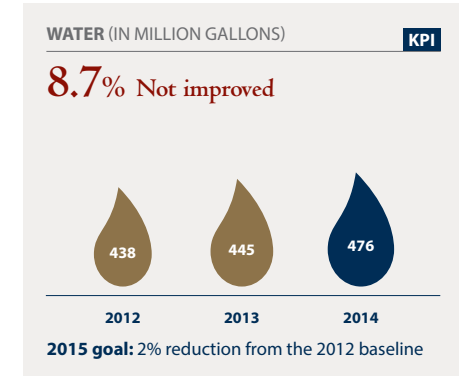


1. "Standard" includes: plastic, aluminum, cardboard, paper, glass and metal.  
 2. "Organic" includes: food waste, horticultural waste and cooking oil.  
 3. "Other" includes: carpet, toner & cartridges, cork, engine oil, mattresses, paint, pallets, playing cards, linen and wood etc.

**Performance of existing operations**

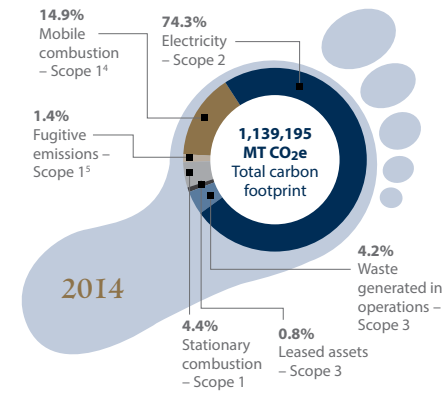


**Performance of newly opened properties**



**2014 CARBON FOOTPRINT**  
(IN CO<sub>2</sub>e)

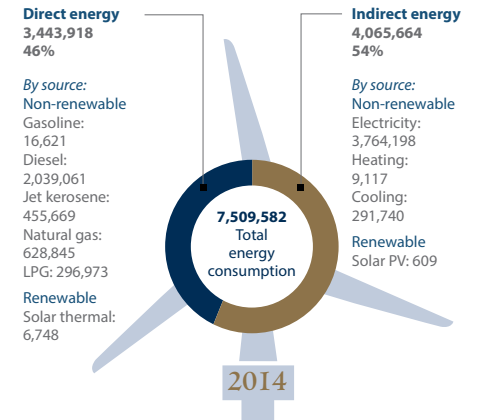
KPI



4. Includes gasoline, diesel, jet fuel and marine fuel.  
 5. Refrigerants.

**2014 ENERGY CONSUMPTION BY ENERGY SOURCE**  
(IN GIGAJOULES)

KPI





## ...stories from behind the scenes.



### Tackling Waste in a Whole New Way

By introducing food waste digesters to our Macao, Singapore, and Bethlehem, PA properties, we reduced food waste by 620 tons in 2014 alone. This innovative technology processes food waste, including meat and dairy, into grey water which can be safely discharged down the drain. By diverting this waste, we are able to reduce greenhouse gas emissions from methane, which is 20 times more potent than carbon dioxide. It also helps reduce the emissions associated with waste transportation from our properties to the disposal site.

### CEOs Discuss Sustainability at MBS

Marina Bay Sands (MBS) hosted more than 40 CEOs from the MICE (Meetings, Incentives, Conventions and Exhibitions) industry at a CEO Sustainability Breakfast Discussion. It was a valuable opportunity to exchange ideas with industry leaders, as sustainability is constantly evolving within the MICE business in Singapore. Kevin Teng, Executive Director of Sustainability at MBS, presented the story of MBS' sustainability journey and the invaluable lessons learned over time. MBS' sustainability partner MCI also reviewed the financial impacts and the benefits of being a sustainable business.

### Sands ECO360° Awards in Bethlehem

It takes the efforts of individual Team Members to implement the Sands ECO360° program initiatives. Sands Bethlehem created a recognition program to honor those who continually go above and beyond the call of duty. Team Members such as Dorothea Portera, William Nickels, Geoff Okpych and our 2014 Annual winner Megan Verholy have contributed to making the Bethlehem property a sustainable success story. They led recycling efforts, coordinated donations and made time to promote sustainability initiatives. Many thanks to the team in Sands Bethlehem for contributing to the global sustainability message.

### Hunger is Not a Game

World Hunger Day began as part of The Hunger Project whose mission is to end world hunger and poverty. This initiative was first piloted by MBS with great success. As a result, World Hunger Day events were rolled out at all Las Vegas Sands properties in 2014 to raise awareness about food waste reduction. Properties held a "Clean Plate Challenge" to encourage Team Members to take only what they can eat to reduce the amount of food that was thrown away in Team Member dining rooms. Additionally, we distributed canned food to local charities. It is through teamwork like this that we have made an impact both inside the workplace and across the wider community.



### Green Captains Arrive in Las Vegas

Our new Green Captains in Las Vegas represent more than 50 different property teams, from Housekeeping to Facilities. They help communicate and implement our sustainability initiatives in the workplace, and have been instrumental in creating a culture of sustainability by continually engaging and educating their colleagues. The Green Captains even developed sustainability scorecards to help assess opportunities for further improvement. Many projects have already been implemented, from increasing bulk purchases of goods and materials, minimizing packaging waste in the kitchens, to changing printer settings to save energy and paper.

## The Development of a Sustainable Resort – The Parisian

Our company has made a firm commitment to incorporate sustainable standards into our new developments. The Parisian Macao, our newest Integrated Resort in Macao, is currently being built according to Las Vegas Sands' Sustainable Development Standards. These are based on the internationally recognized LEED™ Green Building Rating System and our own best practices. The Parisian design incorporates the latest efficiency technologies including: 100% LED lighting installation, which saves more than 5 million kWh of electricity every year; low-flow water fixtures with estimated annual water savings of 12.2 million gallons; and high-performance glazing to significantly reduce the building's solar heat gain. In addition, we have built infrastructure at The Parisian to use grey water (when recycled water becomes available from the Macao Water Utility, SAAM) for toilet flushing in the casino, back of house, retail and MICE spaces. We believe The Parisian takes our Integrated Resorts to the next level of sustainability.



## Our report

Our report addendum draws on the performance highlights of the calendar year 2014. It covers the full scope of our global operations including majority-owned subsidiaries.

We adhere to the Global Reporting Initiative (GRI) G3.1 Sustainability Reporting guidelines. GRI has confirmed that the report was prepared according to the GRI G3.1 Guidelines, at Application Level C.

To view the Las Vegas Sands' GRI index, please visit:

[sands.com/files/2015\\_GRI\\_Index.pdf](https://www.sands.com/files/2015_GRI_Index.pdf)

## Boundaries

This report addendum covers all Las Vegas Sands' global properties.

## Data

We included aggregated data from our monthly reporting for each property. The data was collected by Las Vegas Sands' Team Members. We believe this information fairly represents our global environmental performance and sustainability efforts.

Our carbon footprint data was calculated internally and the methodology was assured by a third-party verifier. The Las Vegas carbon inventory includes Sands Aviation and the Macao carbon inventory includes Cotai Jet.

Thank you for your interest in our efforts behind the scenes...  
**we look forward to showing you more soon**



ABOVE LEFT TO RIGHT: The Venetian, The Palazzo, Sands Expo and Convention Center, Sands Bethlehem, Marina Bay Sands, Sands Macao, The Venetian Macao, The Plaza Macao, and Sands Cotai Central

Please let us know what you think about our Sands ECO360° report at: [sandseco360@sands.com](mailto:sandseco360@sands.com)