

Highlights of this issue >>>

- 2017 PATA Gold Award for SCL
- Food Waste Digesters Installed in PA
- Recycling Center Tour in Las Vegas

Sands ECO360 Quarterly*“A Quarterly Insight into Las Vegas Sands Corp. Sustainability Activities”**Big Event >>>***Season of Sustainability at Marina Bay Sands**

Extinction Soup, one of 21 films shown during the Singapore Eco Film Festival, is a documentary that exposes the mass slaughter of sharks for their fins

For the second consecutive year, the ArtScience Museum at Marina Bay Sands hosted the Singapore Eco Film Festival. Free to the public, the festival brought together eco-organizations, storytellers and artists to celebrate the efforts of local and regional environmental groups, and accelerate the changes needed to secure a safe and sustainable future.

The three-day event featured a series of thought provoking –films, hands-on workshops and compelling talks that aimed to motivate all attendees to collaborate for a greener future. During a panel discussion that followed a screening of the film “Extinction Soup,” Kevin Teng, Head of Sustainability at Marina Bay Sands, shared more about the Integrated Resort’s journey to sustainable food options and encouraged guests to make more environmentally-inspired choices with what they eat.

The festival showcased 21 films that fell under three themes – consumption, environmental protection and the oceans. The movies featured a range of stories from around the world on subjects as diverse as the plight of giraffes and an orchestra that plays instruments made from waste.

*Environmentally Responsible Operations >>>***Sustainably Stylish in Las Vegas with Reclaimed Tote Bags**

Each year, thousands of event banners are printed, displayed for meetings and conventions and then discarded, filling landfills with materials that are not biodegradable. Globally, over 600,000 tons of vinyl from banners and billboards end up in the trash each year. In Las Vegas, the Sustainability and Floral Teams have created a solution to the problem by recycling banners into one of a kind tote bags. “Our teams specialize in creativity,” said Dana Beatty, Executive Director of Floral Operations, “We love showing guests and Team Members alike that something new can be made from the things we already have, without depleting further resources.” At the end of an event, vinyl banners are taken down, washed and assembled by hand into stylish tote bags by a local business. Most recently, the banner that once announced the Year of the Rooster on the property’s famed Campanile tower was turned into several hundred tote bags.

*Reports >>>***2016 Sands ECO360 Report Released**

Las Vegas Sands launched its 6th annual environmental report in August. The report has a new magazine-style look to make it more reader-friendly. It includes an updated vision for the Sands ECO360 program as well as 2020 targets, which are now aligned with 3 out of 17 United Nations Sustainable Development Goals: energy, water and responsible consumption. The report also highlights the best 2016 sustainability stories from our properties. To find out more, please visit the [Sands ECO360 webpage](#).



Food Waste Diversion >>>

Turning Waste to Water at Sands Bethlehem

In August, Sands Bethlehem installed two aerobic food digesters that will reduce its monthly trash load by 20 to 30 tons. The new digesters, which use microorganisms to turn leftover food waste into grey water, can each break down up to 2,500 pounds of organic trash each day. All of the food waste from the property's restaurants, food court and Team Member dining rooms will be diverted from the landfill going forward. The machines weigh each load and send the data in real time to a cloud-based dashboard, allowing the Sustainability Team at Sands Bethlehem to continually monitor the quantity of food waste that is discarded.



Awards >>>

Sands China Ltd. Wins Gold Award at 2017 PATA Travel Awards

The Sands ECO360 Global Sustainability program was recognized at the prestigious 2017 Pacific Asia Travel Association (PATA) Gold Awards, taking top honors in the "Environment – Corporate Environmental Program" category. In crowning Sands ECO360 as a Gold Award winner, PATA specifically noted the program's "green" goals and action plans that help minimize Sands China Ltd.'s environmental impact. The awards ceremony was held at The Venetian Macao in September, coinciding with the PATA Travel Mart, which is Asia-Pacific's premier travel trade show. A total of 27 Gold Awards were distributed this year to recognize exceptional achievement in seven different categories: Marketing Campaign, Environment, Corporate Social Responsibility, Heritage and Culture, Education and Training, Marketing Media, and Travel Journalism. An international panel of experts selected the winner in each category. Sands China Ltd. won another PATA Gold Award in the "Marketing Media" category for its promotional video clip to announce the opening of The Parisian Macao.



Las Vegas Team Members Tour North America's Largest Recycling Center

Team Members in Las Vegas were given the opportunity to visit The Southern Nevada Recycling Center, which is North America's largest and smartest residential recycling center. The 110,000 square foot facility is home to highly advanced, state-of-the-art recycling technologies. The center serves more than 535,000 households, and can process more than two million pounds of recyclables per day – an equivalent weight of 500 automobiles!



Awards >>>

Marina Bay Sands Achieves Green Hotel Award

Marina Bay Sands was a recipient of the Singapore Green Hotel Award 2017-2018, which acknowledges the Integrated Resort as a leading sustainable organization within the country. Presented every two years by the Singapore Hotel Association, the Green Hotel Award recognizes facilities that have implemented good environmental practices pertaining to waste minimization, energy conservation and water efficiency. Thirty hotels received the award this year. Raymond Koh, Vice President of Facilities at Marina Bay Sands (pictured, center), accepted the award from Guest-of-Honor Dr. Amy Khor, Senior Minister of State, Ministry of the Environment and Water Resources and Ministry of Health.



Community Partnerships >>>

Sands Bethlehem Food Pantry Donation

The Sands Bethlehem Event Center hosted the Performance Foodservice 2017 Food Show in August, showcasing products and services from a variety of restaurant vendors. Following the conclusion of the exhibition, there were a number of leftover food items that were destined for the landfill. However, Team Members from Sands Cares and Hotel Sales joined together to organize a donation collection for local community organizations. Nearly 130 different products were collected following the tradeshow event and distributed to charitable organizations within the Lehigh Valley.



Stakeholder Engagement >>>

Asian Business Case Competition 2017: Sustainable Innovation, Future Infinite

Marina Bay Sands was delighted to be a part of Nanyang Technological University's 11th Asian Business Case Competition (ABCC), which saw students from nine international universities working together to crack an eight-hour business case on the Integrated Resort's sustainability initiatives. The participants presented their solutions to a panel of judges that included senior executives from Marina Bay Sands. The ABCC is Singapore's first international undergraduate business case competition and the world's only carbon neutral international competition focusing on sustainability.



Sands China Ltd. Recognized For Innovative Building Design with ASHRAE Technology Award

In September, the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) recognized outstanding achievements in innovative building design in the areas of occupant comfort, indoor-air quality and energy conservation as part of the Technology Awards Program. Sands China Ltd. received the 2017 Region XIII Technology Award within the Existing Building category. All applicants had to submit one year of actual, verifiable building performance data in order to be considered for the award. Syed Mubarak (pictured, center), Director of MEP Plant Operations Department at Sands China Ltd., accepted the award on behalf of all Team Members. ASHRAE, founded in 1894, is a global society advancing human well-being through sustainable technology for the built environment.



Energy Efficiency >>>



Heart of House Gets Brighter in Bethlehem

The entire Heart of House at Sands Bethlehem now features 100% LED lighting. While the hallways and stairwells were converted to LED lamps in 2016, all remaining fluorescent bulbs in offices, mechanical rooms and storage areas were all recently swapped out for more efficient ones. Since 2016, more than 5,500 fluorescent tube lights in the Heart of House were replaced with LED options, which are not only more energy efficient but also last longer.

Environmentally Responsible Operations >>>

Las Vegas Pools and Spas Utilize Glass Filtration Media

Twelve swimming pools and spas at The Venetian | Palazzo resorts in Las Vegas now utilize crushed, recycled glass media to filter water instead of traditional sand-based filtration systems. Crushed glass tends not to block pipes as often as sand, lessening the need to flush – or backwash – as often, resulting in a 70% reduction in water demand. The Sustainability Team in Las Vegas estimates the savings to be more than five million gallons of water each year. The new system therefore not only lowers consumption and costs, but also reduces the chemical requirements of pools and spas. "Glass filtration media allows us to filter out much finer particulate matter, which will result in both cleaner and clearer water," said Jim Albers, Assistant Chief Engineer in Las Vegas. "Furthermore, the glass media is self-sterilizing. As such, the filter will not form bacteria nor biofilm inside the tank, which means that we'll never have to change the filtration media again."



Las Vegas Properties Partner with NV Recycles to Host Educational Workshops

In Las Vegas, Sands ECO360, Sands Academy and Nevada Recycles have partnered to offer Team Members fun and interesting sustainability workshops. The first workshop focused on recycling, addressing myths and realities of the collection process. The second workshop focused on vermiculture and composting. Compost is organic material that can be added to soil to help plants grow. Food scraps and yard waste currently make up 20-to-30 percent of what we throw away, and can be composted instead. Making compost keeps these materials out of landfills where they take up space and release methane, a potent greenhouse gas. Rachel Lewison, Southern Nevada Recycling Coordinator, showed Team Members how they can create their own compost bins, complete with worms to decompose organic food waste into rich soil for gardening. At the end of the events, Team Members were also tested on their recycling knowledge with an interactive activity.



Sustainability in the Workplace – Sands China Ltd.

Christian Kunze is an Executive Steward within the Food & Beverage Department at Sands China Ltd. Thanks to Christian and his team's effort at Sands Cotai Central, the Integrated Resort has reduced their food waste by more than 20% in the past several years. He recently sat down with the Sands ECO360 team to discuss the work he does to minimize food waste.

What is Sands Cotai Central in particular – and Sands China Ltd. in general – doing to minimize food waste?

We have a number of initiatives in place to both reduce and minimize food waste. One of the most effective to date is an awareness campaign whereby we post the previous day's food waste in our Team Member Dining Room, and indicate how many people would have had a sufficient meal from the quantity of wasted food. Another new initiative we've undertaken recently is a food waste dewatering system, which serves to squeeze out the liquid content of the waste. The water is then discharged down the drain, and the solids that remain can be further processed by our food waste digesters. This machine has helped us reduce food waste volume by 65% during the trial period.

So the resort also utilizes food waste digesters?

Yes, our pilot food waste digester project has been a great success. At Sands Cotai Central, we have seen great results and reduced the food waste coming from the kitchen tremendously. Accounting for waste from all outlets, we are currently diverting about 15 tons per month.

Have you been able to identify any common reason(s) for food waste?

Through our tracking and monitoring program, one reason we've identified is overproduction at certain restaurants and facilities. Too much food was being produced, and thus large quantities were left over at the end of the day. With enhanced data collection and analysis, we've been able to identify these kitchens and work with the chefs to reduce the production of excess food.

What is the number one thing Team Members can do to reduce their food waste?

Simply put, take what you eat and eat what you take. Being aware is the single most important thing in being able to help in reducing our food waste.



- Green Ideas Challenge in Las Vegas
- 2017 CDP Climate Score