

Feature Story

Our Integrated Approach to Waste Diversion

Responsible waste management is an important aspect of our sustainability journey. MGM deploys an integrated approach to waste management.

With a comprehensive recycling and waste management program, we endeavor to reduce waste in every way possible. One of the areas in which we pioneer is food waste. Through source reduction and a thorough treatment process, we manage leftovers in the most cost effective and eco-conscious manner.

For example, we are the first in Macau to roll out ORCA in managing food waste, which can turn 400 tons of food waste into environment-friendly liquid every year. At MGM COTAI, we operate a food waste composting program to transform food waste into nutrient-rich organic fertilizer. More than 200 tons of food waste generated from our operation have been composted to date, with its compost applied to over 100,000 plants at our properties.



Our other waste management highlights:

- Our Company-wide recycling program includes paper, plastic, metal and special materials such as batteries, safety helmet, and other project-based waste
- We created partnership with nonprofit organizations and charities to donate retired furniture or equipment to local community
- We organize roadshows and activities to promote environmental concepts and cultivate recycling behaviors among team members

- We conduct property-wide waste audit to understand the waste stream better and improve our waste management

- MGM hires a recycling vendor to recycle e-waste, ensuring that our electronic products are recycled and safely disposed



- Our partnership with Clean the World allowed us to recycle soap bars and turn them into new, sanitized bars to be distributed to communities in need





After years of hard work from several key departments and support from the entire team, MGM MACAU has once again ranked the Golden Status in Macau Green Hotel Awards.

The latest achievement is a reflection of MGM teamwork and our devotion to our mantra of “Create a better tomorrow today” through continuous improvements.

Compared to our 2013 baseline, MGM MACAU has achieved annual reductions of 19% in energy, 15% in water and 19% in waste in 2019. Since we rolled out ORCA, the food digester, last year, we divert annually 400 tons of food waste from going to the incineration plant. Our initiative to install beverage stations at the casino floors has allowed us to eliminate distribution of over one million plastic bottles last year (for both MGM MACAU and MGM COTAI). We also averted 4.5 million pieces of single-use plastic (for both MGM MACAU and MGM COTAI) by implementing “No Plastic Program”.

The Macau Environmental Protection Bureau (DSPA), the main organizer of the award, highlighted our employees engagements such as our Eco-friendly Christmas Tree Challenge (which saw enthusiastic participation from departments-Thank YOU!) and Green Monday.

“From the outset, MGM has focused on maximizing energy efficiency and reducing the environmental impact of its operations. Even with the current challenges, MGM remains dedicated to continuous improvement and to finding new and innovative ways to extend energy reduction. We are thankful for the support we have received from everyone, especially the management team, along our sustainability journey,” says Greg Meares, Vice President Facilities Management.

“Sustainability is a collective mindset at MGM. Our sustainability roadmap goes hands in hands with strong commitment and partnership with every department in the company. We will keep on exploring, learning and innovating together,” says Keith Lei, Vice President of Human Resources.

Other highlights commended by Macau Green Hotel Awards

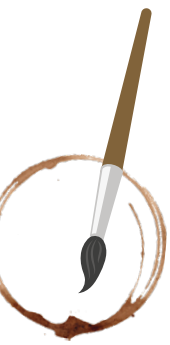
- Replacement of single-use plastics with eco-friendly tableware
- Implementation of wastewater recycling systems (collects water from cooling tower to flush toilets)
- Buildings HVAC Optimization project
- Collection and Use of rainwater for cooling tower
- Indoor air quality testing and monitoring on a bi-monthly basis in guest rooms and indoor common areas
- Incentive program for hotel guests to go green
- Community programs to share our green practices

Let's keep up the “green” work together!



We supported the 2020 Macau Energy Conservation Week organized by the GDSE from June 14 -20th. Besides the Light-Off One Hour on June 15th, our team members put on casual outfits and turned the AC up to 23 - 25°C to conserve energy on Casual Wear Day.

Creativity x Eco-Art



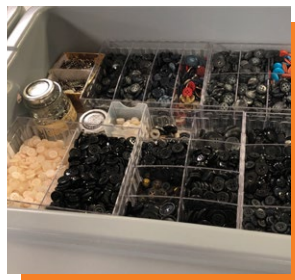
The Arts and Culture team's recent workshop "1,2,3 Rock, Paper, Scissors" connects creative art and the upcycle concept to deliver a fun experience for kids. They make ink out of coffee ground and turn out-of-phase laundry bags into aprons for the little painters to wear.



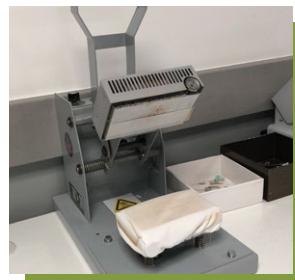
Skillful repurposing at Housekeeping



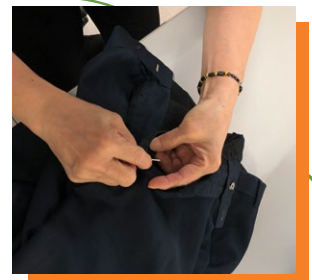
When old guest towels and robes are replaced by new ones, they do not just go to the dumpster. The ones that are still in reasonable conditions are separated from the pile and will be cut and overlapped into smaller rags to be used in cleaning.



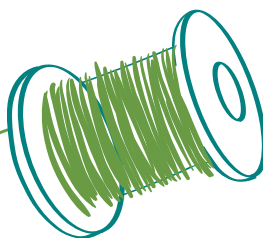
A uniform is full of gems - from fabric fastenings like buttons and zippers, to logo labels and chips - that will be salvaged once it is retired. The good pieces are kept for repairing other uniforms, while the worn out ones will be sent back to suppliers to recycle.



Besides the gem box, salvaged uniform fabrics are also upcycled to make protective covers for stamping machine and sharp projections (e.g. hanging rack).



Besides the reusing of fabrics and fastenings, they also call for less plastic packaging from the uniform suppliers, and reuse garment bags that comes with new suits.





Our team member Angus Chan from Facilities Management gave us a tour of his home farm powered by vermicomposting.

Vermicomposting or worm composting is very beneficial for growing edible plant. The natural fertilizer produced by this method is considered to be “black gold” because it contains high levels of microbial activity and enriches soil and promotes water retention.



用蚯蚓泥
種植的薄荷

Earthworms: Earthworms have great reproductivity and recycling capacity, can process raw vegetable such as peels and rotten fruits. Soil containing worm castings makes a great fertilizer and is easily absorbed by plants - plus, they don't smell bad at all! Use a bucket (with or without draining holes) and control the soil moisture~70%. For better result, use African Nightcrawlers and grind up and drain the raw food waste before composting it.



太平二
號蚯蚓



面包蟲

Mealworms: best for beginners. All you need is a caddy, some bran and mealworms. You can compost bread, carrot, and dry vegetable leaves. The trick is to keep it dry. Cons? its processing capacity is relatively low.



白星花
金龜

To avoid unpleasant odor and pests, Angus suggests using mesh bag to cover the bin, and put soil over the food waste and keep bin aerated.

Since using the composter bins, Angus has seen significant reduction of organic waste at home - and gains a great deal of organic fertilizer. “I haven't bought fertilizer in a very long time! Because it is organic, the plants won't get over fertilized even if I add a lot, unlike the chemical fertilizer - which a slight excess can result in over fertilization,” Angus adds.

Grub worms: they are larvae of the Japanese beetles, very capable of processing fibers such as roots and stalks. Their castings are dark, odorless, and shape like rice. They are very fertile too! Important to control the soil moisture at 50%. Mix mushroom stems with mashed vegetable leftovers to enhance its recycling capacity.

DID YOU KNOW?



Our Everyday Life Waste Status



2.24 kg

The daily amount of trash generated by each per person in Macau!

In 2019, only **16.8%** of the solid waste was recycled,
that is a **5.3%** decrease from last year.



The Top 3 Waste:



Organic Waste



Plastic



Paper & Cardboard

These are the things we could try to reduce by cutting down food waste and practicing mindful buying & recycling.



Source: Report on the State of Environment of Macao 2019 from DSPA

Scan the QR code to know more about the various recycling programs launched by DSPA in Macau.

