

PLANET

PROTECTING OUR ENVIRONMENT

Protecting the planet is a social, economic and ethical, as well as environmental, imperative. As a recognised corporate leader, we are committed to minimising our environmental footprint and delivering sustainable value to our society.



OUR ALIGNMENT TO THE UNSDGs



MATERIAL SUSTAINABLE MATTERS

- Climate Change
- Environmental Management

MAPPED TO OUR CAPITALS



RELATED PRINCIPAL RISKS

- Finance
- Asset Management
- Facility Management
- Health, Safety and Environment
- Security

5-YEAR SUSTAINABILITY ROADMAP (2019-2023)

Goal 3

Combating Climate Change and Reducing Environmental Impact



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FOCUS FOR THE YEAR

- ▶ Strategising the way forward in support of the Climate Change Agenda
- ▶ Assessing our readiness towards reporting on the Task Force on Climate-related Financial Disclosures (TCFD) Recommendations
- ▶ Stepping up efforts to achieve 100% elimination of single-use plastic at MOKL Hotel

OUR APPROACH

The world is facing a climate emergency, and natural resources are being used up faster than they can be replenished. Protecting the environment is an ongoing challenge for businesses of all sizes, in all industries, all over the world. We continue to promote responsible business practices throughout our operations and to support the global Climate Change Agenda.

This year, to strengthen our sustainability performance, we looked to evaluate and manage the risks and opportunities associated with Climate Change and assess our readiness towards supporting the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

In line with our commitment in supporting the United Nation's Sustainable Development Goals in promoting good health and wellbeing, building sustainable cities and communities and taking measures to address Climate Action, we aim to minimise disruption to the environment and its adverse impact to our community by reducing the environmental footprint of our buildings and to efficiently manage the use of energy, water and resources.



1

DRIVING DOWN ENERGY CONSUMPTION
in our operations



2

MINIMISING USE OF WATER
throughout our assets



3

MINIMISING QUANTITIES OF WASTE GENERATED
at our assets



4

PROMOTING USE OF GREEN PRODUCTS AND SERVICES



5

INFLUENCING SUPPLIERS/ CONTRACTORS to promote **ENVIRONMENTAL CONSERVATION**

PLANET

CLIMATE CHANGE

We are committed to supporting the transition to a clean and energy-efficient economy. Our approach to Climate Change supports the transition to a cleaner, more energy-efficient and sustainable global economy that is conscious of its use of limited natural resources.

We recognise the complexity and urgency of Climate Change and consider the risks and opportunities that Climate Change presents to the global economy. As a large corporate entity, we believe we can make a meaningful impact in addressing Climate Change.

We acknowledge the science behind Climate Change and support the Paris Agreement's aim of holding the increase in the global average temperature to well below 2°C above pre-industrial levels, and of pursuing efforts towards limiting it to 1.5°C.

As such, we support the transition to a low-carbon economy whilst realising that this might take time due to socio-economic constraints. We need to find a balance between the need for increasing energy access and economic growth,

and the urgency to reduce carbon emissions across all areas of our operations. Consequently, we will be cautious in our approach to this transition, which is not solely focused on the next decade but rather 20, 30 and 40 years ahead. Therefore, when assessing our participation in all fossil fuel activities, we will ensure we consider a variety of financial, socio-economic and environmental factors relevant to a local context. The transition cannot be made in isolation from the realities of the communities in which we, and our partners, operate, and we welcome the voice of all stakeholders as we make the move together to a cleaner, low-carbon world that is most responsible for all participants.

We are mindful of the potential climate risks when the economy restarts after COVID-19 and therefore stand firm in our commitment to clean energy investments as they will make the new economy more sustainable.

Our Climate Change Journey

2021

- Conducted an assessment on our readiness towards supporting the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD)
- Conducted a workshop on Net Zero Carbon Emission (NZCE) in collaboration with GHSE, PETRONAS

- Adopted digital technology in the pilot launch of the Integrated Building Command Center (IBCC) for facilities management to enable real-time operations and automation which contributes towards energy and overall performance efficiency
- Continued exploration on TCFD recommendations in reporting requirements and disclosures and the way forward

2020

2019

- Established a Climate Change Position Statement
- Engaged with PETRONAS GHSE to explore the recommendations of the TCFD and the way forward for the Group

OUR CLIMATE CHANGE POSITION STATEMENT

“

We duly recognise our corporate responsibility as a player in the real estate sector in mitigating Climate Change impact and to add value to the community where we operate.

”



2016-2017

- Established Energy Management Committee
- Preliminary discussion on the proposed Climate Change Position Statement
- Conducted a Climate Change Workshop in collaboration with GHSSE, PETRONAS
- Disclosed our 3-Year Sustainability Roadmap on GHG emission and energy consumption target and results

- Developed a carbon inventory to establish emission baseline and monitor GHG emission
- Discussed the recommendations by Task Force on Climate-Related Financial Disclosures (TCFD) with SSC in line with Bursa Malaysia's support towards TCFD

- Embarked on our flagship action in establishing data collection methodology
- Commenced reporting on GHG emission and energy consumption data

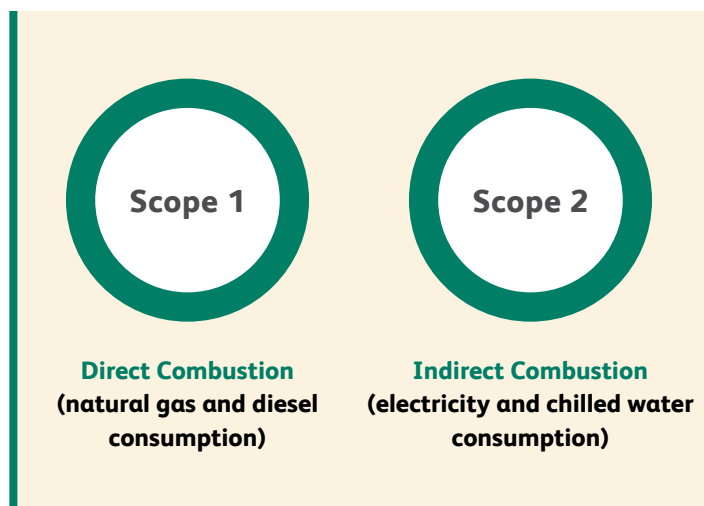
2018

2014-2015

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Greenhouse Gas Emission

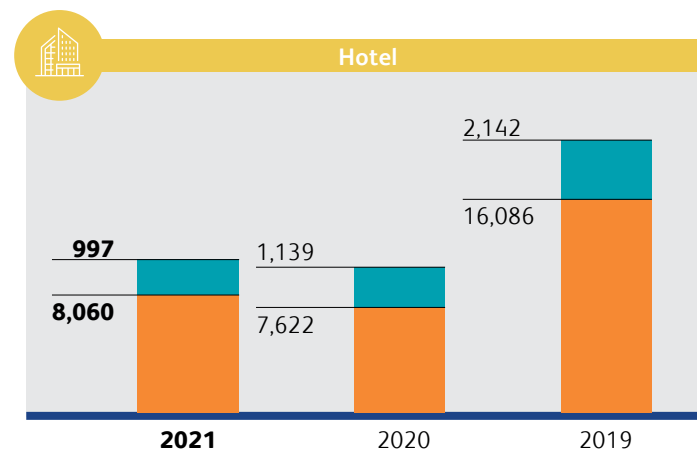
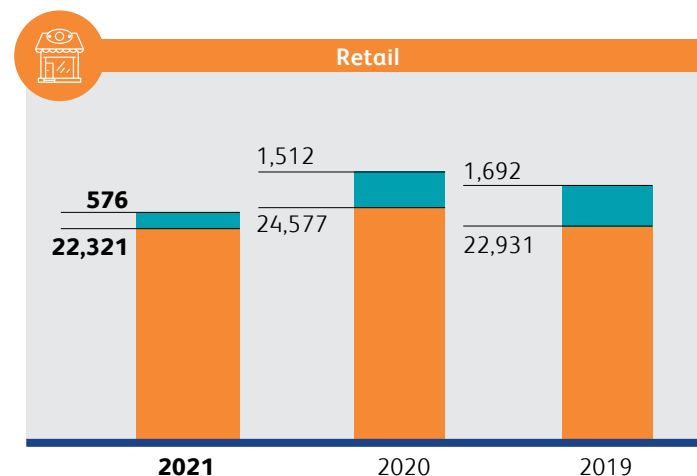
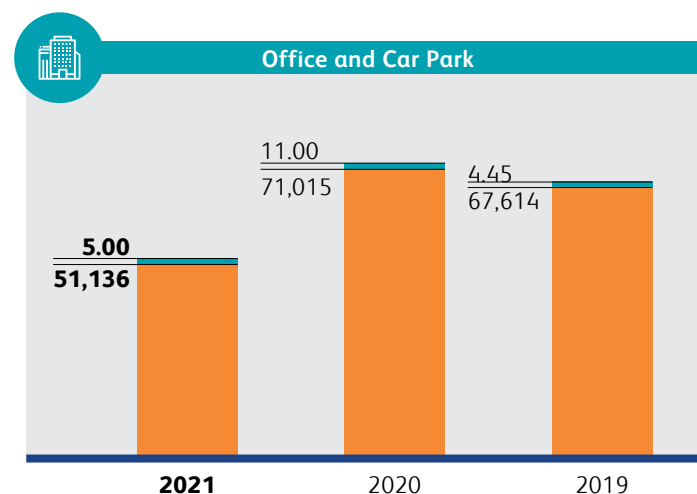
We embrace our responsibility to understand and manage our carbon footprint and we monitor our carbon emission and track our progress via our 5-Year Roadmap based on:



In support of the climate change agenda, we collaborated with PETRONAS and conducted a workshop on Net Zero Carbon Emission (NZCE) to better understand the technicality involved in moving towards NZCE. We are looking into setting up a task force that will further assess, identify the boundary, sources of our emission, the baseline as well as the various options and technology available in reducing our GHG emission and subsequently propose the way forward for the Group.

During the year, we have successfully achieved a reduction of 21.5% in our GHG emission from 105,876 mtCO₂e in 2020 to 83,095 mtCO₂e in 2021 as a result of our continued proactive measures in minimising our carbon footprint coupled with the reduced occupancy and lesser business activity in our offices, car park and retail during the year.

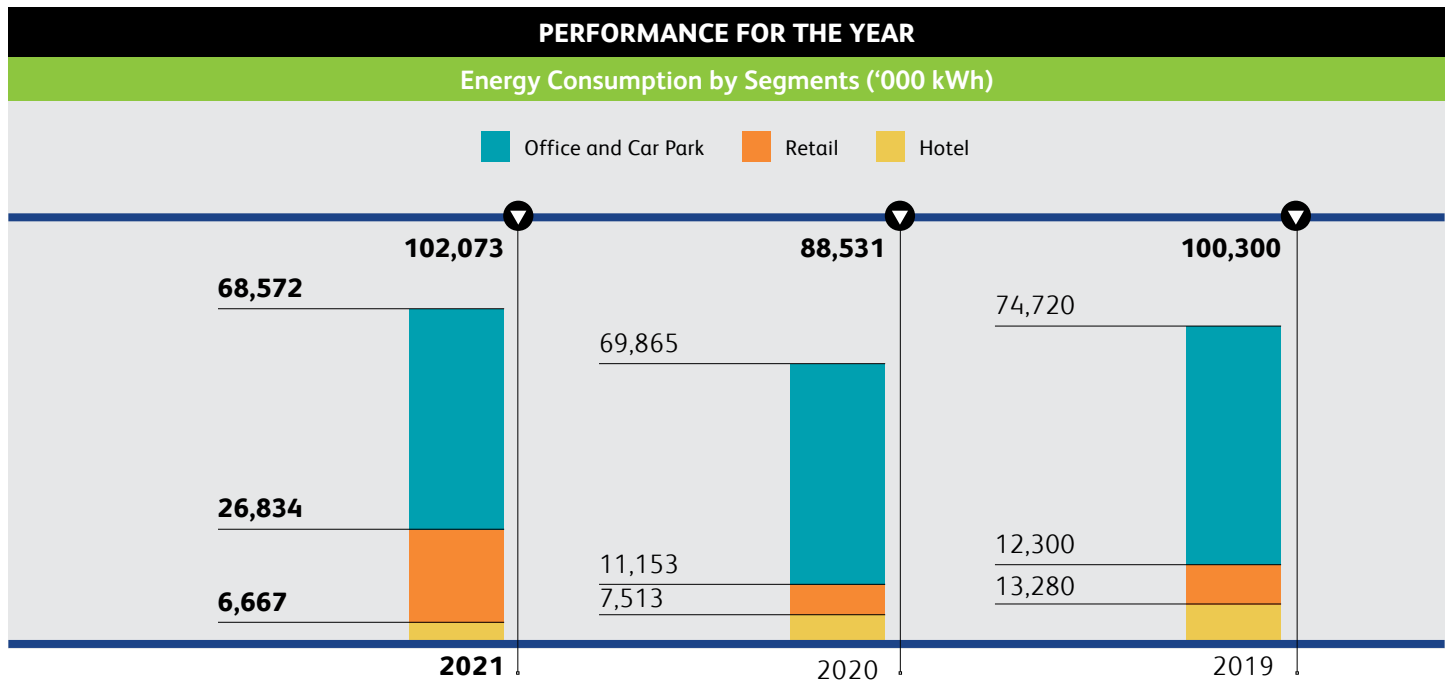
PERFORMANCE FOR THE YEAR			
Greenhouse Gas Emission by Segment (mtCO ₂ e)			
	Total		
	2021	2020	2019
Scope 1	1,578	2,662	3,838
Scope 2	81,517	103,214	106,631
Total	83,095	105,876	110,469



Efficient Energy Management

As one of the main sustainability agenda and pillar to our effort in reducing our carbon footprint, we continue to implement energy efficient initiatives throughout our business operations to optimise energy consumption towards overall reduction.

Our overall energy consumption during the year increased 15.3% from 88,531 kWh in 2020 to 102,073 kWh in 2021. This was due to the increase in operational activities with the reopening of our hotel and retail businesses.



Offices

- LED light replacement for facade/external lighting, and common areas
- Switching off light when not in use and print when necessary
- Health Check of fire pump ongoing at 80% completion
- Fire Pump repair work progressing at 70% completion
- Completed replacement of Building Control System Sensor for lighting
- Completed Phase 1 of chiller overhaul activity

Retail

- Modernisation of escalators at Ramlee Mall
- Upgrading of Building Control System
- Air Handling Unit refurbishment works at back of house
- LED upgrading works at Ramlee and Ampang entrances and car park entrance lobbies
- Participated in Earth hour on 27 March 2021 by turning off non-essential lightings

Hotel

- 20% running capacity threshold for hot water calorifier, extraction fans, and water pumps
- Reduced Guest lift operation to three units from eight units
- Temperature setback to 25°C as floors were closed
- Lights at corridor, closed floors and non-essential areas, switched off during low or no activity
- Minimal lighting at partially closed basement parking area
- Introduced heat pump system to replace boiler for hot water generation for guestroom

PLANET

CASE HIGHLIGHT

Integrated Building Command Centre

In line with our Facilities Management 4.0 Transformation, the Integrated Building Command Centre (IBCC) was launched in April 2021. The IBCC provides a centralised monitoring and command base to coordinate points of visibility via a centralised dashboard that shows real-time overall building performance.

The IBCC features a centralised command center, complete with digital and intelligent facilities, that will allow efficient energy management, reduce labour intensity, schedule of maintenance man-hours, and the cost of managing buildings.

The real-time monitoring of Building Management Systems such as chilled water systems, alarm systems and Building Energy Index at the PETRONAS Twin Towers and Menara 3 PETRONAS, will contribute towards our effort in reducing our carbon footprint.



**Smart
Facilities
Management
systems**



IBCC Features – designed in a modular way to monitor and control key and subservices

Energy Management	Automation System	Sensor Monitoring System	Life & Safety	CCTV	Chilled Water System	HSSE	Vertical Transportation (VTS)	Work Order Management System (WORMS)

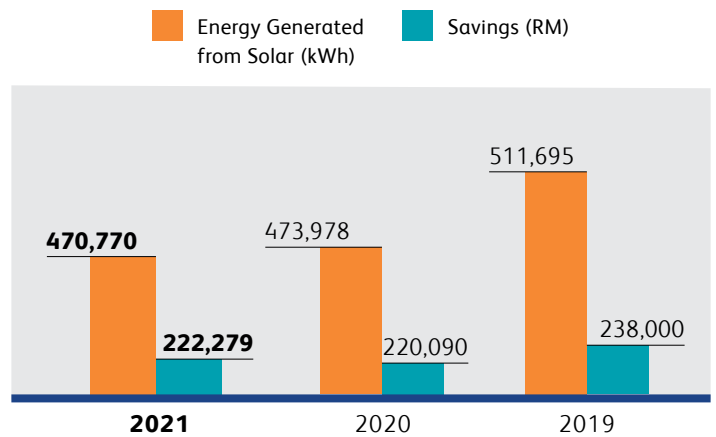


Renewable Energy

Reducing our environmental impact is vital to both the Group and our customers. We take a practical approach in managing natural resources which include promoting the use of renewable energy at our mall.

At Suria KLCC, the photovoltaic system, located at the rooftop has contributed to the mall’s electricity saving of approximately 16.8 million kWh since 2014, equivalent to a total saving of RM1.8 million. This in turn, equates to a GHG emission reduction of approximately 360,000 kg of carbon dioxide (CO2) per year.

Solar Energy Performance



ENVIRONMENTAL MANAGEMENT

Our mission focuses on providing the highest quality commercial office space while bringing responsible environmental solutions and innovative energy saving strategies to our tenants and the communities where we operate. We know a cleaner future cannot be delayed, thus our commitment to reduce waste, save energy, and manage our resources responsibly across our portfolios.

We closely manage our environmental performance through green building best practice, industry sustainability benchmarks, and internal reviews. As the performance of our assets improves through enhanced operations and capital investments, so too does our baseline, towards improving the sustainability performance of our buildings.

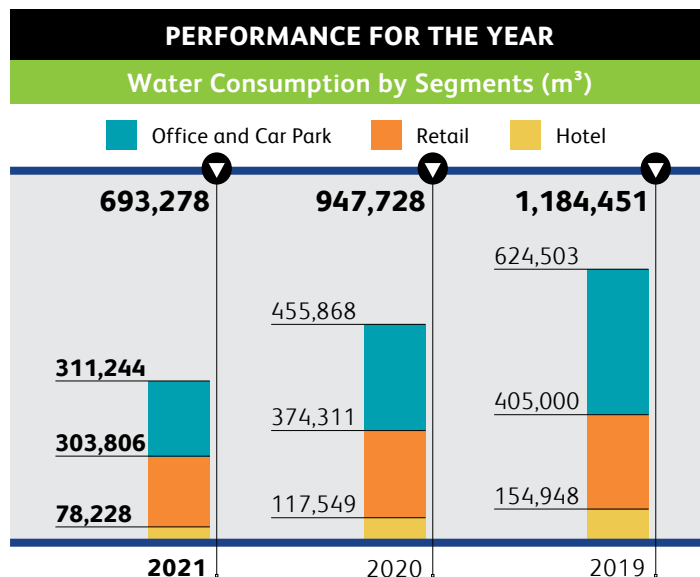


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Water Management

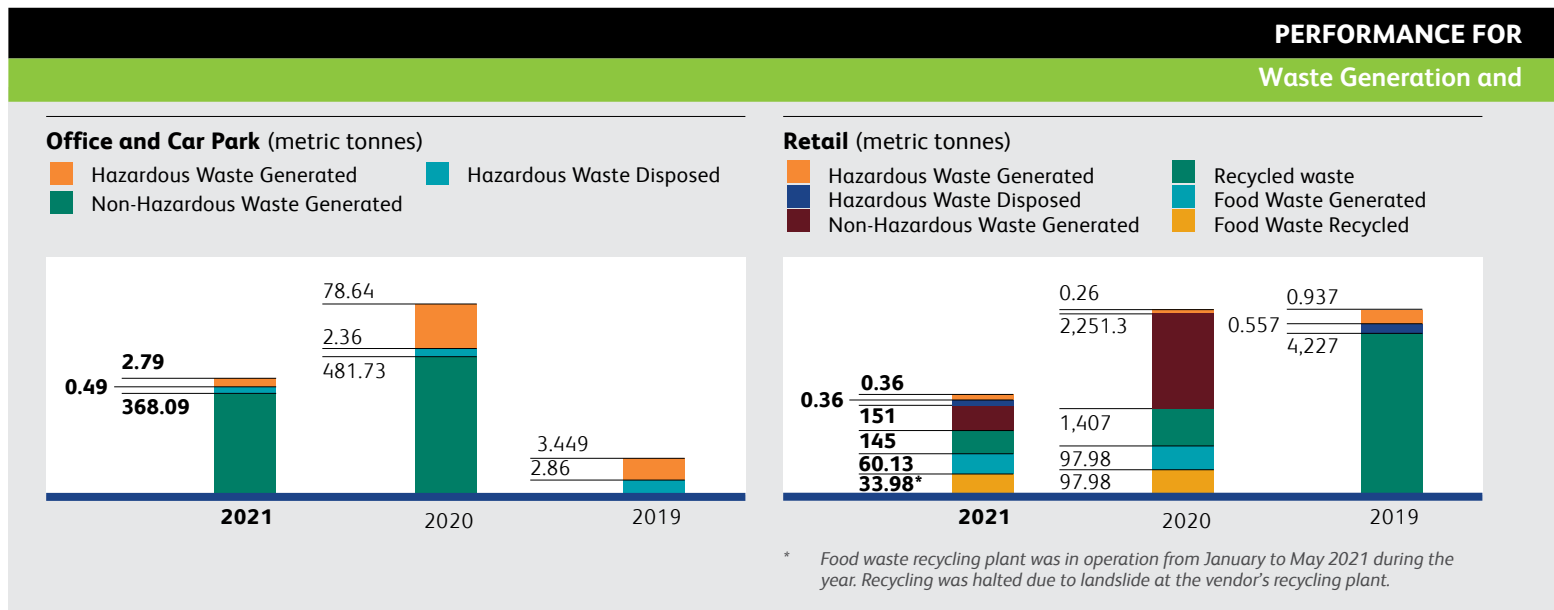
The solutions we have implemented today for water resource protection and waste management will benefit the long-term health and wellbeing of our employees, tenants and our communities. Our water consumption is relatively low compared with other industries. Our primary use is in our office buildings, retail malls and hotel facility, where we use it for drinking, sanitation, and food preparation. We have in place various initiatives that support our goal of monitoring and minimising the amount of water we consume across our operations. We assess water consumption and installations and make site-specific recommendations for water efficiency improvements.

During the year, we achieved a reduction of 27% in water usage, contributed by the ongoing water reduction initiatives as well as the reduced occupancy due to the prolonged lockdown.



Waste Management

The waste we produce is in the form of our disposal of construction waste during the development and renovation of our buildings. Municipal waste produced during operations from our buildings by users and occupants, which include domestic and hazardous waste make up the balance of waste we produce. We are continuing our effort to reduce waste and reuse resources.



Offices

- Ongoing 3R campaign at all office buildings in collaboration with PETRONAS
- Encouraged contractor to use friendly material i.e. Green product for chemical and biodegradable plastic
- Encouraged internal contractors to participate in the recycle program
- Conducted a digital cleanup campaign to reduce the usage of the hard drive storage and leveraging cloud based (one drive) application to help reduce carbon footprint of the digital system

Retail

- Waste sorting exercise held to support the mall's recycling program
- Carried out food waste recycling program for Level 2 Food Court tenants
- Total food waste generated: 60.13 tonnes
- Total food waste recycled: 33.98 tonnes

Common Facility

Retail

Hotel

- Implementation of water recollection/harvesting effort – rainwater harvesting project in collaboration with PETRONAS’ Malaysian Petroleum Management (MPM) at Masjid As Syakirin. The rainwater collected is used for irrigation and floor cleaning purposes around the area. Since its implementation in December 2020, it has achieved a collection of 4,500 litres/month at its highest

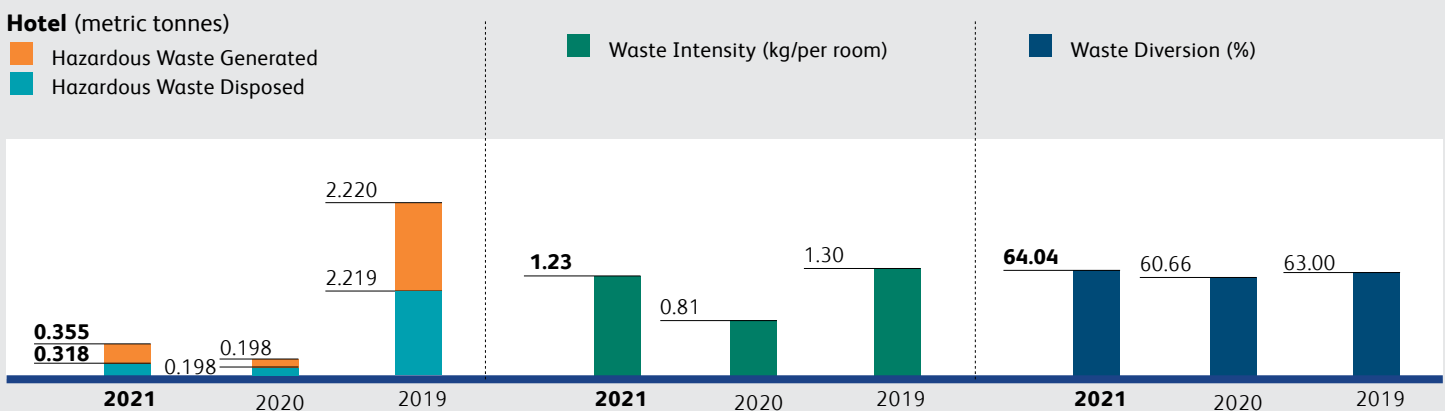
- Monitoring of water leakages issues throughout the mall

- Centralised dishwashing to minimise water use
- Reduced laundry operations to 2/7 days with reduced hours
- Reduced operations of water dispensers and ice machine
- Closed warm and cold whirlpools, sauna and steam room

Where our services require us to handle hazardous waste, we dispose them responsibly, without risk to our people, the environment or local communities. We continue to encourage our people to minimise their waste through various initiatives, by minimising printing and optimising use of consumables.

THE YEAR

Disposal by Segments



Hotel

- Conducted online awareness training for employees on diligent practices of segregations and smart purchasing
- Successfully eliminated 100% Single-Use plastic in the operations mainly from guest rooms, Food & Beverage, kitchen and spa
- Paperless initiative - introduced QR Code in all guest rooms which allows guests to access latest information of the Hotel, digital map, In-room dining and minibar menu, MO shop and digital library
- “Waste Not Want Not” Annual sale - to provide an avenue for employees to donate their unwanted items for resale to other colleagues. This in turn would reduce the amount of waste that goes into the landfills

PLANET

CASE HIGHLIGHT

THE ABSOLUTE ELIMINATION OF SINGLE-USE PLASTIC AT MANDARIN ORIENTAL, KUALA LUMPUR

The first step in eliminating Single-Use plastic started in 2019 when Mandarin Oriental, Kuala Lumpur (MOKL Hotel) collaborated with WWF-Malaysia with the signing of a Memorandum of Understanding (MoU) in November 2019. Part of the initiative was to eliminate Single-Use plastic throughout the hotel's operations.

In 2020, the Alternative Materials Tool by WWF was introduced to find alternatives to achieve the goal of absolute elimination of Single-Use plastic. As it would be unrealistic to omit the usage of packaging within the hotel, steps and references to the Alternative Materials Tool have been made to find substitutes in materials for food packaging. Sustainability implications were carefully

considered using data and analysis to constantly make improvements.

As corporate responsibility has always been the guiding principle for MOKL Hotel, 2021 saw groundbreaking milestones in its commitment to always making better choices.

More than ever, MOKL Hotel places emphasis on sustainability as urbanisation continues to spread. As much as possible, in each and every decision across the hotel, MOKL Hotel highly regards corporate responsibility values so to make real impact as active members striving to make a difference.




Responsible Material Use





At KLCCP Stapled Group we promote sustainable consumption by optimising the use of environmentally friendly products throughout our operations.

What we buy and where we buy it matters at every level of our supply chain - from the operations team, the contractors on site to our suppliers producing the materials. We take a thorough approach to sourcing sustainable materials as we have the responsibility in minimising the adverse effect, not only to the environment but also to our people and the community.

This includes environmental and ethical sourcing of eco-friendly products that are safe, non-toxic and biodegradable. Our HSE team is monitoring all chemical usage through permit system prior to work commencement in ensuring eco-friendly products are used in the maintenance works at our premises.


Hotel

At our hotel, we have increased the use of sustainable, eco label and local products such as:

 <p>Coffee 98% usage</p>	 <p>Tea 100% usage</p>	 <p>Vanilla 100% usage</p>	 <p>Cocoa 95% usage</p>
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- Sourced paper products bearing certifications from the Forest Stewardship Council/ Programme for Endorsement of Forest Certifications (PEFC)
- Use of recycle Paper Products
- Identified operational areas using paper and research for suitable alternatives
- Increased the use of Sustainable Seafood which was at 68% during the year and removed critically endangered species from the hotel's menu and sourced fish that is certified by the Marine Stewardship Council (MSC) or the Aqua Culture Stewardship Council (ASC)