



ENVIRONMENTAL

STEWARDSHIP

Environmental stewardship is a core responsibility of KLCCP Stapled Group to promote a sustainable society and cultivate a green and safe corporate culture. We continue to take proactive measures in improving environmental performance and efficiency of the assets we manage in the areas of greenhouse gas emissions, energy efficiency, responsible water and waste management.

Our retail and hotel properties and asset management company continue to support and step up KLCCP Stapled Group's efforts in responsible energy management, water efficiency and environmental conservation programmes in its many areas of operations to make a positive difference and ensure that the best practices have minimum adverse effects on the general well-being of customers, guests and employees.

Material Sustainable Matters

- Climate Change
- Environmental Management

Context

With growing awareness worldwide of environmental concerns, it is imperative to address how the needs of the present can be met without compromising the ability of future generations to meet their own needs with emphasis on protection of natural resources and the environment. Critical business needs for water, energy, and raw products must coincide and be balanced with care for stakeholders and the environment. The efficient use of environmental resources such as energy and water contribute to operational efficiency and long-term sustainability of KLCCP Stapled Group.



Envirocomm 2016, held at the Endau-Rompin (PETA) Johor focuses on elements of environmental conservation and supporting local communities.

Our Approach

At KLCCP Stapled Group, we acknowledge our responsibility and emphasise the needs in raising awareness and understanding of environmental sustainability amongst our business units, stakeholders and the broader community. In line with our CoBE and as a real estate owner, developer and manager, we aim to minimise disruptions to the community, lowering the environmental footprint of

our buildings and use energy, water and resources more efficiently.

With inherent focus on mitigating the environmental related challenges, and in achieving operational sustainability, KLCCP Stapled Group has embarked to strengthen its foothold in the areas of energy efficiency and waste management in all its assets and operations. In our 3-year Sustainability Roadmap, we have identified our baseline and targets for improving our

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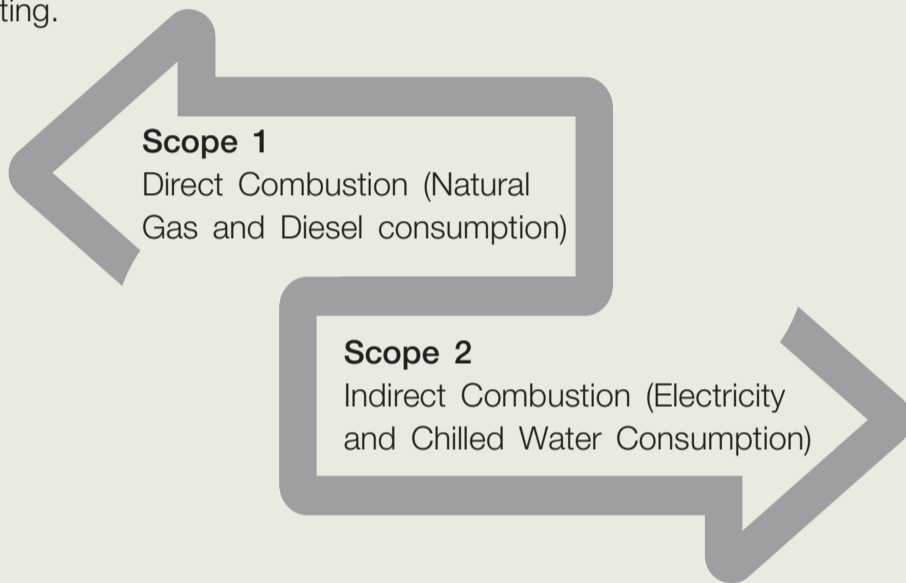
environmental sustainability performance in these areas. We strive to ensure our decisions contribute to improvements in environmental sustainability, working in-tandem with our tenants, the local authority, government and other stakeholders in achieving our targets.

KLCCP Stapled Group is committed in achieving its aspiration to be recognised as a responsible organisation that places great importance to environmental best practices throughout our operations.

CLIMATE CHANGE

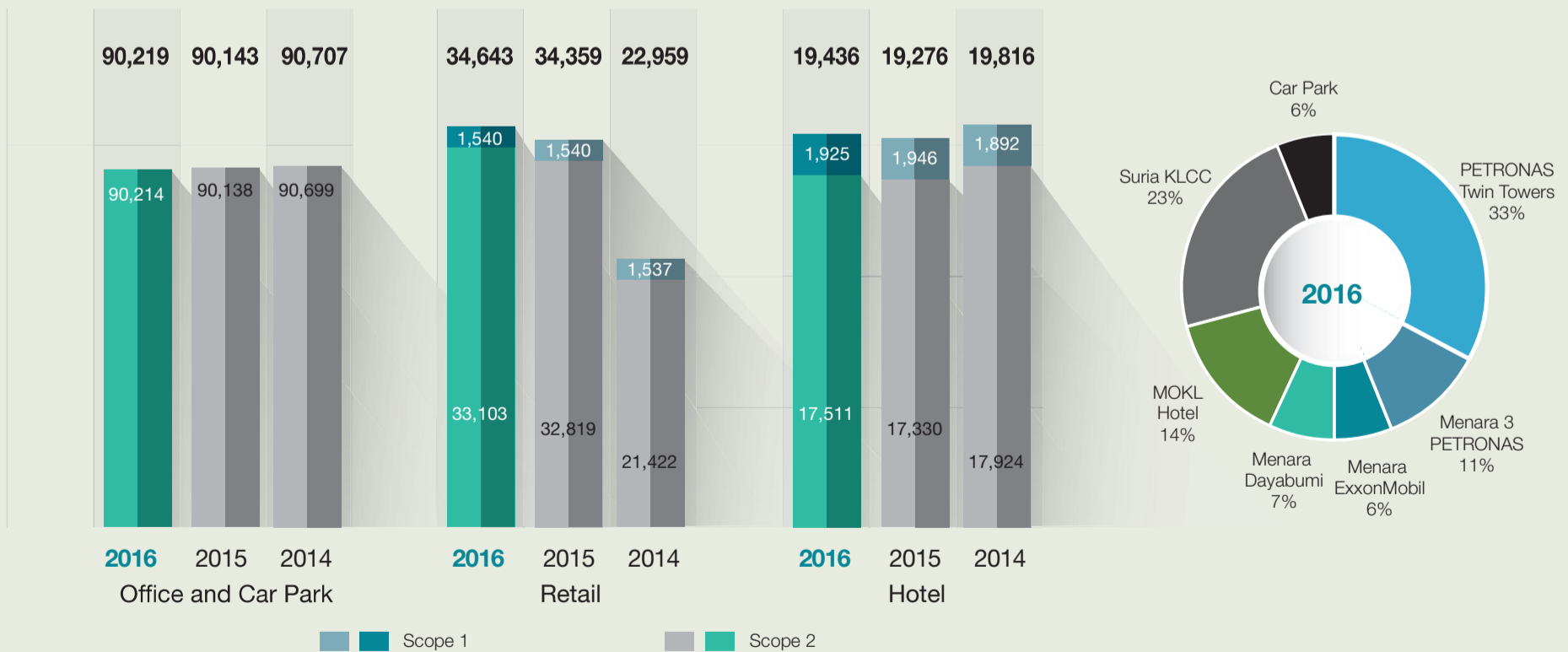
Climate change results in extreme weather and global warming and this will have impact on our wear and tear of assets and cost associated with repair and maintenance. Increased demand on ventilation and air-conditioning will also result in higher energy consumption. With climate change fast becoming a global agenda, Malaysia has committed to combating global climate change with a pledge to cut its greenhouse gas emissions (GHG) by 45% by 2030. As a good corporate citizen, KLCCP Stapled Group is committed to address climate change risks through reduction of its energy consumption and carbon emissions in its business operations and externally certified Environmental Management System (EMS) 14001 certification. To-date, our facility management company, KLCC Urusharta Sdn Bhd and our hotel, MOKL Hotel are ISO 14001 EMS certified.

Our monitoring and reporting of GHG emissions is based on Scope 1 and Scope 2 reporting.



Performance for the year

GreenHouse Gas (GHG) Emissions (mt CO₂-e)



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KLCCP Stapled Group anticipates, mitigates and develops adaptation strategies to face the upcoming carbon risks or opportunities, which may affect our tenants, users, guests and community.

Measuring Carbon Emissions

Our carbon management is in relation to utilities (electricity, natural gas, chilled water) and diesel. In compliance with the PETRONAS Technical Standards, we have developed a carbon inventory to establish our emissions baseline and monitor our carbon emissions on a quarterly basis and tracking our progress. The consumption of each business based on utilities and diesel are compiled with a GHG emissions factor assigned and thereafter monitored. Energy reduction initiatives are then put in place to drive our action towards our reduction target. This year, we extended our monitoring on carbon management to include our hotel and retail operations.

Overall, KLCCP Stapled Group's GHG emissions for 2016 totaled 144,297.47 metric tonnes of carbon dioxide equivalent (mt CO₂-e), a marginal increase from 2015 mainly due to the

increase in chilled water usage at our office properties and electricity consumption at the car park. Out of the overall total emissions, 63% is from the office and car park whilst retail and hotel contribute 23% and 14% respectively. Indirect GHG emissions from electricity and chilled water account for 98% with the rest being direct emissions, from diesel usage for the generator set at our offices and natural gas consumption from the food and beverage (F&B) outlets at Suria KLCC and MOKL Hotel.

Energy Management and Efficiency

Our energy management strategy is one of the pillars to our carbon emissions reduction strategy. Energy management is unquestionably of great importance to KLCCP Stapled Group as we rely on energy across our business operations of property development and facilities management. Reducing energy consumption in our commercial buildings is vital to achieve KLCCP Stapled Group's energy efficiency goals and impact on overhead, cost, return on investment and the commensurate reduction of GHG emissions.

By implementing energy efficient fixtures and renewable energy technology in our properties, KLCCP Stapled Group seeks to conserve energy consumption and embrace green excellence in our assets for a lower carbon economy. This will in turn contribute to occupier satisfaction and productivity as it impacts the indoor air quality, lighting and noise levels, thermal comfort, links to nature and proximity to amenities.

In 2016, KLCCP Stapled Group introduced targets to reduce energy across our business operations from the baseline year of 2015 in its Sustainability Roadmap. We will be monitoring our progress in energy reduction through the planned initiatives and against our baseline year henceforth, in our commitment to reduce energy use in our operations.

Following the achievement of the Provisional GBI certification for PETRONAS Twin Towers and Menara 3 PETRONAS in 2015, we continued to implement initiatives during the year towards our target of attaining full GBI certification by 2018, for both these properties and enhance operational efficiency in our retail and hotel assets.

Key initiatives for the year

PETRONAS Twin Towers

- Installation of LED lighting at staircases, lobby and office floors at Tower 2
- Upgrading of Building Management System (BMS) – installation of Energy Management System (EMS), to track and control energy consumption

Menara 3 PETRONAS

- Upgrading of BMS – installation of EMS, to track and control energy consumption
- Switching off 50% of common area lighting after office hours
- Implementation of LED lighting at common area at 50% coverage
- Switching from High Tension starters to Soft Starters for four units of chiller to reduce consumption of electricity
- Replacement of two units of cold water pump

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Suria KLCC

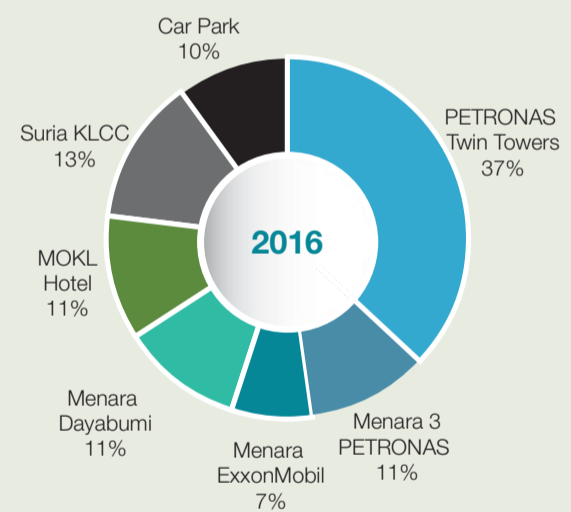
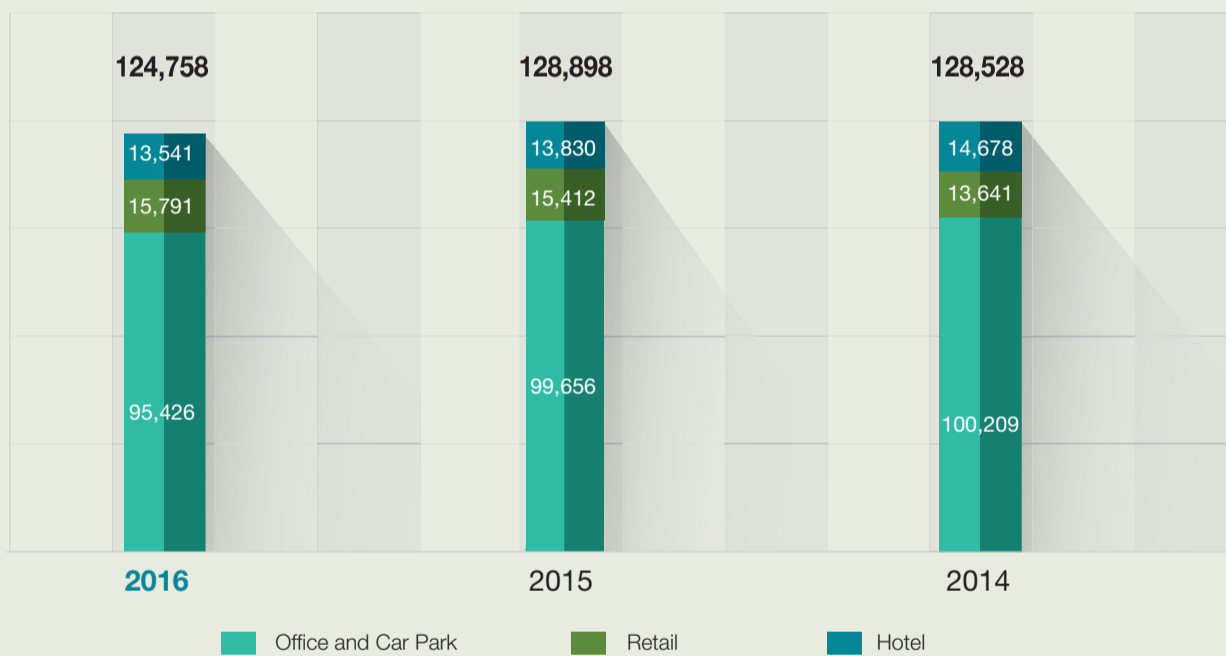
- Replaced 20% of the mall's normal lights to LED lights
- Upgrading of Fire Alarm System
- Upgrading of the building heat exchangers and replacement of fan coil unit at retail outlets

MOKL Hotel

- Installation of LED lights for renovated rooms and upgrading of Integrated Room Management System – energy savings software and hardware
- Replacement of central BMS to ensure real time energy management and monitoring
- Installation of three high efficiency primary chilled water pumps with state of the art fresh air primary air handling units to improve overall indoor air quality
- Replacement of kitchen induction hobs with improved efficiency of 90% of the input energy from the gas range of 55%

Performance for the year

Electricity Consumption ('000 kWh)



Energy consumption registered a 3.2% decrease from 128,898,361 kWh in 2015 to 124,758,292 kWh in 2016. This was largely contributed by the reduction of 4.2% in the office and car park segment, particularly from the initiatives undertaken at PETRONAS Twin Towers and Menara 3 PETRONAS towards attaining full GBI certification. Retail segment saw a 2.5% increase from 2015 to 2016 as a result of the upgrading works in the shopping mall

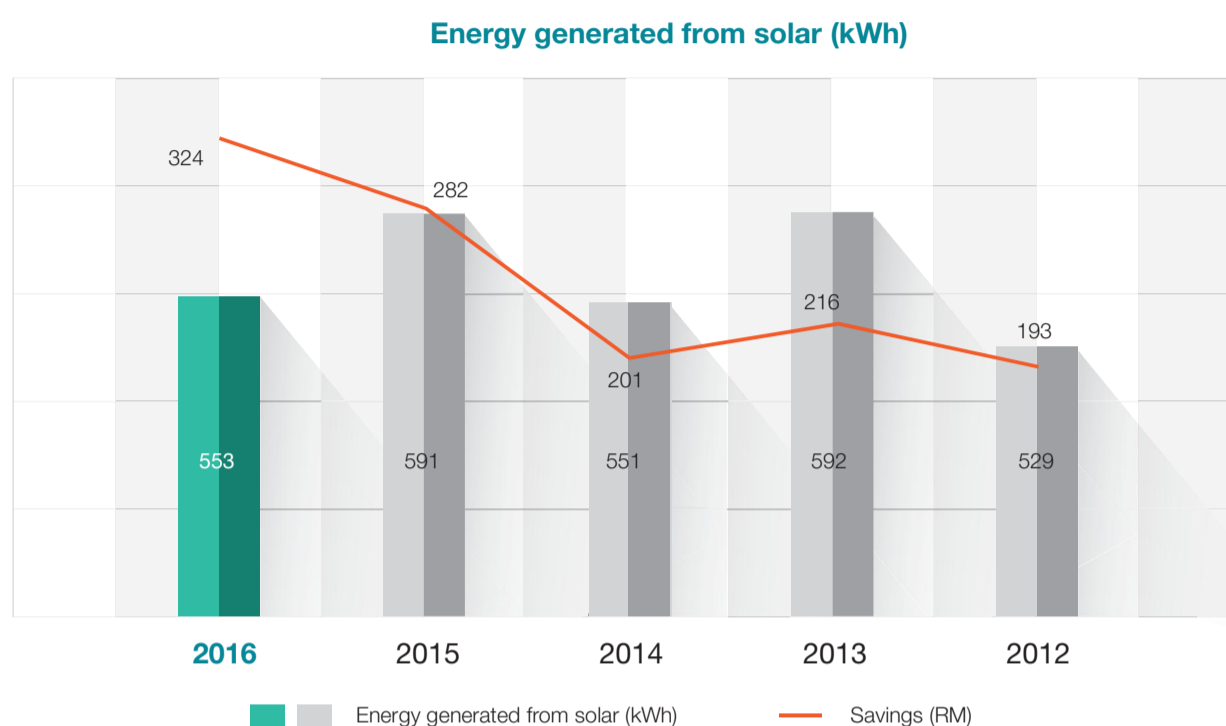
requiring testings whilst hotel segment saw a 2.1% reduction from the installation of LED lights and installation of high efficiency induction hobs.

Renewable Energy

The solar photovoltaic installed at the rooftop of Suria KLCC in 2012 continued to reap electricity savings for the mall. The clean energy generated from the system contributes to the GHG emissions reduction by approximately

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360,000 kg carbon dioxide (CO₂) per year and supplies about 30% of Suria KLCC's power requirements. From 2012 to 2016, energy generated from the solar panels totaled of 2,817,146 kWh, equivalent to 1,926.93 mt CO₂-e and a cost savings of approximately RM1.2 million.



ENVIRONMENTAL MANAGEMENT

Water Management

Water use is an environmental sustainability concern that has recently taken on increased relevance. Severity of weather conditions has caused communities, industries, and regulators to place additional efforts into conservation strategies. Water resources have become increasingly stressed by population growth, contamination of resources, and depletion of groundwater supplies.

Water is a key resource in our operations and we realise the need to manage our water effectively and maintain the quality of water for the users at all our buildings. As a real estate owner, developer and manager, we are committed to reduce water consumption, reuse water and prevent water pollution.

As part of our target to achieve full GBI certification for PETRONAS Twin Towers and Menara 3 PETRONAS, KLCCP Stapled Group continued to enhance our initiatives in reducing our water consumption.

Key initiatives for the year

Office

- Installation of water aerators for ablution
- Identifying and resolution of water gushing issue at lower floors, preventing water wastage

Retail

- Installation of water meter in all F&B outlets to track consumption
- Replacement of old water pipes to avoid leakage

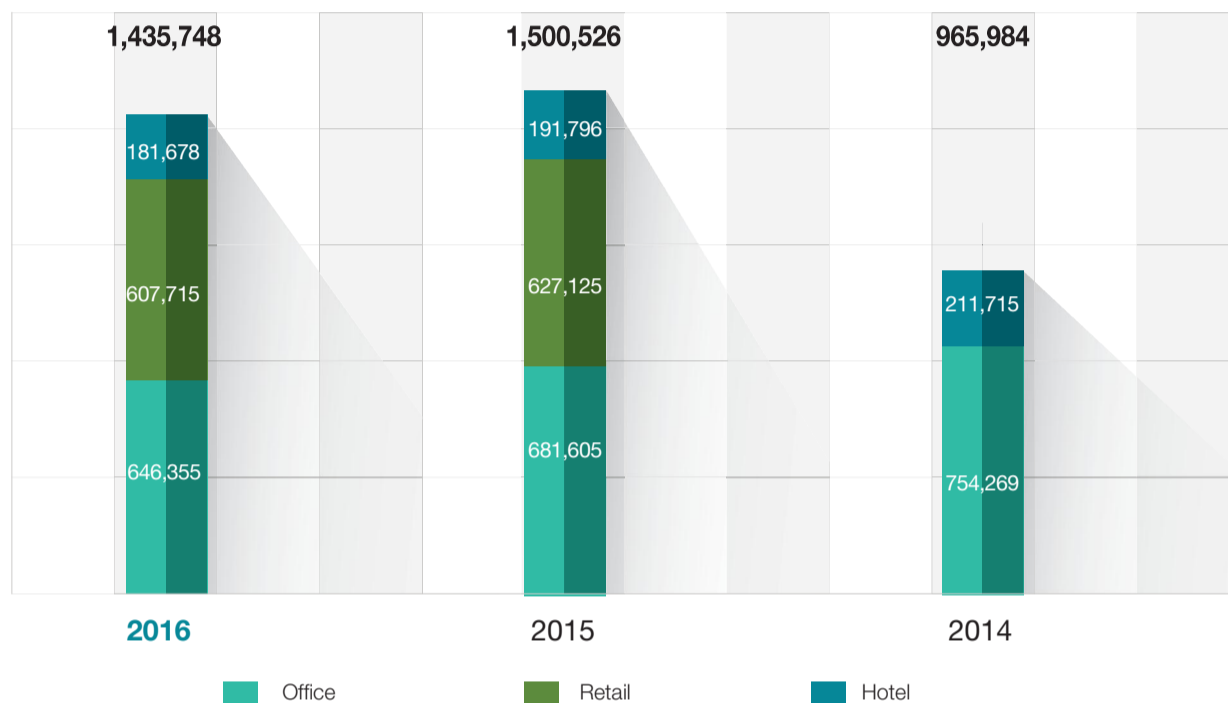
Hotel

- Installation of water restrictors in all renovated rooms to manage flow rates
- Installation of water restrictors at all kitchens to concealed type and use of "seat" between pipe and faucet to stop drips in the kitchens

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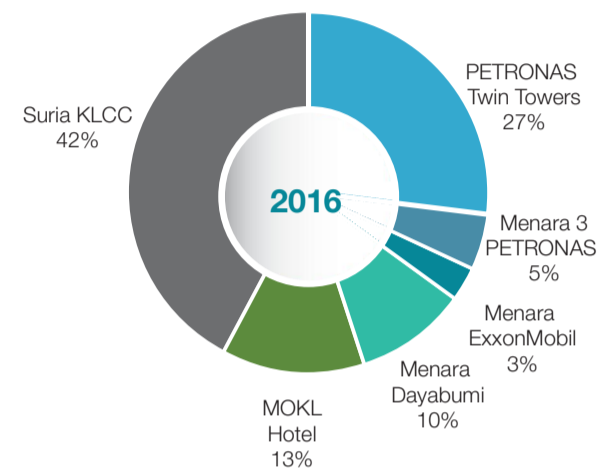
Performance for the year

Water Consumption (m³)



Note:

1. Data collection for retail commenced in 2016



With our ongoing initiatives, overall water consumption for 2016 reduced by 4.3% being largely contributed by the 5.3% reduction in MOKL Hotel. The office and retail assets also registered reductions of 5.2% and 1.6% respectively in 2016. With a footfall exceeding 48 million, Suria KLCC is the largest consumer of water amongst our assets at 42% with PETRONAS Twin Towers, the highest of the office assets at 27% of the overall consumption for the year.

Waste Management

KLCCP Stapled Group practices responsible waste management to ensure the well being of our tenants, guests, customers and the community at large. This is also part of our commitment and contribution towards our environment for the benefit of our future generation.

As a real estate owner and developer, our approach to waste management covers construction waste produced during

development and renovation of our buildings, municipal waste produced during operation of our buildings by the various users and occupants, which includes domestic and hazardous waste. Domestic waste comprises solid waste, compostable materials, recyclable materials and reusable materials waste whilst hazardous waste generated include used fluorescent bulbs, used batteries, spent lubricating oil, spent organic solvents and electronic wastes.

In respect to hazardous waste, KLCCP Stapled Group complies with the Scheduled Wastes Regulation 2005 (Environmental Quality Act 1974) by the Department of Environment (DOE), Malaysia. All the generated hazardous waste from our respective assets are disposed to the waste facility managed by Kualiti Alam, Sdn Bhd, registered and licenced with DOE. All scheduled waste are weighed and inventory tracked on a monthly basis. Collection of scheduled

waste is undertaken within 180 days by Kualiti Alam and e-consignment note are filed into DOE's eSwis website.

At our offices, as part of our sustainability practices and in line with our targets of achieving the full GBI certification for PETRONAS Twin Towers and Menara 3 PETRONAS, we have a Waste Management and Recycling Plan in place which outlines measures to achieve our identified goals on waste management.



MOKL Hotel segregates their domestic and recycled waste using specifically allocated waste bins.

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Short Term Goals	Long Term Goals
Identification of the type of waste produced for identified area	Minimising generation of unnecessary waste
Establishing the amount of waste for every type of waste produced	Minimising the quantities of waste generated ending up as landfill
Generate statistical database for deriving a custom and successful waste management and recycling plan	Recovering, reusing and recycling waste generated onsite where possible
Establishing baseline waste production	

At our hotel, general waste is segregated at source, particularly in the main waste generation areas of housekeeping and kitchen. The housekeeping attendants on each floor have separate bags for discarding recycled waste versus solid waste. Kitchens are all equipped with separate bins for the separation of wet food waste, recycle waste and wet waste.

Waste for landfill or recycling are submitted by the waste vendor and tracked on a monthly basis. The data is collected and trended for any abnormalities prior to corrective actions being taken. During the year, the waste vendor was requested to place a weighing machine at the Waste Management Center for more accurate data on recycled waste.



Recycled waste bins are placed at the North-West Development car park to encourage the public to dispose their waste responsibly.

KLCCP Stapled Group requires our main contractor to implement responsible waste management procedures to minimise construction waste and effectively manage the disposal of such waste to dumping sites approved by the authority. The contractor is required to submit the designated location of the dumping sites and proof of authority approval prior to disposing the waste from our construction sites.

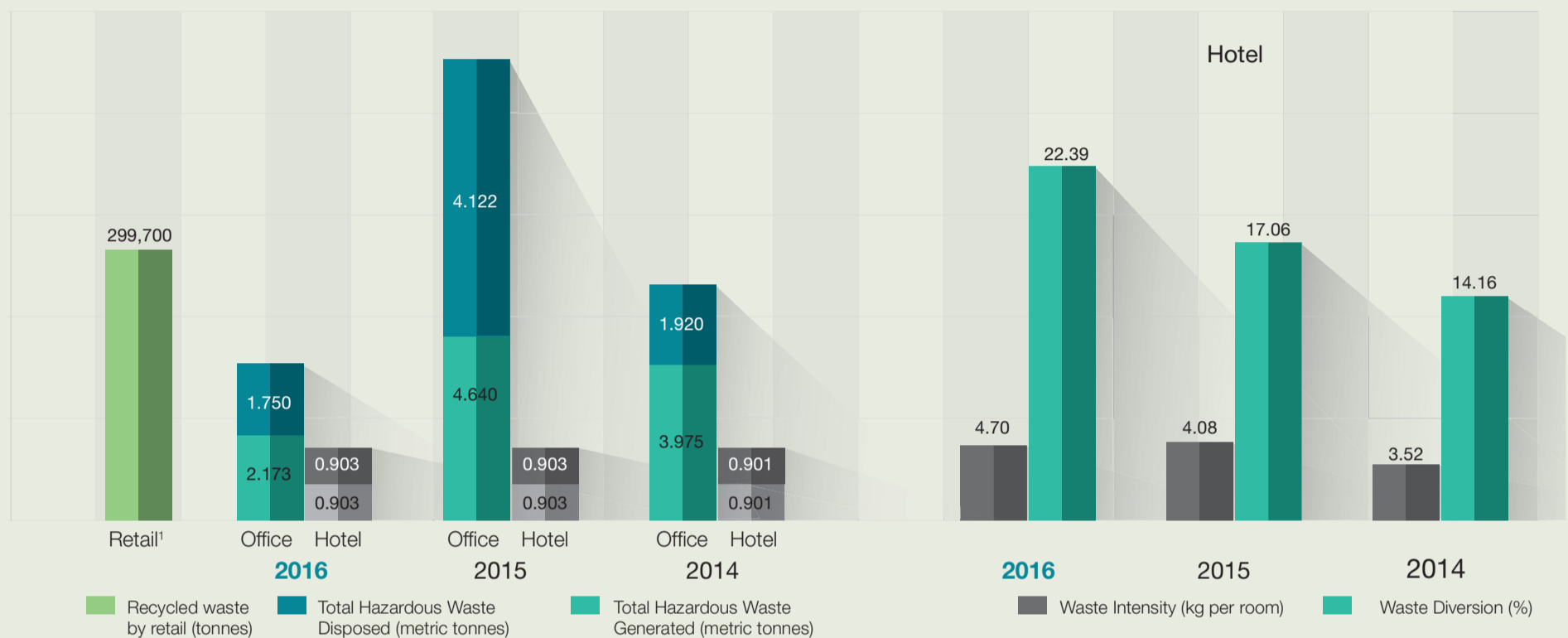
Key initiatives for the year

Recycling	<ul style="list-style-type: none"> Recycle bins are placed within the car park area of the North-West Development Smart purchasing and diligent practices by employees and suppliers Implementation of food compost machine
Waste Segregation	<ul style="list-style-type: none"> Enhancement of Standard Operating Procedure at PETRONAS Twin Towers Coaching of contractors on waste collection Campaigns and notifications to educate tenants
Waste Reduction	<ul style="list-style-type: none"> Garment bags, laundry bags, newspaper bags at hotel guestrooms are made from non-woven material, which allows for wash and reuse Paperless internal meetings and storage of documents and materials on shared drives or referencing from smart devices Flyers for hotel guest information take the form of Electronic Direct Marketing Glass bottled water (Natura – patented three-step filtration process with high grade long-lasting carbon filter) in hotel meeting and function rooms Digital Library for all in-house guests – digital download of newspapers and magazines, in various languages, reduce wastage of hardcopy newspapers Auto dosing systems to minimise chemical waste

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Performance for the year

Waste Management



Note:

¹ data collection commenced only in 2016

In 2016, KLCCP Stapled Group generated approximately 3.076 metric tonnes of hazardous waste from its office and hotel operations. This was a reduction of 45% from 2015 as a result of the initiative of changing fluorescent tubes to LED lights. Of the hazardous waste generated, approximately 87% was disposed to approved facilities. As at December 2016, MOKL Hotel's Waste Intensity (landfill waste per overall guests room nights) was at 4.7 kg per room compared to 4.08 kg per room in 2015. This increase was mainly due to the ongoing first phase renovation of the guest rooms which commenced in June 2016. With MOKL Hotel's increased focus on the requirement to practice the 3R of Reduce, Reuse and Recycle, the Waste Diversion improved to 22.39% from 17.06% in 2015, thus contributing less to landfill waste.

Responsible Material Use

As a real estate owner, developer and manager, KLCCP Stapled Group takes pride in ensuring the assets and facilities managed are in pristine condition and cater to the comforts of our users and occupants whilst adhering to environmental friendly products and material use. The use of sustainable building materials in our assets and the eco-friendly products which we promote throughout our operations play a part in driving environmental values and behaviours within the organisation and delivering environmental, social and business benefits.

Promoting the Use of Biodegradable Products

KLCCP Stapled Group continues to promote the utilisation of biodegradable and eco-friendly products throughout our business operations. At the KLCC Park, we have imposed in our contract with the vendor for the use of environment friendly products in the landscape maintenance and pest control.

KLCCP Stapled Group acknowledges the increasing importance of green procurement and in stepping up our efforts to move towards a more responsible procurement practice. We are currently expanding our procurement scope by procuring products and services to support the green building initiatives especially at the PETRONAS Twin Towers, Menara Dayabumi and the Car Park of the North-West Development.

At our hotel, the contracts with vendors include utilisation of green product requirement. In compliance with the hotel's certification in ISO 14001 – Environment Management System, consideration of products that are environmentally friendly will be given priority. Special attention is paid on ozone depleting materials. The policy further covers guidelines for Safety and Health requirements.

Our hotel team continues to seek-out suppliers who have accreditations or

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Key initiatives for the year

PETRONAS Twin Towers

- Fit out materials such as carpet flooring and adhesive used are from recycled materials and low in Volatile Organic Compound (VOC)
- Materials for ceiling insulation were of recycled content materials and non-toxic
- All wiring outlet plates are PVC free to minimise outgassing of toxic substances and the lifecycle issues are also considered in the production and disposal processes

MOKL Hotel

- Laundry chemicals used are under the Ecolab's Ensure Program, biodegradable products, phosphorous free, Alkylphenol Ethoxylates (APE) free and Nitrilotriacetic Acid (NTA) free and uses much lower temperatures for an effective wash
- Dry cleaning section switched from dowper dry cleaning machines to machines using hydrocarbon – safer for our colleagues and the environment
- Biodegradable shower cap, sanitary bags made from cornstarch and toothbrush handle made from straw fibre for hotel guests usage
- Spa products used in The Mandarin Oriental Spa – Cartons and brochures are sourced from Forest Stewardship Council (FSC) accredited stock
- Housekeeping of rooms using Ecolab's range of chemicals reduces our environmental footprint through earth friendly formulas, containing no APE

certifications and who can provide quality products at competitive prices. The team continues to provide guidance to nominated F&B suppliers in food safety requirements by performing scheduled value added audits and inspections of their premises.

Other sustainable practices by our hotel team include sourcing from locally farmed or grown products – farmed fishes, vegetables and fruits, herbs and spices and non serving of shark's fins in the hotel's Chinese restaurant and banquet.

Suria KLCC places high priority for suppliers who have proven track record, credentials and certification. Performance of service providers are guided and monitored through scheduled audit checks and inspections.

Inculcating Eco-Minds

Our environmental sustainability involves KLCCP Stapled Group playing its part as a good corporate citizen and encourage our employees to develop environmental and community outreach initiatives to appreciate and inculcate the back-to-nature awareness. Through such activities, we endeavour to make a difference and inspire others to do the same in our quest for a sustainable future.

Envirocomm 2016

The Envirocomm 2016 programme was successfully held at the Endau-Rompin (PETA) Johor National Park from 24th to 26th November 2016, focusing on the elements of environmental conservation while supporting the local communities. The Endau-Rompin Johor National Park is one of the very few remaining large tracts of lowland tropical rainforest in the Malaysia Peninsular with a total area of 19,562 hectares.

Environmental awareness programmes were organised with the aim of



MOKL Hotel's Back to Nature encouraged employees' participation in environmental conservation activities.



Planting of fruit tree at the Orang Asli village school during Envirocomm 2016 in Endau-Rompin (PETA) Johor.

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connecting with nature and to create awareness on the importance of conserving nature through a number of outdoor activities such as jungle trekking and water tubing. As a property development and investment company, KLCCP Stapled Group has a role in protecting and preserving the environment as well as to inculcate culture of learning on bio-diversity and environmental protection among its employees. The programme contributed greatly not only to the preservation of environment through tree planting activity but also provided exposure for the employees to experience the importance of bio-diversity and park preservation.

Employees were also given the opportunity to perform outreach services for the *Orang Asli* community residing in Kampung PETA, the nearby village and presented them with a token of contribution from the employees. The highlight of Envirocomm 2016 was the tree planting ceremony, where 20 fruit trees were planted at the village school.

MO Charity Run

In December 2016, MOKL Hotel, in support of World Wide Fund for Nature, Malaysia (WWF), held the MO Charity Run at the Forest Research Institute, Malaysia (FRIM) to raise funds and to create awareness on the importance of environment conservation among employees and the community. The 9km trail run received overwhelming participation from both employees and members of the public. A total of RM31,828 was raised and donated to WWF-Malaysia to support its conservation efforts.

Other Community Relations Programmes

Waste Not Want Not Charity Bazaar	<ul style="list-style-type: none"> • Encouraged employees to “Recycle and Reuse”. • Employees, suppliers and business partners donated usable items to be sold and raised funds for the less fortunate.
Earth Hour	<ul style="list-style-type: none"> • Targeted lights and shut-down of non-essential equipment in the commercial and retail space and at the hotel. • Worked to engage and educate our tenants, guests and visitors to encourage participation • Concerted effort made to identify and eliminate electricity usage resulting in savings
Give a Book, Take a Book	<ul style="list-style-type: none"> • Encouraged employees to read more. This also helps the environment by allowing employees to borrow or donate books from the library located in the staff cafeteria
Back to Nature	<ul style="list-style-type: none"> • Employees visited a Syabas plant to learn about how water is processed and channeled to the users • Cleaning of the surrounding areas of the waterfall at the Forest Research Institute Malaysia



MOKL Hotel successfully raised RM31,828 through the MO Charity Run and the proceed was donated to WWF Malaysia in support of their conservation efforts.