



ENVIRONMENTAL STEWARDSHIP

ENVIRONMENTAL STEWARDSHIP IS A CORE RESPONSIBILITY OF KLCCP STAPLED GROUP. WE CONTINUE TO TAKE PROACTIVE MEASURES IN IMPROVING ENVIRONMENTAL PERFORMANCE AND EFFICIENCY OF THE ASSETS WE MANAGE. WE COMMIT TO MANAGE AND INITIATE ENVIRONMENTAL INITIATIVES IN THE AREAS OF ENERGY EFFICIENCY AND RESPONSIBLE WATER AND WASTE MANAGEMENT. WE ALSO ENCOURAGE EMPLOYEES' ENGAGEMENT AND INVOLVEMENT IN ECO-FRIENDLY ACTIVITIES AND CONSERVATION EFFORTS.

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 programs 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.



The fish release activity at Sungai Papan in Gerik, Perak promotes environment conservation and contributes to the lake ecosystem

GreenHouse Gas (GHG) Emissions

In our bid towards achieving a lower carbon economy, KLCCP Stapled Group embarked on its flagship action to monitor and manage GHG emissions in 2014 as part of our sustainability initiative recognising the focus on carbon emissions. This is also in line with PETRONAS' requirement of its subsidiaries to be in compliance with the enforced Environmental Quality

(Clean Air) Regulations 2014. Our data collection is focused on our office and hotel properties.

At Mandarin Oriental, Kuala Lumpur (MOKL Hotel), one of the hotel's Guiding Principles is "Acting with Responsibility". In line with this principle and also in compliance with our certified standards of ISO 14001, OHSAS 18001 and ISO 22000, our

hotel has identified and complies with various regulatory requirements. In respect to emissions, MOKL Hotel complies with the requirements of Environmental Quality Act in terms of baseline, yearly or every 5-years of monitoring and measurement of emission. This is conducted with a recognised organisation and results are reviewed by senior management for further improvements.

CORPORATE RESPONSIBILITY AND SUSTAINABILITY REPORT

Key Initiatives in 2015

KLCC Park	<ul style="list-style-type: none"> Electric motorcycles are used at the KLCC Park for patrolling
MOKL Hotel	<ul style="list-style-type: none"> Installed charging station for electric cars at the car park Brought on board Kuala Lumpur's first electric eco-friendly car, Nissan Leaf, for in-house guest use. One charger was installed at MOKL Hotel's car park and in June 2015 an additional charger was installed for guests' usage
KLCC North West (NWD) Development Carpark	<ul style="list-style-type: none"> Installation of LED lights at KLCC basement car park commenced in mid-October 2014 and was completed in April 2015 Equipped with Electric Vehicle Charging Station, made available to encourage the use of eco-friendly vehicles NGV Shuttle Buses are used to shuttle passengers from the multi-level carpark located near Jalan Binjai to the surrounding areas and within the KLCC Precinct

Performance in 2015

GHG Emissions

		2015	2014
Office and Car Park			
- Scope 1	mt CO ₂ -e	19.45	22.3
- Scope 2	mt CO ₂ -e	67,829	73,201
Hotel	kg CO ₂ -e/sqm	235	252
Retail	kg CO ₂ /year	300,000	



Electric eco-friendly car for MOKL Hotel's in-house guest use

In 2015, our GHG emissions showed a slight improvement under Scope 1 decreasing from 22.30 million tonnes of carbon dioxide equivalent (mt CO₂-e) in 2014 to 19.45 in 2015. Similarly Scope 2 emissions reduced from 73,201 mt CO₂-e in 2014 to 67,829 mt CO₂-e in 2015. This was attributable to the installation of LED lights in the PETRONAS Twin Towers and the basement car park which minimises electricity consumption.

Our hotel segment reduced GHG emissions by 6.7% compared to 2014. This translated to a reduced GHG emissions intensity of 18.3% compared to a 2007 baseline.

At our retail property, the photovoltaic system installed at the rooftop of Suria KLCC in 2012 generates clean energy that contributes to the reduction of carbon emission of approximately 300,000 kg of carbon dioxide a year.

Energy Efficiency

KLCCP Stapled Group acknowledges the importance of energy conservation for a sustainable future as reducing our electricity consumption not only lowers our greenhouse gas emissions and carbon footprint, it allows us to save in terms of our energy cost. We are committed to minimising energy consumption and reducing carbon footprint by adopting energy efficiency measures to enhance our operational excellence.

Key Initiatives in 2015

During the year, various ongoing initiatives in promoting energy efficiency at our properties were enhanced.

At the PETRONAS Twin Towers, sustainable procurement practices were adopted to promote reduced energy consumption. Energy saving office appliances and LED lights are used resulting in significant energy savings.

MOKL Hotel diligently tracked its energy usage and reported on a quarterly basis while energy intensity is measured on a monthly basis and compared against targets allocated by Mandarin Oriental Hotel Group. Energy performance is benchmarked against industry standards and internal and external audits are conducted monthly, bi-annually and annually for purposes of continual improvement.

During the year, KLCC Parking Management Sdn Bhd (KPM) embarked on the project of installing the Parking Guidance System (PGS), Energy Monitoring System (EMS), LED lighting and usage of Electric Vehicle (EV). The installation of the PGS was the largest implementation for a carpark which received recognition from a global vendor, Circontrol, Spain. With the EMS function in place, the overall electricity consumption of lighting cost constitutes 19% from the total energy cost. Installation of LED lights throughout KLCC NWD basement carpark has resulted in a reduction of 52% in electricity cost for car park lighting for the entire car park.

Suria KLCC has invested in energy saving lights within the area in the shopping mall since 2008. The photovoltaic system installed on the rooftop of Suria KLCC is capable of producing more than 600 megawatt hours of solar energy annually and continues to conserve the environment for future generations.



Recycle waste bins at MOKL Hotel



Engineering personnel recording meter reading at MOKL Hotel

Performance in 2015

Energy Consumption (kWh)

	2015	2014
Office and Car Park	97,822,746	100,209,159
Hotel	13,886,919	14,709,902

Our office and car park registered a 2.4% reduction in energy consumption from 2014 to 2015. The installation of LED lighting in the PETRONAS Twin Towers, Menara 3 PETRONAS and the basement car park contributed to this decrease in energy consumption. Our hotel segment saw energy consumption reduced by 5.6% in 2015.

CORPORATE RESPONSIBILITY AND SUSTAINABILITY REPORT

Solar Energy – Retail

Year	Energy Generated from Solar (kWh)
2012	529,470
2013	592,205
2014	551,162
2015	591,216
Total	2,244,053



Solar Panel on Suria KLCC rooftop

The clean energy generated from the photovoltaic system was able to generate 591,216 kWh in 2015 which is an increase of 7.3% from 2014.

Water Management

KLCCP Stapled Group continues to emphasise on the importance of efficient water usage throughout its operations particularly in areas where daily water usage is significant including washrooms and for cleaning and maintenance work. This is to ensure people using our buildings experience a healthy and pleasant environment.

Key Initiatives in 2015

We closely monitor the use of fresh water across our operations. At the PETRONAS Twin Towers and Menara 3 PETRONAS, controlled valve for water usage were installed as part of our effort to reduce water consumption.

Being in the hospitality industry, efficient usage of water is a priority at MOKL Hotel where water usage is generally measured to benchmarked international standards. Monthly water meter readings are also compared to billings by Syabas to determine challenges and action for improvement. Internal as well as external water audits are conducted on a monthly, bi-annually and yearly basis with actions determined for continued improvement.

Performance in 2015

Water Consumption (m³)

	2015	2014
Office	640,251	754,269
Hotel	187,714	213,343

The Green Building Index (GBI) initiatives on water consumption resulted in significant impact wherein a 9.6% reduction was reported for KLCC REIT properties. Kompleks Dayabumi under KLCCP showed a decrease of 38.4% from 2014, as a result of the roll-out of awareness programs year-on-year and the

demolition of the City Point podium. Through these efforts, overall water consumption for the office segment resulted in a 15% reduction in consumption from 2014 to 2015. Water consumption in the hotel sector recorded a 12% reduction as a result of the various initiatives undertaken to reduce water consumption.

Waste Management

Our properties are within the tourism belt and being an iconic destination in the Kuala Lumpur City Centre, they play an important role in raising public awareness about waste issues. KLCCP Stapled Group practices responsible and environmentally-friendly waste disposal to minimise the adverse effects on the environment. We also promote and educate the public on the importance of recycling and responsible waste disposal as these efforts, collectively will contribute towards a long-term sustainable future.

Scheduled wastes and hazardous wastes generated by our respective properties were well managed according to the Environmental Quality Act, Scheduled Wastes Regulations 2005 and comprised SW103 (used batteries), SW 109 (used fluorescent

tubes) and SW110 (E-wastes) which were disposed to the licensed prescribed service provider, Kualiti Alam Sdn Bhd.

At our MOKL Hotel, our employees are trained in the proper segregation of waste, solid, hazardous or recyclable waste. Targets are set each year for waste to be minimised and diligently segregated. Wastes collected are measured via Key Performance Indicators (KPI), namely Waste Intensity (weight of non diverted waste in kg vs guest room nights) and Waste Diversion Rate (weight of waste diverted from landfills and recycled).

Key Initiatives in 2015

At the PETRONAS Twin Towers, a Waste Management and Recycling Plan is part of the sustainability practices adopted for the premise operation, consistent with the overall sustainability policy adopted and the GBI initiatives. The plan aims to minimise quantities of waste generated ending up as landfill and the recovering, reusing and recycling of waste generated onsite which is integral to allow effective waste separation, collection and disposal.

In support of the 3R campaign in 2015, KLCCP Stapled Group organised the Hazardous Household Waste (HHW) Campaign involving the KLCC Group's subsidiaries and joint venture partners. The program was designed to cultivate public awareness on household hazardous waste such as used batteries, used fluorescent bulbs and e-waste which contain potentially hazardous ingredients that may be

corrosive, toxic, ignitable or reactive and require special care in disposal. Convenient collection points were provided to encourage the public to participate in the recycling initiatives.

MOKL Hotel continued its sustainability programs by creating awareness amongst its employees and guests on the need to think 'sustainable' and by doing their part. Among the programs conducted were the "Waste Not Want Not Sale" where employees contributed items for sale, sale of recycled wastes and implementation of glass bottled water with high grade long-lasting carbon filter at the Hotel's function rooms which reduced consumption of waste from plastic bottles.

Performance in 2015

			2015	2014
Office	Total Hazardous Waste Generated	tonnes	0.622	3.975
	Total Hazardous Waste Disposed	tonnes	0.342	1.920
Hotel	Waste Intensity	kg per room	4.08	3.52
	Waste Diversion	%	17.06	14.16

In 2015, total hazardous waste generated by our Office properties reduced by 84% whilst total hazardous waste disposed reduced by 82%. This significant waste reductions was as a result of the replacement of fluorescent bulbs with LED in our office buildings and basement car park.

As at December 2015, MOKL Hotel's waste intensity (landfill waste per overall guest room nights) was at 4.08 kg per room guest compared to 3.52kg in 2014. The increase was due to the decrease in guest room nights and covers for 2015. With MOKL Hotel's efforts in recycling, the Waste Diversion improved to 17.06% from 14.16% in 2014.

Products and Services Responsibility

As an organisation who takes pride in creating longer term value via responsible economic, environment and social practices, KLCCP Stapled Group is committed to sustainable development and services it renders. Our products and services play a part in driving environmental decisions and influencing environmental values and behaviours within the organisation.

CORPORATE RESPONSIBILITY AND SUSTAINABILITY REPORT

Green Excellence in our properties

The PETRONAS Twin Towers by virtue of its iconic stature have been the focus of numerous global events over the years. In 2014, we embarked on initiatives to obtain certification for the PETRONAS Twin Towers as a certified green building under GBI Malaysia. The efforts paid off when the PETRONAS Twin Towers attained the Provisional Gold Certification in April 2015 while Menara 3 PETRONAS attained the Provisional Silver Certification. Our facility management team at these two properties continue to improve performance in economic, health, safety, environmental and social aspects.

Property	Key GBI Initiatives
PETRONAS Twin Towers	<ul style="list-style-type: none"> • Upgrading of Building Management System • Installation of LED office lighting at Tower 2 in August 2015 • Installation of water efficient flushing systems for toilets • Installation of variable fan drives for lift motor rooms and fire fans
Menara 3 PETRONAS	<ul style="list-style-type: none"> • Implementation of the LED lights and motion sensors in the staircases which are expected to yield a 3% reduction in electricity bills • Implementation of the water leak detection system • Energy management system scheduled for implementation on site in 2016

Promoting the use of Biodegradable and Eco-Friendly Products

KLCCP Stapled Group promotes the usage of biodegradable and eco-friendly products in both our office and hotel premises as well as in the maintenance of KLCC Park. The use of biodegradable products not only benefits our environment but also helps to reduce cost. Our business operations aspire to do more to conserve and protect the environment and create an entire ecology of living that promotes sustainability.

PETRONAS Twin Towers	<ul style="list-style-type: none"> • Carpet flooring, paint and adhesive used for installation work are from recycled materials and low in Volatile Organic Compounds (VOC). • Materials used for ceiling insulation above acoustic partition walls were selected for good sound transmission class rating, non-toxic with recycled content materials. • All wiring outlet plates are free from PVC to minimise out-gassing of toxic substances and also taken into account are the lifecycle issues in terms of production and disposal.
MOKL Hotel	<ul style="list-style-type: none"> • Replacement of leather boxes for laundry with foldable laundry box in non-woven material. • Environment bulletin board was replaced with a TV monitor displaying notices and environmental awareness videos, eliminating printing on paper. • Spa products used in the Mandarin Spa are packaged with materials that cause minimal damage to the environment and are made of environmentally friendly ingredients. • Annual review of chemical lists in Housekeeping, Laundry, F&B and Engineering for environmentally friendly products which result in operational efficiency with energy and utility cost savings.

Inculcating Eco-Minds

KLCCP Stapled Group is committed in raising community and employee awareness on environmental issues by providing knowledge and encouraging its employees to volunteer their time and effort to participate in environmental conservation activities and inspire others in doing more for a sustainable future.

Key programs for the year included:

Envirocomm 2015

The Envirocomm 2015 program organised by KLCCP Stapled Group was successfully held at the Royal Belum Forest in Gerik, Perak. Envirocomm is one of our CSR programs initiated with the objective to cultivate the culture of an environmental and socially responsible employees. It is also our way of giving back and contributing to the society's wellbeing and promoting conservation of the environment and our eco system.

One of the activities held was contributing to the lake ecosystem through fish release program.



Bamboo rafting at Banding Lakeside in Gerik, Perak

Participants comprising employees of the Group were involved in activities such as bamboo rafting at Banding Lakeside, fish feeding at Sanctuary Waterfall and jungle trekking. A total of 10,000 native fish contributed by the Group were released at Sungai Papan.

MO Charity Run

In support of the Group's effort in inculcating eco-mindset among its employees, MOKL Hotel employees initiated the MO Charity Run as part

of the hotel's series of CSR activities for the year. The objective of the Run was to raise funds for the Malaysia Nature Society (MNS) and to create awareness amongst the community on the need to conserve our habitat and to highlight MNS's efforts in the protection of Malaysia's natural heritage. The Run had close to 500 participants and managed to raise RM36,000 for MNS.

Earth Hour

KLCCP Stapled Group has participated in Earth Hour since 2010. Earth Hour which is held in conjunction with Earth Day aims to inspire awareness of and appreciation for the earth's environment, particularly on energy consumption and sustainability principles by encouraging corporations and the general public worldwide to simultaneously switch off their power for an hour. Supporting this initiative are our retail, hotel and our offices as part of our ongoing commitment to create a legacy.



MO Charity Run