



OUR COMMITMENT

At KLCCP Stapled Group, we recognise the interconnectedness of climate change, energy management and environmental stewardship in building a sustainable future. The growing impacts of climate change, such as floods, heat waves and droughts, threaten both communities and the resilience of our assets. Similarly, environmental degradation, including resource overuse and improper waste management, underscores the need for urgent action.

We are committed to reducing our carbon footprint through energy efficiency and decarbonisation efforts, while embracing eco-friendly practices that position our properties as symbols of modernity and responsibility. By engaging tenants, partners and surrounding communities, we strive to foster shared accountability for protecting the planet. Our environmental and climate management strategy reflects a steadfast dedication to creating sustainable value for future generations.

OUR APPROACH

OUR CLIMATE REPORTING JOURNEY

 Commenced reporting on GHG emissions and energy consumption data.

2015

 Discussed TCFD recommendations with SSC pursuant to Bursa Malaysia's requirement to adopt these recommendations.

2017

- | 2016
- Developed a carbon inventory to establish emissions baseline and monitor GHG emissions.
- Established the Energy Management Committee.

2018

- Discussed our proposed Climate Change Position Statement.
- Conducted a Climate Change Workshop in collaboration with GHSSE, PETRONAS.
- Disclosed our GHG emissions and energy consumption targets in our 3-Year Sustainability Roadmap.







CLIMATE-RELATED DISCLOSURE

In September 2022, Bursa Malaysia revised the Main Market Listing Requirement to elevate the sustainability practices and disclosures (Enhanced Sustainability Disclosure) of listed entities. Their practice note requires climate-related disclosures to be prepared and aligned with TCFD recommendations by the financial year ending 31 December 2025 onwards. As a public limited company on the Main Market of Bursa Malaysia Securities Berhad, KLCCP Stapled Group, encompassing KLCCP and KLCC REIT Management Sdn Bhd (KLCCRM), is obligated to disclose common sustainability matters in our 2024 documents, and gradually move towards TCFD-aligned climate disclosures for the financial year ending (FYE) on or after 31 December 2025. To satisfy this requirement, as well as to meet stakeholders' expectations for transparent climate disclosures, KLCCP Stapled Group conducted a materiality assessment, where Climate Change and Energy Management are ranked as priority environmental, social and governance (ESG) topics with high materiality for KLCCP Stapled Group's ESG Strategy.

KLCCP Stapled Group recognises the urgency of addressing climate change and its impacts on the company's financial performance through relevant action, as well as on reporting on our initiatives in line with Bursa Malaysia's requirement for mandatory TCFD disclosures. Initiatives undertaken in this regard are therefore recorded in this document, including support provided of an external consultant to assess and address climate-related risks and opportunities.

A comprehensive gap analysis conducted in 2023 identified areas for improvement in our climate risk management and disclosures based on TCFD recommendations as well as industry/market good practices. These gaps were subsequently addressed via measures including:

- Scenario analysis on transition and physical risks and opportunities and their financial implications on the Group's business and value chain
- Identification of possible risk mitigation and adaptation actions
- Enhancement of existing governance, strategy and risk management systems to incorporate climate-related considerations
- Capacity building of management team on financial impacts of climate risks and their respective roles and responsibilities in climate governance structure.

In September 2024, the Securities Commission announced the National Sustainability Reporting Framework (NSRF), requiring Main Market listed companies with market capitalisations of more than RM2 billion to disclose in accordance with IFRS S1 and S2 starting in 2025, with full adoption of the standards by 2027. Bursa Malaysia had also revised it's Main Market Listing Requirements in December 2024, with the requirement to align with TCFD recommendations disapplied and substituted with IFRS S1 and S2. KLCCP Stapled Group, while maintaining the alignment with TCFD recommendations in our climate-related disclosure for the year under review, will pursue IFRS S1 and S2 disclosures in phases, considering the reliefs allowed within the NSRF, and leveraging the data as well as systems put in place from earlier preparations made for TCFD.

This first climate-related disclosure summarises the Group's climate-related risks and opportunities and the integration of the financial risks and opportunities into corporate governance, strategy, risk management, metrics and targets.

The disclosure of financial information allows all parties to understand the potential financial consequences of climate change to the reporting company, its investors and other stakeholders. TCFD's disclosure framework, conceptually similar to IFRS S2, comprises four pillars: Governance, Strategy, Risk Management, and Metrics and Targets as shown below. Collectively, the pillars provide insights into the reporting company's management and resilience strategy against climate-related financial impacts.

TCFD Recommendations Structure



The flow of this disclosure aligns with the pillars indicated in the visual above.

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Governance

KLCCP Stapled Group's commitment to sustainability and climate-related matters is firmly rooted in our robust governance structure, which sets the governing elements and processes as the foundation of sustainability integration. Decision-making processes take into consideration sustainability risks, including overarching risks to the delivery of NZCE by 2050. Efficient governance serves to provide a common understanding and consistent approach in managing related risks and opportunities stemming from climate change.

For more details on the Group's Sustainability Governance, please refer to pages 20 to 21.

Climate risk and opportunities are also included in the ESG training plan which is explained in detail on page 76 for different functions. In 2024, one training session was conducted on 14 December 2023 by an external consultant as part of the climate risk assessment.

The results of our climate risks and opportunities assessment, along with the narrative statement within this report, were also presented to the top management of the Group during an executive presentation on 16 April 2024.

Strategy

The effects of climate change are increasingly evident in the frequency and severity of climate-related events such as floods, typhoons, heatwaves, forest fires and droughts, among others. These have a pronounced negative impact on business and communities, often damaging assets and disrupting business activities. At the same time, the transition to a low-carbon economy poses its own risks and opportunities, where transition ahead of other companies presents business opportunities, whereas falling behind may result in financial and reputational impacts.

For the Group, climate change may pose a risk to our assets, surrounding communities and overall business model and value chain. Accordingly, we strive to enhance the durability of our assets to build resilience and even seize opportunities arising from the low-carbon economy transition, where possible.

Guided by the SSC, each of our operating units conducted physical and transition climate risks and opportunities assessments. The physical risk assessment used Shared Socioeconomic Pathways (SSP) scenarios from the Intergovernmental Panel on Climate Change (IPCC)¹, while the transition risks and opportunities assessment was based on the International Energy Agency (IEA)'s Stated Policies Scenario (STEPS) and Announced Pledges Scenario (APS)².

The Group has identified the following timeframes for physical and transition risks and opportunities assessment: short-to-medium term (1-10 years) and long-term (>10 years). The timeframes are intended to reflect potential climate impacts on the Group's assets in their useful lifetime – an average of 50 to 60 years.

Assessment Scope

We conducted a physical risk assessment on eight assets, examining a list of nine potential climate hazards utilising the Low Carbon Scenario (SSP1-2.6) and High Carbon Scenario (SSP5-8.5). Based on relevant climate hazards applicable to the scope of assessment, five hazards were shortlisted with highest risk scores across short-to-medium term and long-term horizons for further assessment.

Physical Risk Assessment Scope



¹ IPCC, 2021. Climate Change 2021: The Physical Science Basis. Contribution of Working Group 1 to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change.

² International Energy Agency, 2023. *Global Energy and Climate Model Documentation*.



Assessment Approach

Acknowledging that physical climate change risks can have implications on our assets, KLCCP Stapled Group prioritised 8 assets in Klang Valley to conduct a climate risk assessment using a three-step qualitative physical risk assessment approach.



Physical Climate Risk Identified

For the physical risk assessment, the Group identified five main natural hazards that could impact our assets, including both acute (event-driven) and chronic (long-term shifts in climate patterns) hazards as identified below. These natural hazards pose risks of varying severity to our assets and, therefore, our businesses.

Type of Hazard Implications to KLCCP Stapled Group

Extreme heat

Unusually high temperatures over an extended period pose various risks to the Group, including potential impacts on infrastructure, energy consumption and the health and safety of personnel, as well as adverse effects on the surrounding environment and communities, encompassing heat-related illnesses and strain on critical infrastructure such as water and power supply systems.



Riverine floods

The overflow of rivers and water bodies, often due to heavy rainfall or a combination of factors, can inundate adjacent areas, leading to property damage, business disruption, and the potential of extended supply chain disruption for the Group.

Extreme rainfall floods

Floods resulting from intense precipitation, such as one-day maximum rainfall and increased frequency of heavy rainfall, could pose risks to the Group's assets and supply chain integrity.

Landslides

Geological hazards, characterised by the downward movement of soil, rocks and debris on slopes triggered by factors such as heavy rainfall, seismic or human activity, present risks to the Group's infrastructure and assets located in or near susceptible areas of Kuala Lumpur.



Water stress

The demand for water exceeds available supply, or the quality of water is compromised presenting risks to the Group's operations and supply chain, especially in regions with limited water resources or high demand for water.

Physical Risk	Baseline (Present Day)	Low Carbon Scenario (SSP1-2.6)	High Carbon Scenario (SSP5-8.5)
Extreme heat	All eight assets have low exposure to extreme heat.	Moderate exposure to extreme heat across all assets by 2050, which will likely lead to moderate/high-risk exposure.	Significant exposure to extreme heat across all assets by 2050, which will likely lead to high/very high-risk exposure.
Riverine floods	Only one out of our eight assets has moderate/high-risk exposure to riverine floods.	Only one out of our eight assets will be moderately/highly exposed to riverine floods.	Only one out of our eight assets will be moderately/highly exposed to riverine floods.
Extreme rainfall flood	Only one out of our eight assets has low/moderate risk exposure to extreme rainfall floods, while the rest are minimally exposed to extreme rainfall floods.	Only one out of our eight assets has low/moderate risk exposure to extreme rainfall floods, while the rest are minimally exposed to extreme rainfall floods.	Only one out of our eight assets has low/moderate risk exposure to extreme rainfall flood, while the rest are minimally exposed to extreme rainfall floods.
Landslides	Seven out of eight assets are moderately exposed to rainfall- induced landslides.	Seven out of eight assets are expected to have minimally higher (moderate/high) exposure to land collapse.	Seven out of eight assets are expected to have minimally higher (moderate) exposure to land collapse.
Water stress	All eight assets are currently categorised as having low risk of water stress.	All eight assets will have moderate exposure to water stress risk in SSP1-2.6 scenario for both 2030 and 2050.	All eight assets will have moderate exposure to water stress risk in SSP5-8.5 for both 2030 and 2050.

Potential Impacts on KLCCP Stapled Group Assets

Our assets will experience similar climate-related impacts as they are all situated close to each other. The table below shows the impacts by type of hazard on the Group's operations, value chain and health, safety and environment (HSE).

Impacts and Mitigation Measures of Hazards Identified

Hazard	Potential Impact on KLCCP Stapled Group					
	Operations	Value Chain	HSE			
Floods	Disrupted operations causing temporary asset closure, rendering the car parks inaccessible, and forcing retail outlets within the premises to suspend operations due to water damage.	Extensive damage to physical infrastructure can adversely affect client relations and tarnish the reputation of real estate offices and hotels. Disruption to transport, products, water or energy supply may also result in reduced revenues due to reduced production, with financial implications for the company.	Floodwaters may carry pollutants, chemicals and hazardous materials, posing health risks and contamination to the surrounding environment in the affected areas. Flooded electricity cables may also cause electricity shocks to nearby personnel or communities, resulting in health and safety risks, as well as increased medical compensation.			

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Heneyd	Potential Impact on KLCCP Stapled Group					
nazaru	Operations	Value Chain	HSE			
Landslides	Land collapse disrupts business operations, causing closures, reduced accessibility and infrastructure damage, hindering day-to-day activities, emergency response, and evacuation procedures.	Decreased property values in landslide-sinkhole susceptible areas, along with increased insurance premiums due to heightened risk exposure, negatively impacting brand image and long-term market competitiveness in affected areas. Disruption of product supplies due to road closures, or of energy supply due to damage to energy supply facilities may also result in reduced productivity, negatively impacting the company's revenue.	Land collapse poses immediate health and safety risks, requiring evacuations, and causes environmental contamination from floodwater pollutants.			
Extreme heat	Extreme heat diminishes productivity and revenue in real estate offices and hotels, while damaging electronic equipment and straining building infrastructure and cooling systems, resulting in increased maintenance costs.	Extreme temperatures affect property demand and hotel occupancy, particularly in areas without adequate cooling, resulting in increased energy consumption and reduced revenue.	Health risks such as dehydration, heat exhaustion and heatstroke can arise alongside discomfort, impacting productivity and disrupting social interactions as individuals struggle to cope.			
Water stress	Water stress increases operational costs for real estate offices and the retail sector due to higher water expenses and the need for conservation measures. Hotels are affected, particularly in regions with water-intense food sourcing, while restrictions on watering in parking areas heighten maintenance challenges.	Devalues properties and investment appeal in real estate, drives development towards regions with better water management, and poses supply chain risks for hotels.	Non-compliance with government regulations and water conservation policies affects real estate offices and hotels in water-stressed regions, impacting guest experience and leading to environmental disruptions in parking areas, exacerbating the urban heat island effect.			

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TRANSITION RISKS AND OPPORTUNITIES

Assessment Scope

Scenarios Used	 IEA Business-As-Usual Scenario (Stated Policies Scenario, STEPS): Review of the current policy landscape and progress of energy systems. A global temperature rise of 2.4°C by 2100 (50% probability) IEA Low-Carbon Scenario (Announced Pledges Scenario, APS): Assumes governments will meet announced climate-related commitments. A global temperature rise of 1.7°C by 2100 (50% probability)
Time Horizon Used	 Short-to-medium term (2030) Long term (2050)
Types of Assets Analysed	Operations and supply chain of KLCCP Stapled Group

Assessment Approach

The scenario analysis on transition risks and opportunities was intended to comprehensively analyse the Group's exposure to potential impacts arising from a global transition to a low-carbon economy i.e., an economy that is decarbonising. The transition risk and opportunity assessment was a three-step qualitative process as indicated in the visual below.



Transition Risk Assessment Approach

TCFD recommends that organisations disclose the resilience of their business strategies to climate-related risks and opportunities, taking into consideration a transition to a lower-carbon economy, where the low-carbon economy pathway is consistent with a 2°C or lower increase in temperature by the end of the century, compared with pre-industrial levels. This could lead to transition risks associated with increased operating costs due to more stringent laws and regulations on GHG reduction, and higher demand for low-carbon technology investment.

The Group sought to ensure that both upstream risks, such as carbon tax on suppliers, and downstream opportunities, such as cost savings from energy efficiency or renewable energy, were included in the analysis to ensure a holistic understanding of the transition risks and opportunities.

An internal stakeholder consultation was conducted through a survey to support the assessment. The transition drivers were evaluated by stakeholders on the impact of the respective drivers on the Group's businesses and value chain.

The Group has analysed the potential impacts on our business using globally recognised climate scenarios from the IEA – APS as a low-carbon scenario, and STEPS as the business-as-usual case.

Transition Risk and Opportunity Scoring for Assessment

Opportunity/Risk Score Key					
High Opportunity	Moderate Opportunity	Low Opportunity	Limited	Not Applicable to	
High Risk	Moderate Risk	Low Risk	(1	business (N.A.)	

Transition Drivers Identified

The Group has identified a list of transition risks and opportunities that are considered relevant and used in scenario analysis.

Policy and Legal	 Carbon pricing Carbon costs will likely be passed on from the upstream supply chain (energy, construction sectors) onto the real estate sector. Compliance with REIT sector regulations. Sector commitments and targets from international bodies and Southeast Asia real estate associations will influence Malaysia's regulations. Decarbonisation expectations of the sector's supply chain. Increasing focus on the reduction of embodied carbon within construction materials affects maintenance, upgrading and development works of the build sector.
Technology	 Renewable energy One of the key focus areas in decarbonising the sector since electricity makes up most of the real estate sector's emissions. Research and Development (R&D) costs for low-carbon technologies Commitment by Malaysia to invest in low-carbon technologies through private-public partnerships to decarbonise the operations, construction and demolition process of assets.
Market	 Access and cost of capital Investors demand the decarbonisation of the build sector to de-risk their investments which would in part reduce their Scope 3 investment emissions. Stakeholders' preferences for low-carbon services Customers and tenants are shifting their preference for green services, in part for cost-savings.
Reputation	 Scrutiny of corporate plans and actions, or lack thereof Increasing stakeholder concerns about climate change which could make it difficult to secure government approvals and increase shareholder activism for climate action.

Transition Scenario Analysis Results and Impacts on KLCCP Stapled Group Assets

The scenario analysis on transition risks and opportunities aimed to assess the Group's exposure to potential impacts stemming from a global shift towards a low-carbon economy. Through internal stakeholder consultations, The Group initially identified transition drivers relevant to our operations and the supply chain.

Transition Deisson	Scenario An	alysis Result	Potential Impact on	Identified Potential Response
Iransition Drivers	2030	2050	KLCCP Stapled Group	Measures
Carbon pricing (Policy and Legal Risk)	Low	High	 Carbon pricing regulations are expected to intensify in a low-carbon scenario resulting in additional direct and indirect costs of operations for the Group. These could be in the form of direct carbon tax on Scopes 1 and 2 emissions or through increased costs of electricity and raw materials. In certain lease and tenancy agreements, the Group has the capability to allocate increased operational expenses on another party. In other instances, tenants are responsible for paying their own electricity bills. Hence, the risks are expected to remain low through to 2030. However, with an expected increase in carbon pricing over the long term, we see it becoming a higher risk by 2050. 	 Implement initiatives to reduce Scopes 1, 2 and 3 emissions thus reducing impact of carbon pricing. Structure tenancy and lease agreements to allocate any associated costs to end users. Set up internal carbon price on procurement of products and services to identify lower carbon products and services.
Compliance with build sector regulations (Policy and Legal Risk)	Limited	Low	 Build sector regulations are expected to intensify in a low- carbon scenario compared to business-as-usual. To comply with these increasing regulations, investments may be required to retrofit buildings to improve energy efficiencies or to reduce GHG emissions and other resource intensities (such as water and waste). This investment could lead to increase in operating costs 	 Proactively look for opportunities to improve resource efficiency of the facilities under management. Monitor changes to build sector regulations and ensure retrofitting efforts align with updated requirements.

as well as capital costs.

Transition Scenario Analysis Results and potential business Implications for KLCCP Stapled Group

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Turneition Duim	Scenario Analysis Result		Potential Impact on	Identified Potential Response
Transition Drivers	2030	2050	KLCCP Stapled Group	Measures
Decarbonisation expectations for the sector (Policy and Legal Risk)	Limited	Low	 Under a low-carbon scenario, the Group's operations and supply chain would have to be decarbonised at a faster pace than in a business-as-usual scenario. The Group would have to incur additional capex to procure low-carbon products and services such as energy-efficient heating, ventilation and air-conditioning (HVAC), solar panels, smart LED lighting, etc. For any future renovation, the Group may have to procure low-carbon construction materials like steel, cement, glass, etc., which could increase our operating and capital costs. Decarbonisation pressure is expected to remain low up to 2030 but to increase over the longer term until 2050 as Malaysia will look at just transition with manageable pressure to adopt low-carbon practices by 2030. 	 Explore long-term contracts or partnerships with suppliers of low-carbon materials to lock in favourable rates and mitigate cost fluctuations. Conduct energy efficiency audits to prioritise refurbishment needs of existing buildings to reduce cooling and heating requirements.
Renewable energy (Technology Opportunity)	Low	Moderate	 Rise in demand for Renewable Energy (RE) from tenants as well as pressure on the Group to procure greener energy for its own operations, could lead to a reduction in operating costs for procuring energy. This demand could be driven by both tenant expectations as well as government mandates. The cost of setting up Solar PV on rooftops, RE projects elsewhere and transferring it to the facilities or procuring it through third parties is lower than the grid tariffs. However, the cost savings are expected to be low up to 2030, increasing to a moderate opportunity over the longer term. 	 Exploring the potential for increasing solar energy generation in the Group's operations to reduce the Group's carbon emissions. Strategic collaborations on green mobility and RE. Capitalise on increased demand for RE by potentially charging a green premium to tenants while continuing to explore other on-site RE opportunities.

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Transition Drivers	Scenario An	alysis Result	Potential Impact on	Identified Potential Response
Transition Drivers	2030	2050	KLCCP Stapled Group	Measures
Research and Development costs for low-carbon technologies (Technology Risk)	Limited	Low	 Research and Development (R&D) costs are expected to increase exponentially to support the transition to a decarbonised economy, which will require the Group to increase financing for any new technological adoptions. This could lead to an increase in operating and capital costs. However, this risk is expected to be limited after 2030, leading to a low risk over the long term as related technologies mature. 	 Explore opportunities and leverage available government funds and grants that support cross-sectoral collaboration in developing decarbonisation technologies and approaches for the real estate sector, such as energy audits which identify areas of high consumption in a building as well as opportunities to reduce consumption. Develop a strategic investment plan that prioritises R&D aligned with the Group's long-term sustainability goals, such as RE integration, innovative green building designs, and advanced energy management systems. Evaluate the effectiveness and scalability of these R&D investments in decarbonisation technologies.
Access and cost of capital (Market Risk)	Low	Moderate	• For corporates with higher carbon footprint, there can be an increase in cost to obtain capital and insurance as financial institutions become more stringent on their climate mitigation commitments.	 Diversify funding sources and collaborate with stakeholders that incentivise climate-friendly investments or offer more favourable financing terms. Develop resilience strategies and adaptation measures to mitigate risks and potentially reduce insurance premiums.
Stakeholders' preferences for low-carbon services (Market Risk)	Limited	Low	 In a low-carbon scenario, more investors, tenants and other stakeholders would prefer buildings that are operationally low-carbon and that embody low- carbon materials, increasing the Group's capital and operating costs to retrofit existing spaces with technologies that improve energy management, as well as water and waste reduction, including the installation of electric vehicle (EV) chargers. 	 Monitor local business demands and adapt marketing campaigns to highlight the Group's low-carbon operations in response to increasing demand for low-carbon assets. Conduct feasibility studies for low-carbon technology investment projects, including how the technologies may be integrated with current and future KLCCP Stapled Group operations.
Scrutiny of corporates' plans and actions or lack thereof (Reputation Risk)	N/A	N/A	• As more Malaysians become aware of climate change and the actions required by the government and corporations, the Group's reputation may be impacted by stakeholder demands for climate action.	• Continue the Group's sustainability and climate-related disclosures through a credible framework in line with regulatory requirements as well as global frameworks such as TCFD and, eventually, IFRS S2.



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RISK MANAGEMENT

Risk management forms an integral part of KLCCP Stapled Group's business and supports the delivery of our strategy while underpinning the Group's business model. Our risk management policy and procedures are designed to embrace best practices, reduce the potential of financial and nonfinancial risk exposure (including exposure to climate change risk), and protect our assets and reputation.

The Boards provide direction by establishing sound risk management principles, guided by the KLCC Group Enterprise Risk Management (ERM) Framework which outlines our risk governance, risk assessment as well as risk monitoring and review processes. This framework provides a standard and consistent approach to achieve full accountability in managing risks across the organisation.

For more information on the KLCC Group's ERM processes, please refer to the Statement on Risk Management and Internal Control in the Integrated Report 2024 on pages 223 to 226.

The KLCC Resiliency Model below provides an integrated view of the overall risk management strategy in KLCC (including climate change risk), which is to reduce the likelihood and impact of all identified risks, respond to immediate risk, and recover from prolonged disruptions to meet business obligations. For more information on the KLCC Resiliency Model, please refer to the Statement on Risk Management and Internal Control in the Integrated Report 2024 on pages 223 to 226.



A risk profiling exercise is conducted to ensure our risk exposures (including that to climate change risk) are properly mitigated, involving the following activities:

- Assess and document material risk, corresponding key controls, and mitigating measures
- Present material risks and associated controls to the Risk Management Committee, Board Risk Committees, and the Boards for deliberation and approval, if required
- Conduct periodic reviews of material risks and associated controls

METRICS AND TARGETS

Climate-Related Metrics

The Group is determined to act on climate change to support the needs of the present and future generations while protecting our business. As a first step, it is important to establish measurable climate-related metrics for performancetracking purposes and set measurable targets to ensure improvements in efforts to tackle climate change.

With regards to climate-related metrics, the following percentage of assets covered by the physical risk assessment will be exposed to increasing risk from different hazards under future climate scenarios compared with the baseline:



The impact and performance indicators related to the following climate-related metrics can be referred to in the "Our Impact" section on pages 70 to 72:



GHG Emissions metrics

In FY2024, KLCCP Stapled Group calculated our GHG emissions in accordance with "The Greenhouse Gas Protocol - A Corporate Accounting and Reporting Standard (Revised Edition)". We report our GHG emissions using the Equity Share approach, which is based on organisational boundaries.

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The Group monitors emissions from all our assets and operating units, covering the following (the information below can be converted to visual representation):



Exclusions:

Emissions from office space leased out in Kompleks Dayabumi, facility management and car park operations for assets not under KLCCP Stapled Group were excluded due to limited access to activity data for the year under review. For Menara Maxis, where we hold a 33% equity interest, emissions were also excluded due to limited control over tenant activity data. We remain committed to improving the accuracy and completeness of our GHG emissions inventory and will revisit these exclusions while we pursue our Scope 3 materiality assessment beginning 2025.

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The calculation methodologies for each scope are explained in the visual below. The emissions factor sources align with the requirements of PETRONAS emissions reporting system:

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Scope	Calculation Method	Emissions Sources	Sources
1	Asset specific activity data x emissions factor x percentage of equity share	Diesel Petrol	GHG Emissions Factor Hub, (1 April 2022) and internal calculation
2	Asset specific activity data x emissions factor x percentage of equity share	Grid Electricity	"2017 CDM Electricity Baseline for Malaysia Prepared by Malaysia, Page 5 (Effective 2021)"
3 Cat 1	Asset specific activity data x emissions factor x percentage of equity share	Diesel Natural Gas Electricity Chilled Water	GHG Emissions Factor Hub, (1 April 2022) and internal calculation
3 Cat 6	Average tCO ₂ e per employee x total employee number x percentage of equity share	Air Business Travel Land Business Travel	PETRONAS TravEx system-generated Emissions Factor
3 Cat 7	Average tCO ₂ e per employee x total employee number x percentage of equity share	Personal Car Motorbike Bus e-hailing/ Taxi Rail	DEFRA activities of business travel – land
3 Cat 13	Asset specific activity data x emissions factor x percentage of equity share	Electricity Chilled Water	GHG Emissions Factor Hub, (1 April 2022) and internal calculation

The Global Warming Potential (GWP) for each GHG within the inventory is as shown below.

GHG	Chemical Formula	GWP ₁₀₀
Carbon Dioxide	CO,	1
Methane	CH ₄	25
Nitrous Oxide	N2O	298
Hydrofluorocarbons	HFCs	12 - 14,800
Perfluorocarbons	PFCs	7,390 – 12,200
Sulphur Hexafluoride	SF ₆	22,800
Nitrogen Trifluoride	NF ₃	17,200

The impact and performance indicator related to the GHG Emissions-related metric can be referred to in Our Impact section on pages 70 to 72.

GHG Emissions and Other Targets

KLCCP Stapled Group is guided by our Sustainability Plan 2030 as well as Net Zero Carbon Emissions Pathway 2050 in defining our climate-related targets. The Group's climate-related targets are as follows:

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Climate-Related Targets Of KLCCP Stapled Group

Metrics	Targets
GHG Emissions ^[1]	 10% of Scope 1 and Scope 2 absolute GHG emissions reduction under equity share across the Stapled Group by 2030 compared to 2019 Net zero carbon emissions by 2050 compared to 2019
Energy Management	 Maintain Building Energy Intensity (BEI) of below 180 kWh/m²/year or minimum 2-Star building energy level for existing offices. Achieve targeted energy intensity for hotel and retail segment by 2030 Mandarin Oriental Kuala Lumpur Hotel: 25 kWh/footfall^[3] Suria KLCC: 0.5 kWh/footfall³
Water ^[2]	 Achieve targeted water intensity specific for office, retail and hotel segments by 2030 Office: 0.85 m³/m² (NFA) Suria KLCC: 0.01 m³/footfall^[3] Mandarin Oriental Kuala Lumpur Hotel: 0.21m³/footfall^[3]

^[1] The calculation method used to establish the reduction target is explained under Asset-by-Asset Decarbonisation Plan

^[2] Details on approaches and impact related to water are explained in the Water Management section on page 69

^[3] Hotel footfall is based on number of hotel room guests and F&B patrons per annum. Retail footfall is based on traffic count into the mall per annum.

Asset by Asset Decarbonisation Plan

In 2024, all business segments undertook a thorough review to identify initiatives for decarbonisation. The potential reduction from these initiatives were calculated and compared with forecasted emissions up to 2030, providing bottom-up information on percentage of reduction possible across the Group based on the following formula:



Where:

- Emissions Factor: As defined in KLCCP Stapled Group's GHG metric accounting
- Activity Data: Energy consumption or other measurable activities
- Historical Emissions Intensity: Emissions per unit of business activity (e.g., per GFA)
- Business Activity Indicator: e.g. gross floor area (GFA) in m²

Following the exercise, the Group has targeted a 10% reduction in Scopes 1 and 2 emissions by 2030 across our OPUs, based on equity share. This target does not take our sectoral decarbonisation pathways into account.

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Energy Management

Energy management remains a critical focus for the Group as we navigate evolving market dynamics in Malaysia. By integrating energy-efficient practices, we achieve cost savings while advancing environmental sustainability, aligning with global efforts to combat climate change.

PETRONAS Twin Towers (GBI Gold), Menara 3 Petronas (GBI Silver) and Menara Maxis (Silver) serve as benchmarks for our commitment to green building standards. These certifications, representing 60% of our office portfolio, reflect ongoing efforts to embed sustainability within our built environment.

Our energy management approach prioritises reducing consumption through operational efficiency and technological innovation. Initiatives such as retrofitting facilities with energy-saving technologies have consistently improved energy performance.

Energy intensity is one of our goals under the Planet pillar of our Sustainability Plan 2030, with specific targets set for each segment.

Looking ahead, in compliance with the new Energy Efficiency and Conservation Act 2024, we will explore ways to maximise our efficiency as well as reduce our consumption through initiatives such as adopting RE. Our aim is to support Malaysia's carbon reduction objectives and reinforce our role as a leader in sustainable property management. This commitment underscores our dedication to a lower-carbon future and resilient energy management practices.

Key initiatives for Decarbonisation and Energy Management based on business segments in 2024:

Office	Car Park	Retail	Hotel
Installation of LED lighting with motion sensors and dimmable sensors in emergency staircases. Replacement of conventional lighting with LED on multiple office floors and parking areas. Replacement of fan coil units (FCUs) with higher efficiency models. Refurbishment of cooling tower systems for improved energy efficiency. Replacement of aging pumps, motors and air conditioning substation units (ACSUs) with energy- efficient alternatives.	Replaced eight out of 14 conventional motorbikes with electric motorbikes. Decommissioned 19 unused IP phones that relied on electricity. Terminated 10 autopay station machines at our parking spaces, while installing a cashless payment system at the exit terminal. Installed 45 units of solar- powered street lighting in open car parks operated by KPM.	Completed the escalator modernisation, enhancing energy efficiency and minimising operational energy use. Progressive execution of ACMV system upgrades, focusing on improving energy efficiency and reducing overall energy consumption.	Lights in basement car park, hotel lobby chandeliers, public area toilets and lift lobby replaced with LED. Further reduced reliance on boilers by expanding the hotel's heat pump system for hot water generation.

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Water Management

Water consumed across our office buildings, retail malls and hotel facilities is sourced or withdrawn entirely from municipal water supplies with no use of surface or groundwater. All discharged water from our facilities flows into municipal sewerage systems and is subsequently treated by public sewage treatment plants (STPs) in compliance with local regulations. As such, there are no specific effluent quality requirements applicable to our organisation.

As part of our HSE policy, we are committed to the responsible use of resources and continuously strive to enhance water efficiency in our operations. Our environmental impact assessment includes resource use evaluations, ensuring potential risks related to water consumption are identified and mitigated.

Additionally, all operations are evaluated to ensure they do not contribute to water wastage. This includes the installation of water-efficient systems, the promotion of non-wasteful behaviours among stakeholders, and appropriate controls to manage water discharge impacts. For instance, MOKUL Hotel modernised their public washrooms with water-saving sensor faucets and bidets, which reduces wastage, while improving hygiene and comfort. While water recycling has not been implemented yet, we remain committed to exploring innovative solutions to minimise water withdrawal and discharge.

Waste Management

Waste is categorised as hazardous or non-hazardous, adhering to the Environmental Quality Act 1974 and the Solid Waste and Public Cleansing Management Act 2007.

Hazardous Waste

We comply strictly with Environmental Quality (Scheduled Waste) Regulations 2005 to manage hazardous waste from generation to final disposal. Our practices include:

- Storing scheduled waste securely in appropriate containers to prevent spillage or leakage, ensuring containers always remain closed.
- Leveraging the Electronic Scheduled Waste Information System (eSWIS) developed by the Department of Environment (DoE) for lifecycle monitoring of waste from cradle to grave.
- Prioritising waste minimisation through reuse, recycling and recovery initiatives before disposal.
- Ensuring compliant disposal practices through licensed contractors.
- Appointing Competent Persons to oversee hazardous waste management at each facility.
- Conducting routine inspections and assessments, including weekly Scheduled Waste Storage Inspections, quarterly Functional Assessments, and annual Operating Legal Assessment reviews.
- Promptly addressing non-compliance issues and sharing lessons learned to prevent recurrence.

Non-Hazardous Waste

Our management of non-hazardous waste aligns with sustainability principles, with a focus on reducing waste generation and promoting responsible disposal. Key initiatives include: • Monitoring non-hazardous waste inventory at the building level using an internal tracking system.

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- Supporting the Malaysia Towards Zero Single-Use Plastic (SUP) Roadmap 2018-2030 by eliminating SUPs during company meetings and events.
- Providing waste segregation bins in all office spaces and training cleaning staff on effective waste segregation.
- Ensuring responsible non-hazardous waste disposal by appointing licensed transporters.

These efforts reflect our holistic approach to environmental stewardship, emphasising compliance, innovation and collaboration for sustainable outcomes.

Efforts towards supporting circularity

Reverse Vending Machine

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KLCCP Stapled Group, in collaboration with MISC and Janz Technologies, has installed a Reverse Vending Machine (RVM) in the Kompleks Dayabumi vicinity. The aim is to drive behavioural change in our employees towards recycling through education and incentives as well as recover as many plastic bottles and cans as possible, diverting them from landfills and oceans to minimise plastic pollution.

This initiative aligns with the KLCCP Sustainability Agenda and the UNSDG, supporting UNSDG 11: Sustainable Cities and Communities, and UNSDG 12: Sustainable Consumption and Production.

Fabric Recycling

Another collaboration between KLCCP Stapled Group, MISC and Pos Malaysia involves the installation of a fabric recycling bin in 2023. In 2024, 1033.8 kg of fabric was collected, demonstrating the programme's effectiveness in:



Food Waste Digester

MOKUL Hotel utilises advanced food waste digestion technology, specifically the MAEKO LQ Series system, to manage organic waste sustainably. This system processes food waste on-site, converting it into liquid that is safely discharged into the drain and routed to the sewage treatment plant (STP).

Using this system, we eliminate the need for waste bins and reduce the volume of waste sent to landfills, lowering our waste management costs and minimising methane emissions. This aligns with efforts to integrate sustainable practices into daily operations while supporting circularity by ensuring food waste is treated responsibly and reintroduced into the water cycle through the STP.

SUSTAINABILITY REPORT **2024**



OUR IMPACT

Progress against Sustainability Plan 2030 Goals and Targets

	Target 2030		Progress	Status
2030	Goal 1: Reduce GHG emissions, promote decarbonisation	Contribute to the Group's NZCE reduction target for KLCCP Stapled Group's operations 10% reduction in Scopes 1 and 2 emissions under equity share across the Group (base year: 2019)	Reduced by 11% from 2019 levels	•
		Energy efficient portfolio		
		 Maintain Building Energy Intensity (BEI) label of <180 kWh/m²/year or minimum 2 Star building energy level for existing office space Maintain energy intensity of 0.5 kWh/ footfall^[1] at Suria KLCC Maintain energy intensity of 25 kWh/ footfall^[1] at MOKUL Hotel 	 100% of office buildings above 2 Star rating 0.55 kWh/footfall at Suria KLCC 27.62 kWh/footfall at MOKUL Hotel 	•
GOAI		Reduce water intensity level	0.77 m³/m² at office buildings	
	Goal 2: Drive environmental stewardship	Achieve the following water intensity targets for each segment	0.01 m ³ /footfall at Suria KLCC	•
		 Office: 0.85 m³/m² Suria KLCC: 0.01 m³/footfall ^[1] MOKUL Hotel: 0.21 m³/footfall ^[1] 	0.25 m³/footfall at MOKUL Hotel	•
		Promote circular economy principles through waste diversion and recovery	Suria KLCC achieved 11% waste diversion rate	•
		Achieve following waste diversion target rates • Suria KLCC: 20%	MOKUL Hotel achieved 27% waste diversion rate	•
		MOKUL Hotel: 55%		
Or	n Track – Progressing			

^[1] Hotel footfall is based on number of hotel room guests and F&B Patrons per annum. Retail footfall is based on traffic count into the mall per annum.



3-year scope 1 and 2 GHG Emissions Trend



3-year Energy Consumption Trend

2024

Scope 1, 2 and 3

60.880

Office

1,119

2023

1,041

Car Park

907

2022

71

12,584 13,767

Hotel

10,467

Retail [1]



Energy consumption breakdown based on segment (MWh)





^[1] Values for retail includes Menara 3 Retail Podium

72



Total Non-hazardous Waste by Category (MT)





Waste diversion by Segment (%)

Water intensity achievement

423,788 Kwh Generated by Solar

Water intensity has increased within our office assets, while the retail and hotel segments have maintained and improved their water intensity, respectively, despite increasing footfall.





0.01 m³/ footfall

0.25 m³/

100% of our water withdrawal and consumption comes from municipal water. In 2024,

1,366,906 m³

(1,367 Megalitres) of water was withdrawn and consumed by KLCCP Stapled Group operations.

^[1] Values for retail includes Menara 3 Retail Podium

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OUR OUTLOOK

Looking ahead, we aim to elevate our climate and environmental performance by aligning with national and international frameworks such as the National Sustainability Reporting Framework, especially on IFRS S2. We will ensure readiness to meet the requirements of the Energy Efficiency and Conservation Act (EECA) 2024. We are also working towards greater transparency in our climate-related disclosure, refining our Scope 3 emissions inventory through materiality assessments, and implementing decarbonisation measures across our operations.

In tandem, we will advance circular economy principles by optimising resource use, reducing waste, and embracing innovative technologies to promote recycling and landfill diversion. Strategic partnerships will enable us to embed sustainability into every segment of our operations, driving resource efficiency and long-term environmental stewardship. Together, these efforts position us to achieve our Net Zero Carbon Emissions Pathway 2050 and contribute meaningfully to a more sustainable future for all.



SUSTAINABILITY REPORT **2024**