

19 EMISSION MANAGEMENT

Related UNSDGs



Goal 13:
Climate Action

Why Is It Important

Climate change is a global challenge that can only be mitigated through collective efforts to reduce greenhouse gas (“GHG”) emissions. In Malaysia, this is reflected in the national aspiration to move towards net zero emissions by 2050, which will require coordinated action across industries. As a corporate entity, our ability to reduce emissions is influenced by financial feasibility. Nevertheless, as a responsible developer and operator, we recognise the importance of doing our part in managing emissions associated with our activities.

Emissions also present financial and operational considerations. The introduction of carbon pricing or taxes, as well as increases in energy and fuel costs, may increase operating and development costs. This applies to emissions from our own energy use and fuel consumption, as well as construction materials such as cement and steel, where carbon-related costs may be passed through to us.

OUR APPROACH

Scope 1 & Scope 2 GHG Emissions

Scope 1 and Scope 2 emissions are managed through our energy management efforts, as discussed and outlined in the Energy Management section. Key measures include:

- Optimising electricity use across our operational assets, including Tropicana Golf & Country Resort and our offices
- Maintaining vehicles, generators, and equipment to support efficient fuel use
- Adopting solar photovoltaic systems to increase the use of renewable energy
- Improving energy efficiency through maintenance and operational monitoring across our assets

Scope 3 Emissions

Scope 3 emissions for the Group are primarily driven by construction-related activities across our value chain, particularly the use of building materials and contractor operations. These emissions are largely outside our direct operational control but are influenced through procurement practices, project planning and development design.

In our business, these emissions are closely linked to development cost. A significant portion arises from embodied carbon in key materials such as cement and steel, as well as energy used by contractors across the construction process. These inputs are inherently energy-intensive and form a core component of our project cost structure. As the operating environment evolves, including changes in energy pricing, subsidy rationalisation and carbon-related policies, these cost drivers remain relevant to how we plan and deliver our developments.

As a property developer, our primary responsibility is to deliver quality developments that meet customer expectations, regulatory requirements, and commercial objectives. As such, decisions relating to materials, construction methods and design are made within practical constraints, including cost, buildability, project timelines, and market positioning.

Within these constraints, we focus on areas where we can reasonably influence outcomes, such as improving material efficiency, reducing rework and wastage, incorporating practical design enhancements, and working with contractors and suppliers to support more efficient project delivery.

Our Scope 3 disclosure is therefore focused on emission sources that are most relevant to our business and where data is reasonably reliable and supportable. This includes construction-related emissions under Purchased Goods and Services, which represent the largest component of our Scope 3 footprint, as well as selected operational and downstream activities such as fuel- and energy-related activities, waste generated in operations, business travel, employee commuting, and energy use in tenant-controlled spaces.

Emissions associated with the use of sold products, particularly energy consumption by homeowners after handover, are not included at this stage due to limitations in obtaining reliable and supportable data and high reliance on occupant behaviour.

This approach allows us to focus on key emission drivers within our value chain while taking practical steps, where feasible, to improve efficiency and manage cost across our developments.

Activity Source	Scope 3 Category	How We Manage This	Related Section
Construction materials such as cement, steel, and other building materials	Purchased Goods and Services	Managing procurement and project planning to monitor cost implications and improve material efficiency, where feasible.	Sustainable Materials; Procurement Practices
Energy use at construction sites by contractors and subcontractors	Purchased Goods and Services	Managing project planning and contractor engagement to monitor energy-related cost and efficiency.	Sustainable Construction; Procurement Practices
Energy use in completed developments	Use of Sold Products	Incorporating practical energy-efficient design features, where appropriate.	Sustainable and Green Design
Construction methods and material efficiency	Purchased Goods and Services	Adoption of construction approaches that improve efficiency and reduce rework and material wastage.	Sustainable Materials; Waste Management
Energy use in operational assets leased to tenants	Downstream Leased Assets	Managing asset performance and incorporating energy efficiency measures, where feasible.	Energy Management; Sustainable and Green Design
Construction waste and material losses	Waste Generated in Operations	Implementation of waste reduction, reuse, and recycling practices at construction sites.	Waste Management

OUR PERFORMANCE

An overview of our GHG emissions across Scope 1, Scope 2, and Scope 3 categories is as follows:

Scope 1 & 2

Category	Emissions Source (tCO ₂ e)	FY2025	FY2024	FY2023
Scope 1	Mobile combustion	712	732	
	Stationary combustion	125	148	
	Fugitive emissions	1,321	1,496	
Subtotal Scope 1		2,158	2,376	
Scope 2	Purchased electricity (grid)	6500	6,804	4,965
Total Scope 1 & 2		8,658*	9,180	4,965

* This metric has been externally assured by an independent third-party. Please refer to assurance statement at page 181 in this report.

1. FY2024 emissions have been restated to reflect changes in organisational structure while FY2023 emissions are estimated using previously disclosed energy data and applicable emission factors.
2. Scope 1 emissions comprise direct emissions from mobile combustion (vehicle fleets and landscaping machinery), stationary combustion (LPG used in clubhouse operations and diesel for backup generators) and fugitive emissions from air-conditioning systems.
3. Fugitive emissions from temporary facilities (such as sales galleries and project offices) are excluded as they are assessed to be not material based on operational scale and refrigerant capacity.
4. Emission factors for fuel combustion are based on the UK Government GHG Conversion Factors 2025, while Global Warming Potentials ("GWPs") for refrigerants are based on the IPCC AR6 100-year time horizon.
5. Scope 2 emissions represent indirect emissions from purchased grid electricity. Grid emission factors are based on the Malaysia Energy Information Hub – Grid Emission Factor ("GEF") 2022–2024 (provisional) for Peninsular Malaysia and Sabah.

Scope 3

Category	Emissions Source (tCO ₂ e)	FY2025	FY2024 ¹
Scope 3	Cat 1: Purchased Goods and Services (Construction Activities)	97,344	
	Cat 3: Fuel and Energy Related Activities (Upstream emissions from landlord energy use)	795	804
	Cat 5: Waste generated in operations	590	178
	Cat 6: Business travel	124	99
	Cat 7: Employee commuting	1,849	1464
	Cat 13. Downstream leased assets (Energy use in tenant-controlled spaces)	2,718	2,775
Subtotal Scope 3		103,420	5,321
Total Scope 1, 2 & 3		112,078	14,501

1. Scope 3 emissions have been restated to include Category 3 and improved calculation methodology, incorporating upstream components such as well-to-tank ("WTT") and transmission & distribution ("T&D") losses.
2. Emissions from construction materials are calculated using the activity-based method, applying the industry-recognised emission factors such as CIDB Malaysia references and the ICE Database (v4.1). Emissions from contractor fuel and electricity consumption are estimated using DEFRA (UK) and Malaysia Grid Emission Factor ("GEF") data. These factors represent standardized averages and may not fully reflect supplier- or project-specific conditions.

3. Transportation of materials to site (Category 4: Upstream Transportation and Distribution) is currently excluded due to data limitations, particularly the lack of consistent logistics and supplier transport data.
4. Scope 3 – Category 3 represents upstream emissions associated with fuel and electricity consumption not included in Scope 1 and Scope 2 and is calculated using relevant upstream emission factors.
5. Waste-related emissions are estimated based on waste quantities and disposal methods using recognised emission factors. Where detailed waste composition data is not available, assumptions are applied based on typical construction waste profiles.
6. Emissions from business travel and employee commuting are estimated based on available activity data (including travel records and internal surveys), applying DEFRA (UK) emission factors. Where detailed travel data is incomplete, reasonable assumptions are applied (e.g. travel distance, vehicle type, and mode of transport).
7. Scope 3 – Category 13 (Downstream Leased Assets) includes energy consumption in tenant-occupied spaces where energy procurement is managed by the Group. Energy directly procured and controlled by tenants is excluded, as such data is not accessible.

Emissions Management Targets

We manage emissions with a focus on improving carbon intensity across our operations, recognising the development-driven nature of our business.

As an interim target, we aim to reduce Scope 1 and Scope 2 carbon intensity by 20% by 2030 from the FY2024 baseline.

In FY2025, carbon intensity improved by 12% compared to FY2024. This was driven by a combination of lower refrigerant-related emissions during the year, ongoing energy optimisation efforts, including the replacement of lighting with LED fixtures at the Group's golf clubhouse, and a reduction in the national grid emission factor.

We will continue to focus on practical measures to manage energy use and emissions across our assets, taking into account operational requirements and cost considerations.

Performance Indicator	Unit	FY2025	FY2024	Change (%)	Target
Scope 1 & 2 carbon intensity	tCO ₂ e / RM mil	5.77	6.52	-12%	Reduce by 20% by 2030 from FY2024 baseline. Current year-on-year performance remains on track

1. FY2025 carbon intensity is calculated as total Scope 1 and Scope 2 emissions of 8,658 tCO₂e divided by Group revenue of RM1,501 million.
2. FY2024 carbon intensity is calculated as total Scope 1 and Scope 2 emissions of 9,180 tCO₂e divided by Group revenue of RM1,408 million.