

# SUSTAINABILITY STATEMENT (CONT'D)

## ENVIRONMENT

**As a highway operator, we are committed to upholding the highest standards of delivering project outcomes without compromising the enduring value of the environment. This includes our dedication to minimising our environmental footprint, promoting resource efficiency and contributing to the preservation of the natural environment.**

At its most preliminary level, WCE's approach to managing environmental impact is through the adoption of best practices and adherence to relevant international and local standards. We are committed to carrying out businesses in a community and environmentally friendly manner based on the following CARE principles:



**C**omplying with all environmental and other relevant legal requirements;



**A**pplying a continual improvement concept while implementing our Environmental Management System ("EMS") and monitoring its performance;



**R**educing and preventing pollution by disposing of wastes according to regulated means, conserving natural resources and adopting environmentally friendly approaches in all activities to minimise water, air and noise pollution; and



**E**ducating employees on the importance of sustainable development and pollution prevention

The construction of the WCE project adhered to the Environmental Impact Assessment ("EIA") Approval Conditions resulting in minimal environmental impact. We continue to strive to ensure our operating activities are carried out in a manner that mitigates or prevents environmental pollution to minimise irreversible environmental damage.

Since FY2023, WCE has embarked on establishing Greenhouse Gases ("GHG") emissions reporting and inventory. This commitment reflects our efforts to mitigate climate change and underscores the importance of conducting responsible business operations while minimising our carbon footprint. In FY2024, we continued our efforts in carbon emission monitoring to develop a GHG emissions reduction strategy moving forward. This approach aligns with our nation's vision to focus on decarbonisation strategy and transition towards a low-carbon economy.



# SUSTAINABILITY STATEMENT (CONT'D)

## Climate Action and Tackling Carbon Footprint

In our efforts to support the national goal of net-zero carbon emissions by 2050, we are now taking into account the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD), considering the risks that the environment may pose to our business, particularly climate-related risks and opportunities. One of the critical steps in establishing climate action is through our carbon reduction strategy.

Carbon dioxide is the most common GHG released through human activities and accounts for the largest percentage of all GHG emitted into the atmosphere. Although it occurs naturally, human activities amplify its concentration leading to a rapid rise of global temperature.

WCE is dedicated to enhancing awareness among our employees and business partners regarding the management of our carbon footprint. The initiatives include efforts such as reducing the utilisation of energy and water usage, lessening the production of construction waste and optimising the utilisation of natural resources across all operational sites.

Throughout FY2024, our focus persisted on monitoring carbon emissions with continuous efforts of our team in developing a forward-looking plan to mitigate GHG emissions.

## Tackling Carbon Footprint

In FY2024, WCE continues its initiatives to tackle carbon footprint through GHG emissions assessments across the Group's operation and maintenance activities on operational highway sections.



### Scope 1

Direct emissions from our operations through vehicles and equipments controlled by the Group.



### Scope 2

Indirect emissions from purchased energy.



### Scope 3

Other indirect emissions generated across our value chain.

### Scope 1:

Emissions under scope 1 account for 10 % of WCE's total emissions. Scope 1 emissions include all emissions released by our operations from company-owned vehicles, machineries and assets:

- Stationary combustion: Combustion of diesel in stationary gensets.
- Mobile combustion: Combustion of petrol and diesel in patrol cars, motorbikes and other company-owned vehicles.
- Fugitive emission: Refrigerant leakage from centralised and individual air conditioning units.

### Scope 2:

Emissions under Scope 2 account for 76% of WCE's total emissions. Scope 2 emissions are associated with electricity purchased and consumed by offices, buildings, toll plazas, lay-bys and street lighting at the operating highway sections.

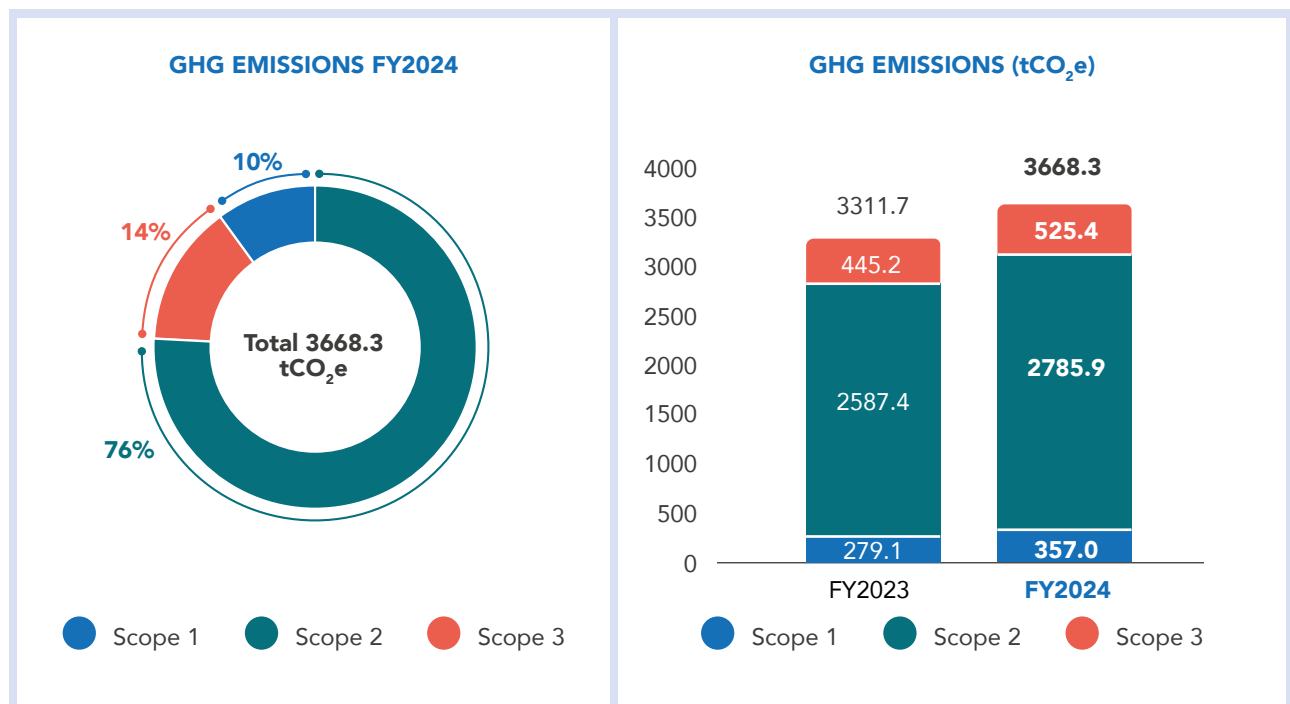
# SUSTAINABILITY STATEMENT (CONT'D)

## Tackling Carbon Footprint (Cont'd)

### Scope 3:

Emissions under Scope 3 account for 14% of WCE's total emissions. Scope 3 includes all other indirect emissions generated across our value chain. In FY2024, we collated reliable data for four out of 15 categories:

- **Category 1 - Purchased Goods and Services:** Purchase of goods for operation and maintenance at operating sections.
- **Category 5 - Waste Generated in Operations:** General wastes and scheduled wastes generated at operating sections and offices which are transported and disposed-off via landfilling.
- **Category 6 - Business Travel:** All land transportation resulting from business-related activities in vehicles not owned or operated by the WCE.
- **Category 7 - Employee Commuting:** Commuting of employees between their homes and their respective base worksites using vehicles not owned or operated by WCE.



Total GHG emissions for FY2024 are 3,668.3 tCO<sub>2</sub>e, an 11% increase from FY2023. This increase is due to the opening of new sections: Section 6 (Bandar Bukit Raja Utara - Assam Jawa) and Section 11 (Beruas – Taiping Selatan), which led to higher operating activities compared to the previous year.

# SUSTAINABILITY STATEMENT (CONT'D)

## Emissions Avoidance in FY2024

The Group continues its efforts to reduce our carbon footprint, optimise resource efficiency, and foster sustainable practices through an emission avoidance strategy. At WCE, the emission avoidance initiatives include the use of renewable energy through the installation of solar panels across regional offices and certain operating toll plazas both in Selangor and Perak. In FY2024, solar energy generation increased by 6% from FY2023, reaching 555,870 kWh.

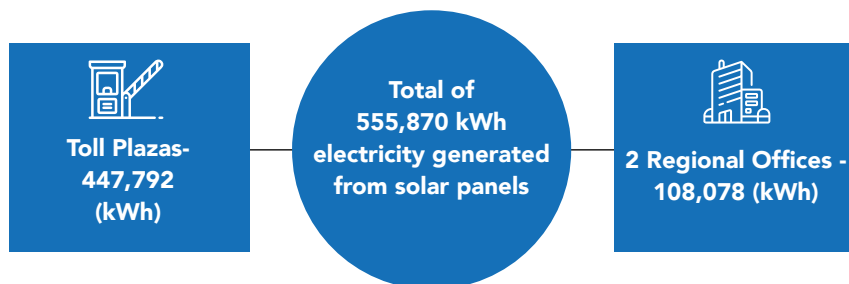
Additionally, we contribute to emission avoidance through waste recycling measures for both operational and office non-hazardous waste. By recycling, we divert waste from landfills and conserve resources. In FY2024, we collected 11.6 tonnes of recyclable waste, a 40% increase compared to FY2023.

The total emission avoidance from each initiative is detailed below:

Initiative	Avoidance (tCO <sub>2</sub> e)	
	FY2024	FY2023
Electricity generated from solar panels (based on 555,870 (FY2023: 510,375) kWh of solar energy generated)	433.6	398.1
Waste diverted from landfills (based on 11.6 (FY2023: 8.3) tonnes of total waste recycling)	0.3	0.1
<b>Total</b>	<b>433.9</b>	<b>398.2</b>



Rooftop solar panels at Hutan Melintang Toll Plaza and Kapar Toll Plaza



From April 2023 to March 2024, we recorded a total of 555,870 kWh of electricity generated from solar PV and 13% of our energy consumption used is from renewal energy sources.

As climate change can significantly impact the Group's business operations, we are considering new opportunities by accelerating the ongoing transition to a low carbon economy.

# SUSTAINABILITY STATEMENT (CONT'D)

## Emissions Avoidance in FY2024 (Cont'd)

In response to the growing adoption of Electric Vehicles (EVs) in Malaysia, the Group has also commenced the installation of EV charging stations at key locations along the West Coast Expressway (WCE). These stations are now operational at the Assam Jawa Toll Plaza, Taiping Selatan Toll Plaza, and Trong Toll Plaza.

The introduction of EV charging stations underscores the Group's commitment to environmental sustainability and reducing emissions, while simultaneously positioning our infrastructure for the future. This initiative not only enhances our competitive advantage but also supports the evolving needs of EV owners for facilitating long-distance journeys. This initiative marks a significant step in our effort to promote sustainable transportation.



**EV Charging Station at  
Assam Jawa**

## Energy Consumption

The energy conservation measures in daily operations are monitored monthly under WCE Group's Environmental Management System ("EMS") objectives. We measure the reduction or minimisation of energy consumption as part of our efforts to reduce global warming. The Group is undertaking various energy-saving initiatives, including:



Periodic reminder to employees to be mindful of energy conservation through notices and memo



Embed energy conservation culture in workplace



Use energy-efficient LED lights in Offices and Toll Plazas

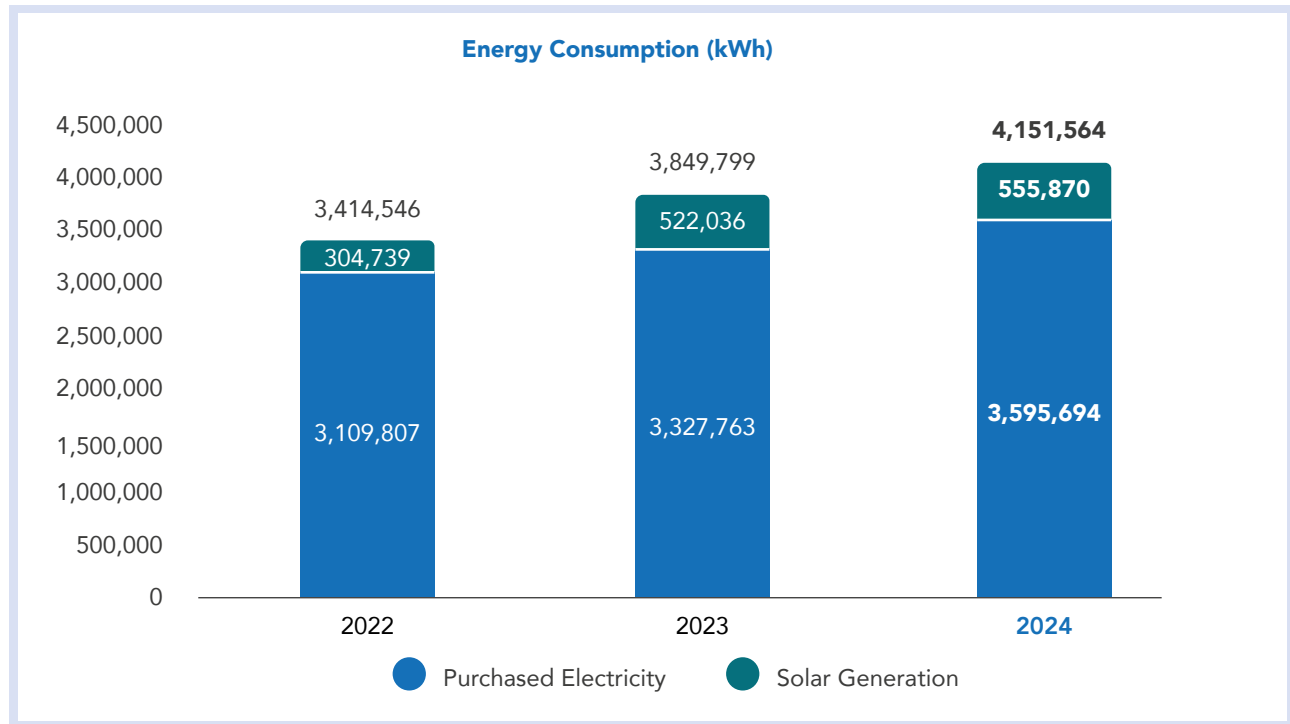


Solar Panel Installation at Offices and Toll Plazas

# SUSTAINABILITY STATEMENT (CONT'D)

## Energy Consumption (Cont'd)

The energy consumption of WCE from FY2022 to FY2024 is presented as below.



Data from FY2022 and FY2023 have been restated due to the expansion of reporting facilities to include all offices, buildings, toll plazas, lay-bys and street lighting to be consistent with those disclosed for FY2024. WCE's overall energy consumption for FY2024 was 4,151,564 kWh, a 7.8% increase from FY2023. This rise is due to the opening of new sections: Section 6 (Bandar Bukit Raja Utara - Assam Jawa) and Section 11 (Beruas – Taiping Selatan). Solar energy usage of 555,870 kWh accounted for 13% of total energy consumed, resulting in overall cost savings of RM282,937 compared to purchased electricity.

Year	Purchased electricity (kWh)	Solar generation (kWh)	BEI for regional offices and toll plazas (kWh/year/m <sup>2</sup> )
FY2022	1,939,176	304,739	86
FY2023	1,949,044	522,036	95
<b>FY2024</b>	<b>2,029,790</b>	<b>555,870</b>	<b>99</b>

As part of our efforts to assess the Group's energy efficiency, we have adopted the Building Energy Index (BEI) to measure energy intensity based on building area. Prior years' disclosures have been restated to include all buildings on operational sections, including toll plazas and lay-bys. In FY2024, the building energy intensity for regional offices and toll plazas was 99 kWh/m<sup>2</sup>/year, up from 95 kWh/m<sup>2</sup>/year in FY2023, primarily due to additional operational sections opened in FY2024. According to the Sustainable Energy Development Authority ("SEDA"), the standard energy intensity for commercial office buildings in Malaysia is 250-300 kWh/m<sup>2</sup>/year. We are pleased to report that WCE's BEI remains well below this benchmark.

# SUSTAINABILITY STATEMENT (CONT'D)

## Energy Consumption (Cont'd)

Additionally, the Group continues to pursue the SEDA GreenPASS certification in FY2024. We achieved energy reductions of 5.04% for the Selangor regional office and 22.44% for the Perak regional office in FY2024.



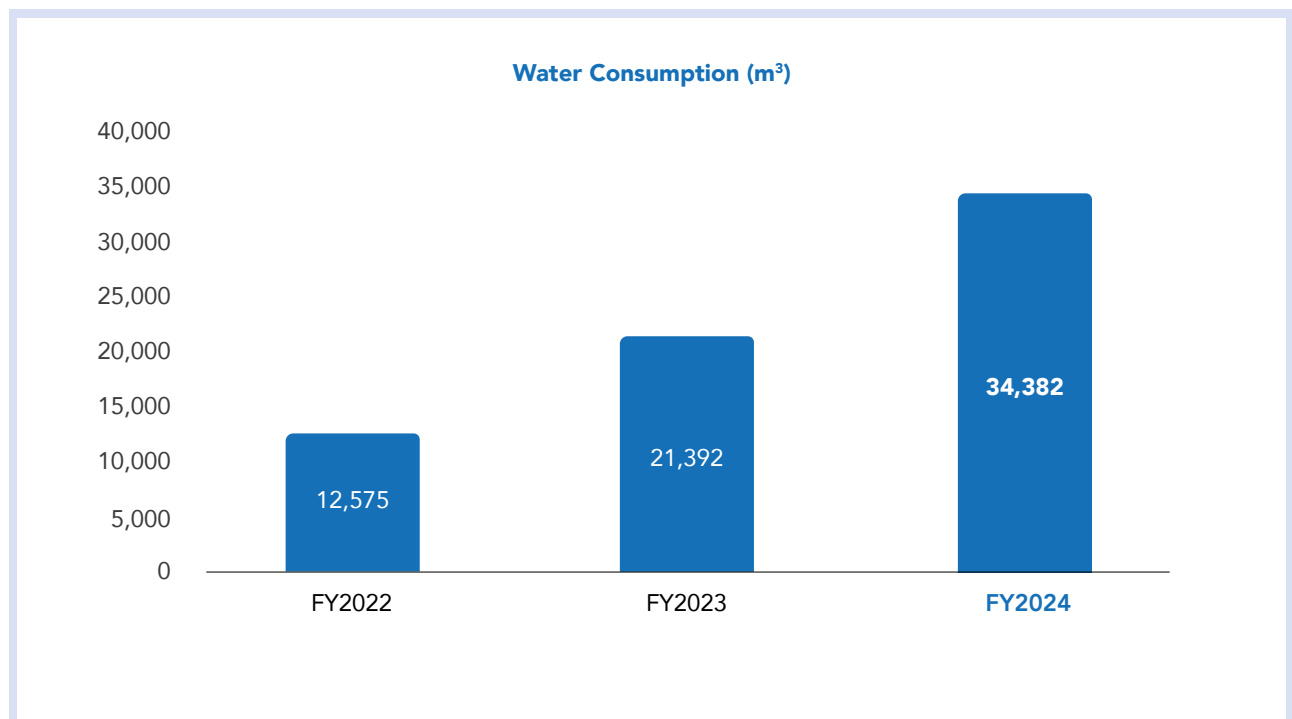
**2023 GreenPASS Certification for Selangor Regional Office**



**2023 GreenPASS Certification for Perak Regional Office**

## Water Consumption

WCE is committed to using water as efficiently as possible across our operating activities. Aligned with WCE Group’s EMS objectives, we monitor monthly water consumption at the office premises, toll plazas and operating sites.



# SUSTAINABILITY STATEMENT (CONT'D)

## Water Consumption (Cont'd)

Year	Water usage (m <sup>3</sup> )	Water usage intensity (m <sup>3</sup> /year/m <sup>2</sup> )
FY2022	12,575	0.5
FY2023	21,392	0.8
<b>FY2024</b>	<b>34,382</b>	<b>1.3</b>

Data from FY2022 and FY2023 have been restated due to the expansion of reporting facilities to include water consumption from all office buildings, toll plazas, and lay-bys to be consistent with those disclosed for FY2024. The total water usage reported for FY2024 was 34,382 m<sup>3</sup>, which reflects a 61% increase from FY2023. This rise in water consumption is attributed to the opening of new sections, specifically Section 6 (Bandar Bukit Raja Utara - Assam Jawa) and Section 11 (Beruas – Taiping Selatan). Additionally, the water usage intensity has increased to 1.3, higher than the previous year.

Besides recording annual water consumption, the washrooms and lavatories in WCE's offices and toll plazas are built with water-efficient fixtures such as push tap faucets and dual flush toilets. Controlled water flow would impact annual water consumption. According to the "Leadership in Energy and Environment" (LEED) rating system, water-efficient fixtures and fittings such as push taps and dual flush toilets could reduce indoor portable water consumption.

Rainwater harvesting systems are installed at our two regional offices mainly for non-potable use such as cleaning and landscaping purposes. This reduces our reliance on water withdrawn directly from the municipal supply.

## Biodiversity

The Group is dedicated to preserving biodiversity along the WCE, emphasising sustainable management of highway operations. Through the Preliminary Environmental Impact Assessment ("PEIA"), we have minimised the impact of the construction of WCE on the surrounding biodiversity as well as maximise the preservation of flora and fauna by moving any protected species to the conservation areas identified. Notable efforts of the Group in biodiversity management include:

- **Animal Box Culvert Construction:** An animal box culvert was constructed at Section 11 in Perak, providing an essential pathway for various animal species to move between fragmented habitats.
- **Highway Fencing:** Fences installed including enhancement of capping beam along the highway prevent animals from accessing the roads, thereby reducing wildlife-vehicle collisions.
- **Tree Planting Initiatives:** WCE is in the process of replanting trees along the expressway upon the completion of the project and is in support of the Program Penghijauan Malaysia through Kempen Penanaman 100 Juta Pokok under Rancangan Malaysia ke-12 (RMK12).



*Fagraea fragrans*

*Dalbergia Oliveria*





# SUSTAINABILITY STATEMENT (CONT'D)

## Effluent and waste

Managing waste in a responsible and ethical manner is important in ensuring compliance with the relevant regulations and preventing pollution of the environment. As the WCE Project is under the construction development stage, construction wastes generally produced comprise mostly earth and other excavation debris, concrete waste, steel scraps, and scheduled wastes. In our waste management approach, we practice the 3Rs - reduce, reuse, and recycle both in operational and administrative activities.

We employ good waste management practices ranging from allocating proper construction bins at all construction sites and storage areas for scheduled waste and appointing only licensed contractors to treat and dispose of scheduled waste.

Type of Waste	Waste Generation (Tonnes)		
	FY 2022	FY 2023	FY 2024
 Hazardous waste	-	0.0037	0.2
 Non-hazardous waste	23.3	303.17	404.5
<b>Total</b>	<b>23.3</b>	<b>303.17</b>	<b>404.7</b>

The increase in waste generation during the year is in line with the intensified operational activities during FY2024.

## Environmental Compliance

In mitigating the impact of construction activity on the environment, the Group appointed external consultants to conduct environmental compliance audits for all sections of the WCE Project. The compliance audit undertakes periodic air, water quality, vibration and noise monitoring in line with the monitoring programmes outlined by PEIA to ensure readings do not exceed limits set in the standards by the respective regulatory bodies.





Monitoring components	Compliance with Standards	Reporting Requirement
Air Quality	Malaysian Air Quality Guidelines	Department of Environment ("DoE")
Ambient Air Quality	Malaysian Ambient Air Quality Standard ("MAAQS")	
Noise Quality	Planning Guides for Environmental Noise Limit and Control	
River Water Quality	National Water Quality Standards	DOE & Lembaga Urus Air Selangor
Site Trap	EIA Condition of Approval	DoE
Vibration	Schedule of Recommended Vibration Limits	DoE

# SUSTAINABILITY STATEMENT (CONT'D)

## Environmental Compliance (Cont'd)

The Group EMS complies with the Management Standard International Organisation for Standardisation for Environmental Management System ("ISO 14001:2015") and other requirements. We have also adopted essential best practices to control and prevent environmental pollution which comprises water pollution control, air and noise pollution control as well as waste management.

We have undertaken environmental control measures and activities to ensure adherence to regulations and guidelines issued by DoE, which include:

 <p>Installation of Gabion Check Dams</p>	 <p>Scheduled Waste &amp; Chemical Storage</p>
 <p>Installation of Silt Fence</p>	 <p>Usage of Silt Fences and Sand Bags</p>

With the implementation of EMS and good practices, the Group did not violate any environmental laws and regulations and has not been penalised or fined for any major environmental violation in the financial year ended 31 March 2024.