

CTOS Scope 3 GHG Emissions 2024 Calculation Results

1. Employee Commuting

Definition: Emissions from employees commuting between home and office.

Methodology & Assumptions

- Data are collected from survey conducted in August 2025.
- Conversion factors are applied by mode of transportation and are obtained from DEFRA 2025.
- Annual working weeks: 45.8 (adjusted for 20 days annual leave, 2 medical leave, and Malaysian public holidays).

Results

Transportation Mode	Distance Travelled (KM)	GHG Emissions (tCO2e/yr)
Bus	13,053.00	2.50
Car	1,497,724.12	368.05
Electric Car	28,625.00	2.00
KTM	58,294.24	3.04
LRT	352,907.32	14.86
Motorcycle	344,622.10	57.67
MRT	98,960.06	4.17
Grand Total	2,394,185.84	452.29

2. Business Travel

Definition: Emissions from employees travelling for work-related purposes

Methodology & Assumptions

- Data are collected from claims record provided by HR.
- Conversion factors applied by mode of transport and obtained from DEFRA 2025.
- Calculation for flight are made via ICAO Carbon Emissions Calculator (ICEC).
- For a more detailed assumptions, please refer to the excel sheet "O - CTOS Scope 3 Business Travel".

Results

Transportation mode	GHG Emission (tCO2e)
Car	20.55
Bus	0.14
Taxi	1.64
Flight	57.69
GHG Emission subtotal	80.03

3. Waste

Definition: Office-generated waste disposed of via building management.

Methodology & Assumptions

- Data are obtained from CTOS Admin Manager (S. Loga Rajan).
- Approximated daily waste generated by floor:
 - 9th floor: 1.75 kg
 - 17th floor: 1.50 kg
 - 18th floor: 1.25 kg
- Annualised (260 workdays/year).
- All waste sent to landfill (no segregation or recycling data available).
- Conversion factors are obtained from DEFRA 2025.

Results

Total Waste (kg)	Emissions (tCO2e)
1,170	609.02