

5.2 Greenhouse Gas Emissions Management

Lotus’ GHG inventory system was originally established in accordance with ISO 14064-1:2018. To align with international disclosure expectations, the Company has adopted the GHG Protocol Corporate Standard as its primary basis for GHG quantification and disclosure, effective from fiscal year 2025 onwards, and obtained third-party assurance. In 2025, the Company further strengthened GHG management and demonstrated tangible decarbonization progress. GHG emission intensity decreased year-over-year at both Taiwan and Korea sites, reflecting improved carbon efficiency per unit of output; notably, Korea also achieved a reduction in total emissions, indicating effective implementation of mitigation measures. While total emissions at the Taiwan site increased due to record-high revenue, the emissions structure continued to improve, with reductions in Scope 1 mobile and fugitive emissions compared to the previous year. Overall, total GHG emissions across Taiwan and Korea decreased by 28% in 2025 compared to the 2022 baseline.

In 2025, the Company conducted its first Scope 3 greenhouse gas (GHG) inventory in accordance with the GHG Protocol, and began progressively expanding the disclosure of value chain emissions. The inventory primarily covered operations in Taiwan, with total emissions of 17,077 tCO2e included within the reporting boundary. The disclosed emissions mainly comprised Category 1 (Purchased Goods and Services), Category 3 (Fuel- and Energy-related Activities), and Category 4 (Upstream Transportation and Distribution). For Category 1 (Purchased Goods and Services), the inventory covered APIs and primary packaging procured in Taiwan. Going forward, the Company will continue to expand the inventory boundaries and related disclosures based on emission significance and data completeness, thereby enhancing the completeness of its Scope 3 GHG inventory.

Item	Scope 1 + Scope 2	Scope 3	Greenhouse Gas Emissions in Taiwan and Korea Reduced by 28% in 2025 (Base year: 2022)
Greenhouse Gas Inventory	☒ Taiwan (GHG Inventory and Assurance) ☒ Korea (GHG Inventory and Assurance) ☒ Other Asian Regions (GHG Inventory and Assurance)	☒ Taiwan: Initiated training and inventory ☐ Korea ☐ Other Asian Regions	

2025 Scope 1 and Scope 2 GHG Emissions (Unit: tCO₂e)

Scope	Description	Taiwan	Korea	Other Asian Regions	Total
Scope 1 (Direct GHG Emission)	Stationary Combustion	997.3857	981.3553	13.8038	1,992.5448
	Mobile Combustion	5.4346	19.2559	10.8055	35.4960
	Direct Fugitive Emissions	314.0464	135.7245	17.1582	466.9291
Scope 1 Emissions (tCO ₂ e) in Total		1,316.8667	1,136.3357	41.7675	2,494.9699
Scope 2(Indirect Energy Emissions)	Purchased Electricity	9,737.6033	3,200.7211	879.9998	13,818.3242
Scope 2 Emissions (tCO ₂ e) in Total		9,737.6033	3,200.7211	879.9998	13,818.3242
Total GHG Emissions (Scope 1 + Scope 2) (tCO ₂ e)		11,054.4700	4,337.0568	921.7673	16,313.294
Data Coverage Rate					97.1%
GHG Emission Intensity (Scope 1 + Scope 2) (tCO ₂ e / NT\$ million revenue)					0.8359

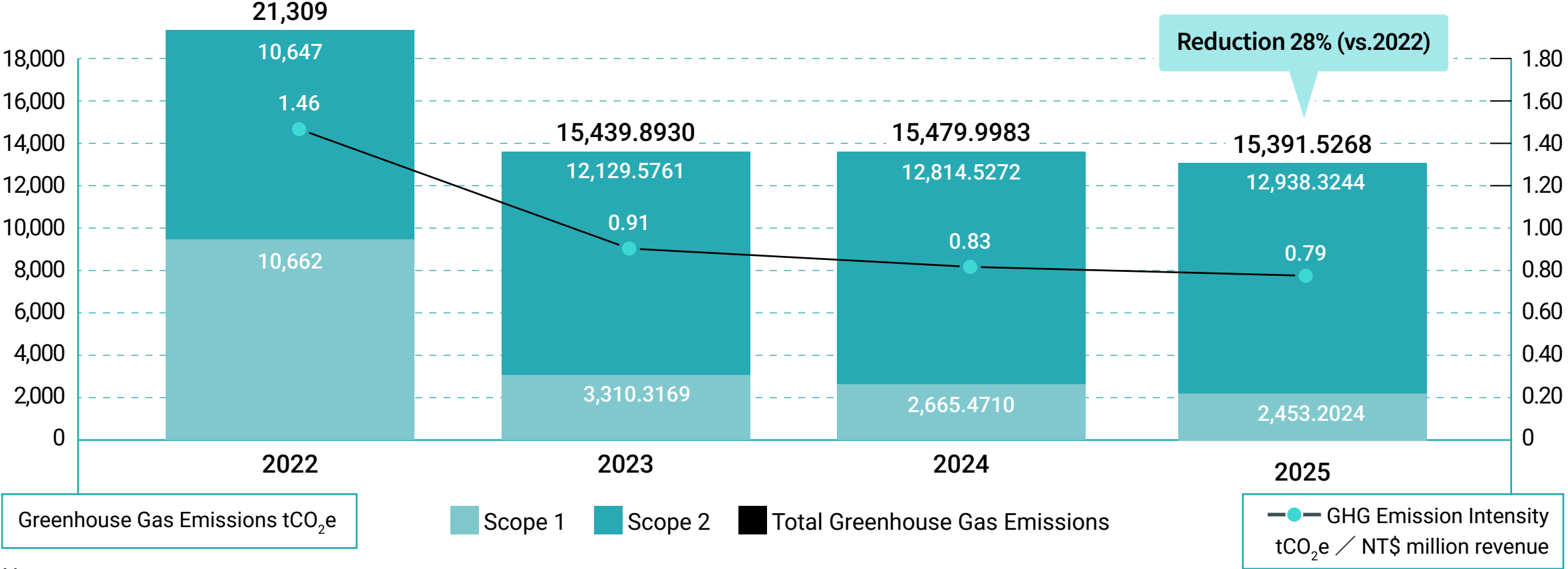
- Notes:
- Scope 1: The main emission sources include the combustion of natural gas, diesel, and gasoline, as well as fugitive emissions from septic tanks and refrigerant equipment.
 - Scope 2: The main emission source is purchased electricity.
 - The GHG emission factors, electricity emission factors, and Global Warming Potential (GWP) values used in the calculations are primarily based on methodologies announced by the Ministry of Environment.
 - GHG Emission Intensity (tCO₂e / revenue) = (Scope 1 + Scope 2) / Operating Revenue (The 2025 calculation excludes NT\$994 million in revenue from the U.S. subsidiary consolidated since December 2025. This ensures consistency with the GHG inventory boundary covering Taiwan, Korea, and Asia, resulting in a reporting revenue of NT\$19,515 million.)
 - The data coverage rate is calculated as the number of employees at sites included in the GHG inventory (1,539) divided by the Company's total workforce (1,585 in 2025).
 - Other Asian regions include operating sites in Singapore, India, Thailand, the Philippines, Vietnam, Malaysia, China, Japan, and Hong Kong.

Lotus Taiwan 2025 Scope 3 GHG Emissions (Unit: tCO₂e)

Scope	Description	Taiwan
Scope 3 (Other Indirect Emissions)	Category 1 Purchased Goods and Services	12,960
	Category 3 Fuel - and Energy-Related Activities	3,567
	Category 4 Upstream Transportation and Distribution	550
Total Scope 3 Other Indirect Emissions (tCO ₂ e)		17,077

Note: The inventory scope for Category 1 (Purchased Goods and Services) includes APIs and primary packaging procured in Taiwan.

Recent GHG Emissions at Major Sites in Taiwan and Korea (tCO₂e)



- Notes:
- Emission intensity is calculated based on revenue (tCO₂e per NT\$ million). The 2025 calculation excludes NT\$994 million in revenue from the U.S. subsidiary consolidated since December 2025. This ensures consistency with the GHG inventory boundary covering Taiwan, Korea, and Asia, resulting in a reporting revenue of NT\$19,515 million.
 - The decrease in emission intensity in 2025 was mainly driven by energy efficiency improvements and optimized utility operations across major sites.

5.2.1 Energy and Carbon Reduction Project

In 2025, the Company reduced its energy consumption by adopting the following 4 energy-saving action plans.

Action Plan	Type of Emission Reduction	Description of Reduction Effectiveness	Calculation Formula of Carbon Reduction	Reduction of Carbon Emissions (Compared to 2024)
Improvement of Fire Extinguisher Management in the Korea Plant	Fugitive Emissions	HALON fire extinguishers were newly included in the fugitive emissions inventory boundary in 2024, resulting in the recognition of related emissions. In 2025, no discharge occurred. Through strengthened equipment management and regular inspections, fugitive emission risks were reduced, and emissions remained low.	2025 Purchase Fugitive - 2024 Usage Emissions.	Reduction of carbon emissions by 348.5 tCO ₂ e.
HVAC Energy-Saving in the Korea Plant	Electric Energy and Liquefied Natural Gas (LNG)	In Korea, energy consumption for HVAC systems was reduced by seasonally adjusting indoor humidity and maintaining it within an appropriate range. Annual savings amounted to approximately 222,357 kWh of electricity and 141,154 m³ of liquefied natural gas (LNG).	Reduced electricity emissions = electricity saved * electricity emission coefficient. (Note 2) Reduced fuel emissions = reduced fuel consumption * emission coefficient. (Note 2)	Reduction of carbon emissions by 483.0 tCO ₂ e.
Adoption of High Performance Temperature Controlled Packaging (Va-Q-pal) in Transportation	Emissions from Transportation	The traditional active cold chain equipment (Envirotainer RKN e1) relies on electricity, resulting in increased energy consumption and carbon emissions. To reduce the environmental impact of the supply chain, the Company continued to adopt Va-Q-Pal packaging in 2025. This solution utilizes vacuum insulation panels and phase-change materials, offering a lighter weight and effectively reducing energy consumption and fuel usage during air transportation.	The carbon emissions per EUR pallet for the RKN e1 container are approximately 61.5 tCO ₂ e, while those for the Va-Q-Pal container are approximately 16.0 tCO ₂ e, resulting in a reduction of about 45.5 tCO ₂ e per pallet. Based on the Taipei–Malta (TPE–Malta) one-way route assessment, a total of 7 pallets were used in 2025; therefore, the total reduction is calculated as 45.5 × 7 = 318.5 tCO ₂ e.	Reduction of carbon emissions by approximately 318.5 tCO ₂ e.
Taiwan Emission Management Optimization	Mobile Combustion	Optimized fleet management, increased adoption of remote communication, and enhanced control of equipment and refrigerant leakage effectively reduced controllable direct emissions. Both mobile and fugitive emissions decreased compared to 2024, indicating improved emission management efficiency.	Reduction of mobile emissions = 2025 mobile emissions – 2024 mobile emissions Reduction of fugitive emissions = 2025 fugitive emissions – 2024 fugitive emissions.	Mobile emissions reduced by approximately 4.4792 tCO ₂ e (≈45%) Fugitive emissions reduced by approximately 47.7837 tCO ₂ e (≈13%) Total reduction: approximately 52.2629 tCO ₂ e.

Notes:

- HALON-type fire extinguishers (including HALON-1211 and HALON-1301) were newly included in the inventory boundary in 2024, resulting in the recognition of related emissions. In 2025, no discharge occurred; strengthened management and regular inspections reduced fugitive emission risks, keeping emissions low.
- The local emission coefficients of Korea are adopted, with the emission coefficient of electricity and the emission coefficient of liquefied natural gas as 0.424kgCO₂e/kWh and 2.75kgCO₂e/m³ respectively.
- Only applicable for single EUR pallet-stacked goods. Besides, the recyclability of RKN-e1 containers is not considered in the reduction assessment.