Methodology for Calculating Scope 3 Greenhouse Gas Emissions

- Organizational Boundary: KURARAY CO., LTD. and 66 consolidated subsidiaries
- Reporting Period: January 1, 2025 to December 31, 2025

GHG emissions are compiled and calculated in accordance with the Group's calculation rules developed in line with the GHG Protocol. The reporting boundary is established based on the operational control approach under the GHG Protocol.

Scope3 Category	Reporting Criteria
Category 1 Purchased Goods and Services	GHG emissions for Category 1 were calculated by multiplying the quantity of raw materials, supplies, and services purchased for production (measured by weight or monetary value) by the applicable emission factors. Where the specific material could not be identified, emissions were estimated by multiplying the purchase amount by an average emission factor. Emission factors were obtained from Managed LCA Content Ver. 2025.2 (Sphera) and the Emission Factor Database on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain Ver. 3.5 (Ministry of the Environment, Japan).
Category 2 Capital Goods	GHG emissions for Category 2 were calculated by multiplying the increase in fixed assets excluding land and intangible assets, by the applicable emission factors. Emission factors were obtained from the Emission Factor Database on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain Ver. 3.5 (Ministry of the Environment, Japan).
Category 3 Fuel- and Energy-Related Activities NOT Included in Scope 1 or Scope 2	GHG emissions for Category 3 were calculated based on purchased electricity consumption, purchased heat consumption, and fuel consumption multiplied by the respective emission factors. Emission factors were obtained from the Emission Factor Database on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain Ver. 3.5 (Ministry of the Environment, Japan), AIST-IDEA Ver. 4.0 (The National Institute of Advanced Industrial Science and Technology), and Managed LCA Content Ver. 2025.2 (Sphera).
Category 4 Upstream Transportation and Distribution	GHG emissions from the transportation of procured raw materials were calculated for each item based on transportation weight, transportation distance derived from transportation scenarios, and the emission factors for each transportation mode defined in the transportation scenarios. Emission factors were obtained from Managed LCA Content Ver. 2025.2 (Sphera). For product shipment transportation, both land transportation and marine transportation were included. In the land transportation, the land transportation emissions for major regions were calculated using shipment data based on transported weight, distance, and emission factors. The land transportation for other regions were calculated using each region transportation cost and monetary based regional emission factors, which were derived from transportation weight and transportation cost of above described major regions cases. Marine transportation emissions were calculated based on the total number of transportation containers used across the Group and the applicable emission factors. Emission factors were obtained from How to Calculate and Manage CO2 Emissions from Ocean Transport A Clean Cargo Working Group (CCWG) Guide February 2015 (BSR).
Category 5 Waste Generated in Operations	GHG emissions for Category 5 were calculated by multiplying the amount of waste generated for each waste type by the corresponding emission factor. For waste generated in Japan, emission factors were obtained from the Emission Factor Database on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain Ver. 3.5 (Ministry of the Environment, Japan). For waste generated outside Japan, emission factors from Managed LCA Content Ver. 2025.2 (Sphera) were used. For recycled waste, the emission factor for plastic recycling in Managed LCA Content Ver. 2025.2 (Sphera) was used as a representative value.
Category 6 Business Travel	GHG emissions for Category 6 were calculated by multiplying the number of employees by the applicable emission factor. Emission factors were obtained from the Emission Factor Database on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain Ver. 3.5 (Ministry of the Environment, Japan).
Category 7 Employee Commuting	GHG emissions for Category 7 were calculated by multiplying the number of employees at each site by the applicable emission factor. Emission factors were obtained from the Emission Factor Database on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain Ver. 3.5 (Ministry of the Environment, Japan).

The quantification of greenhouse gas emissions is subject to uncertainties associated with the measurement of activity data, the determination of emission factors, and scientific uncertainties relating to the determination of global warming potentials (GWPs).