GHG (Greenhouse Gas) Emissions 2024

GHG Emissions (Scopes 1 and 2)

[Unit: t-CO_2e]

Scope		FY2020*3	FY2021*3	FY2022*3	FY2023*3	FY2024*3
Total*4: Scope 1 and Scope 2 Market-based		11,475	8,518	9,472	8,811	8,134
Scope 1*1		5,276	3,395	3,771	3,713	3,458
	Japan	1,867	1,622	1,525	1,501	1,478
	Overseas	3,409	1,773	2,245	2,211	1,979
Scope 2*2: Location-based		5,559	4,999	4,961	4,777	4,682
	Japan	4,014	3,636	3,587	3,430	3,366
	Overseas	1,545	1,363	1,374	1,348	1,317
Scope 2*2: Market-based		6,199	5,123	5,702	5,099	4,677
	Japan	4,654	3,760	4,327	3,751	3,360
	Overseas	1,545	1,363	1,374	1,348	1,317

*1. Direct GHG emissions: City gas, LPG, Natural gas, Kerosene, Bunker A, Gasoline, Diesel oil, Non-energy GHG, etc.

*2. Indirect GHG emissions: Electricity

*3. Fiscal year: From April 1st to March 31st of the following year

*4. Total: The total numbers may not be consistent due to rounding.

[Calculation Target]

Riso Group:

RISO KAGAKU CORPORATION (Head office and domestic sales, production, and development bases), domestic sales subsidiaries, overseas manufacturing subsidiaries, overseas sales subsidiaries

[Calculation Bases]

Calculation method:

We referred to the "Greenhouse Gas Emissions Calculation and Reporting Manual" published by the Ministry of the Environment and the Ministry of Economy, Trade and Industry.

Emission factor:

Scope 1

＜Japan＞ We used values from the "List of Calculation Methods and Emission Factors in the Accounting, Reporting, and Publication System" published by the Ministry of the Environment.

＜Overseas＞ We used values from the "LCI Database AIST-IDEA Ver.3.4" published by the IDEA Laboratory, the Research Institute of Science for Safety and Sustainability, the National Institute of Advanced Industrial Science and Technology.

Scope 2

＜Japan＞ For the location base, we used the national average emission factor from the "Emission Factor for Each Electric Power Company" published by the Ministry of the Environment. For the market base, we used the adjusted emission factor from the "Emission Factors by Each Electric Power Company" of an electric power company contracted at each site. When we could not identify the electric power company, we used the national average emission factor.

＜Overseas＞ We used values of each country from the "LCI Database AIST-IDEA Ver.3.4" published by the IDEA Laboratory, the Research Institute of Science for Safety and Sustainability, the National Institute of Advanced Industrial Science and Technology.

Global Warming Potential：

＜Japan＞ We used the 100-year Global Warming Potential from the IPCC Sixth Assessment Report.

＜Overseas＞ We used the IPCC 2021 GWP 100a without LULUCF.

[Notes]

The calculation bases are different from those in the "GHG (Greenhouse Gas) Emissions 2023" published in 2023.

GHG Emissions (Scope 3)

[Unit: t-CO_2e]

Category	Overview	Target	Calculation Method	FY2023*1
Total*2 : Scope 3				127,373
1	Purchased goods and services	Manufactured and sold Equipment, and related consumables	For manufactured equipment and consumables, calculate by multiplying the total amount of constituent materials by the emission intensity. For purchased items, calculate by multiplying the purchase price by the emission intensity of the items.	96,694
2	Capital goods	RISO Group's capital investment	Calculate by multiplying the amount of new equipment in the fiscal year by the emission intensity.	3,756
3	Fuel- and energy-related activities not included in Scope 1 or 2	Amount of purchased electricity and fuel	Calculate by multiplying the amount of purchased fuel, electricity, heat, etc. by the emission intensity from the resource extraction stage to the transportation stage.	1,784
4	Upstream transportation and distribution	Logistics volume of the manufacture in the printing equipment business, sales and related consumables	Calculate by multiplying the amount of shipment according to transportation methods by the transportation distance, and then by the emission intensity according to the transportation methods.	1,353
5	Waste generated in operations	Emissions according to waste types	Calculate by multiplying the amount of shipment to waste treatment/recycling companies by the emission intensity.	367
6	Business travel	Number of RISO Group employees	Calculate by multiplying the number of employees who traveled on business by the emission intensity per employee.	365
7	Employee commuting	Number of RISO Group employees and number of working days	Calculate by multiplying the number of working days by the emission intensity per employee.	657
8	Upstream leased assets	Not applicable (included in Scope 2)	–	–
9	Downstream transportation and distribution	Transportation of equipment and consumables from shipping bases to locations where they are used, and from the locations where they are used to collection bases and processing facilities.	Calculate by multiplying the amount of shipment according to transportation methods by the transportation distance, and by the emission intensity according to the transportation methods.	18,621
10	Processing of sold products	No applicable cases	–	–
11	Use of sold products	Number of products sold in the fiscal year	Calculate by multiplying the number of products sold in each region by the emission intensity of electricity by region.	734
12	End-of -life treatment of sold products	Equipment and consumables that have exceeded their lifespan	Calculate by multiplying the quantity to be disposed of by the collection rate, and then by the emission intensity according to the treatment.	2,905
13	Downstream leased assets	Energy consumption of leased real estate properties	Calculate by multiplying the leased assets by the emission intensity of energy consumption.	136
14	Franchises	No applicable cases	–	–
15	Investments	No applicable cases	–	–

*1. Fiscal year : A year from April 1st to March 31st of the following year.

*2. Total : The total numbers may not be consistent due to rounding.

［Calculation Bases］

Calculation method:

We referred to the "Basic Guidelines for Calculating Greenhouse Gas Emissions through the Supply Chain Ver. 2.4" published by the Ministry of the Environment and the Ministry of Economy, Trade and Industry.

Calculation tool：

We used “Scope 3: Calculation Tool-2024 Edition” published by LCA Promotion Consortium, the National Institute of Advanced Industrial Science and Technology.

Emission intensity:

① We used the “LCI Database AIST-IDEA Ver.3.4" published by the IDEA Laboratory, the Research Institute of Science for Safety and Sustainability, the National Institute of Advanced Industrial Science and Technology.

② We used the "Database of Emissions per Unit for Calculating Greenhouse Gas Emissions, etc. from Organizations through the Supply Chain (Ver.3.4)" published by the Ministry of the Environment.

Global Warming Potential:

We used the IPCC 2021 GWP 100a without LULUCF.

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