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Regarding the Explanatory Notes:

Note: Explaining the increase and decrease of individual passages

† : Comments on the entire chart

*: Definition of words

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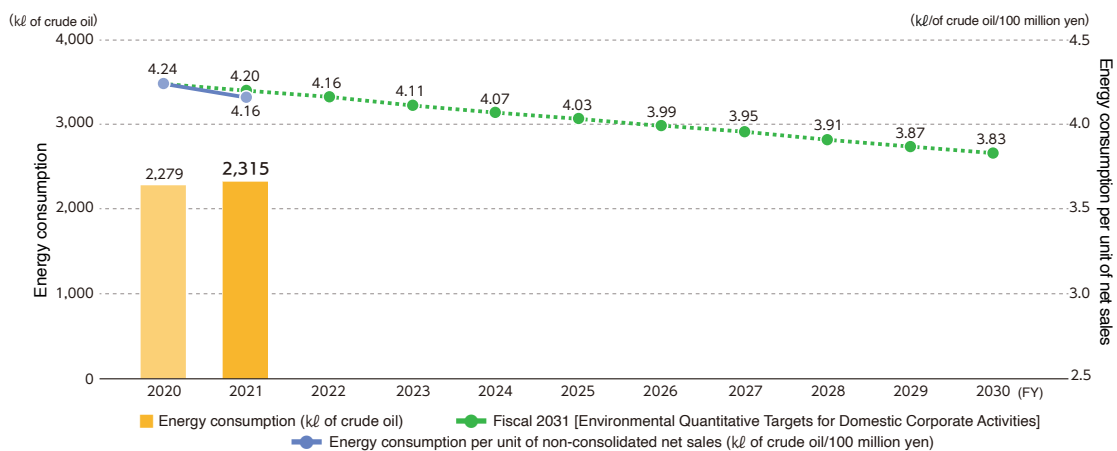
Progress on Fiscal 2031 Environmental Quantitative Targets

Based on “The Electrical and Electronics Industries ‘Carbon Neutrality Action Plan’” proposed by the industrial community with the aim of reconciling corporate growth and global warming policies, we have set quantitative targets for each fiscal year and are managing the progress of measures to curtail environmental impacts in order to achieve the fiscal 2031 environmental quantitative targets.

“Promotion for Energy Saving” through domestic corporate activities

Throughout Japan, reduce the energy consumption per unit by 9.56% in fiscal 2031 compared to the base year (Fiscal 2021). (Reduce the energy consumption per unit of non-consolidated net sales to 3.83 kℓ of crude oil/100 million yen or less in fiscal 2031.) The yearly average improvement in the energy consumption per unit of net sales is set at 1%.

Figure 1 Changes in Energy Consumption and Energy Consumption Per Unit of Net Sales by Domestic Corporate Activities



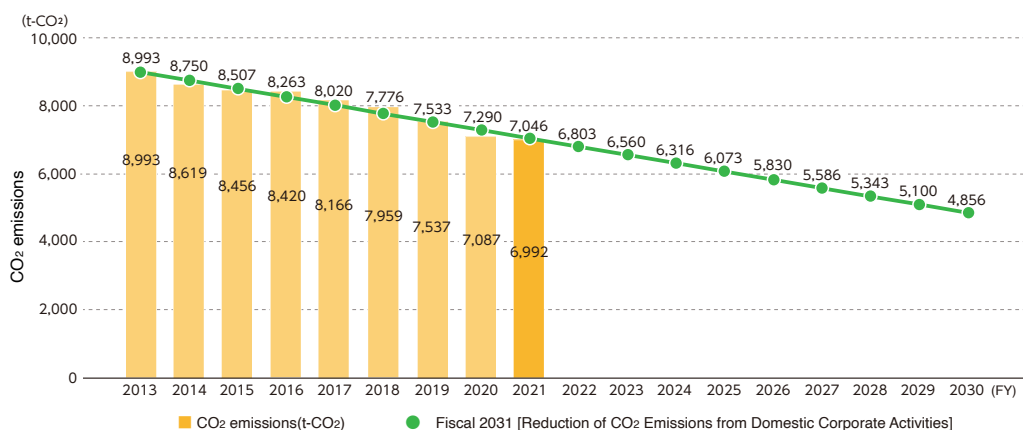
Scope of calculation: Energy consumption at all of RISO KAGAKU CORPORATION'S non-consolidated domestic sites (excluding fuel used for outsourced logistics and company-owned vehicles). Net sales refer to non-consolidated net sales. We reviewed the scope of calculation for setting the environmental quantitative targets for fiscal 2031.

Taking on “the Challenge for Reducing CO₂” through domestic corporate activities (non-binding targets)

Throughout Japan:

- 1) Reduction of energy-originated CO₂ emissions at domestic sites; and
- 2) Challenging to reduce them by around 46% compared to the base year (fiscal 2014)

Figure 2 Changes in CO₂ Emissions from Domestic Corporate Activities



Scope of calculation: Energy consumption of all domestic sites, fuel consumption of company-owned vehicles, outsourced logistics for products and services under the jurisdiction of the logistics department, and CO₂ emissions in conjunction with those. Net sales refer to non-consolidated net sales. We reviewed the scope of calculation for setting the environmental quantitative targets for fiscal 2031.

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Figure 3 Fiscal 2022 Environmental Quantitative Targets and Achievements; Fiscal 2023 Environmental Quantitative Targets

Category	Reduction of CO ₂ emissions		
Scope of application	All domestic operations and overseas production subsidiaries	All domestic operations	Total for all domestic production sites
Fiscal 2022 Environmental Quantitative Targets	Reduce to 8,398 tons-CO ₂ or less.	Reduce to 7,368 tons-CO ₂ or less.	Reduce to 2,691 tons-CO ₂ or less.
Fiscal 2022 Activity Results	7,852 tons-CO ₂	6,880 tons-CO ₂ Note 1	2,619 tons-CO ₂
Rating	○	○	○
Fiscal 2023 Environmental Quantitative Targets	Reduce to 7,995 tons-CO ₂ or less.	Reduce to 7,027 tons-CO ₂ or less.	Reduce to 2,593 tons-CO ₂ or less.

Rating symbols: ○: Achieved; △: Improved; ×: Not Achieved

Note 1 The difference from the CO₂ emissions in fiscal 2022 (7,453 tons-CO₂/year) in Figure 4 occurred because this amount includes contracted transport whose scope of calculation in Figure 4 is not under the jurisdiction of the logistics department.

KEY POINT

In fiscal 2022, we continued to update energy-efficient equipment such as air conditioners or lighting; however, we didn't make proactive investment with equipment that would make great reduction of CO₂ emissions.

CO₂ emissions nationwide increased by 95 tons-CO₂ compared to fiscal 2021 due to increased production activities.

We will try to reduce CO₂ emissions by using reusable energy or introducing non-conventional approaches.

Figure 4 Environmental Burden throughout Japan (Fiscal 2022)

	INPUT			OUTPUT					
	FY2021	FY2022	Compared to FY2021	FY2021	FY2022	Compared to FY2021			
Energy consumption and CO₂ emissions, resource input amount, waste generation, etc. in all business activities within Japan									
Energy consumption	GJ/yr	127,444	125,129	98	CO ₂ emissions	t-CO ₂ /yr	7,623	7,453	98
Electricity	MWh	8,157	8,266	101	Electricity	t-CO ₂ /yr	4,527	4,588	101
Bunker A	kℓ	32	36	113	Bunker A	t-CO ₂ /yr	86	97	113
LPG	t	91	91	101	LPG	t-CO ₂ /yr	273	274	101
Kerosene	kℓ	0	0	—	Kerosene	t-CO ₂ /yr	0	0	—
City gas	1,000 m ³	49	53	108	City gas	t-CO ₂ /yr	109	115	105
Gasoline	kℓ	453	415	92	Gasoline	t-CO ₂ /yr	1,072	982	92
Diesel	kℓ	1	1	95	Diesel	t-CO ₂ /yr	2	1	95
Volume of contracted transport*6	10,000 t-km	771	733	95	Volume of contracted transport*6	t-CO ₂ /yr	1,554	1,396	90
Water consumption	m ³	22,570	22,722	101	Water drainage	m ³	20,466	20,188	99
					Steam, water, and related emissions	m ³	0	0	—
Product parts and materials	t	6,200	5,079	82	Products*5	t	8,403	7,489	89
Collection of used products	t	2,561	2,286	89	Used product/waste disposal volume*1	t	3,386	3,071	91
					Volume transferred to recycling processes*7	t	163	191	117
					Volume recycled*2	t	3,193	2,856	89
					Other*3	t	1	1	93
					Final disposal (landfill)*4	t	28	24	85

Scope of calculation: INPUT and OUTPUT in the Figure 5 "Environmental Burden in Japan by Operational Process (Fiscal 2021)" (p4) are calculated.

Calculation target: At the head office, sales, development/designs and production sites, energy consumption and associated CO₂ emissions, water consumption and water drainage, and waste generation; at production sites, material input in production; at domestic logistics and transportation sites, fuel consumption by company-owned vehicle operations, and contracted transport volume (from not only the logistics department but also others), and associated CO₂ emissions; at sites of collection, reuse and recycling, volumes of used products collected and waste generation.

*1 Waste generation: RISO classifies all unwanted substances generated from its operational processes, including valuable resources and resources to be recycled or reused, as waste.

*2 Volume recycled: Total volume of materials for recycling and thermal recycling, including valuable resources. The volume to be reused in operational processes is excluded.

*3 Other (waste generation): The volume of gas emissions from recycling processing and incineration.

*4 Final disposal (landfill): The volume to be disposed of in landfill sites, which includes residues and incinerated ash from intermediate processing such as recycling.

*5 Major products: ComColor high-speed color printers, RISOGRAH digital duplicators, and inks, masters, and other supply products for ComColor and RISOGRAH.

*6 Volume of contracted transport using external carriers: Volume of contracted transport (for delivery, procurement, collection, etc.) of products, parts, used products, and waste.

*7 Volume transferred to recycling processes: The amount of recycled materials to be reused as raw materials in operational processes.

 ● CO₂ Emissions Calculations

Electricity: For Japan, a conversion value of 0.555kg-CO₂/kWh was used throughout the year, and for overseas, conversion values in IEA statistical data for each country were applied.

Bunker A: 2.71 kg CO₂/L LPG: 3.00 kg CO₂/kg Gasoline: 2.32 kg CO₂/L Volume of contracted transport: According to the calculation standards of Act on the Rational Use of Energy.

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Figure 5 Environmental Burden in Japan by Operational Process (Fiscal 2022)

Operational process	INPUT				OUTPUT					
		FY2021	FY2022	Compared to FY21		FY2021	FY2022	Compared to FY21		
Head Office and Sales Scope of calculation: The head office and domestic sales bases of RISO KAGAKU CORPORATION and RISO OKINAWA CORPORATION (Data on wastes are available only for the head office.)	Energy consumption and CO₂ emissions from the head office and sales department service activities									
	Energy consumption	GJ/yr	21,835 <small>Note 1</small>	20,594	94	CO ₂ emissions	t-CO ₂ /yr	1,204 <small>Note 1</small>	1,134	94
	Daytime electricity	MWh	1,978 <small>Note 1</small>	1,843	93	Daytime electricity	t-CO ₂ /yr	1,098 <small>Note 1</small>	1,023	93
	LPG	t	3	3	104	LPG	t-CO ₂ /yr	8	9	104
	Kerosene	kℓ	0	0	—	Kerosene	t-CO ₂ /yr	0	0	—
	City gas	1,000 m ³	44 <small>Note 1</small>	48	109	City gas	t-CO ₂ /yr	98 <small>Note 1</small>	103	105
	Water consumption	m ³	3,182	2,966	93	Water drainage	m ³	3,182	2,966	93
Design and Development Scope of calculation: RISO R&D Center	Energy consumption and CO₂ emissions at the product development stage									
	Energy consumption	GJ/yr	22,062	23,382	106	CO ₂ emissions	t-CO ₂ /yr	1,251 <small>Note 1</small>	1,326	106
	Daytime electricity	MWh	1,610	1,698	105	Daytime electricity	t-CO ₂ /yr	894 <small>Note 1</small>	942	105
	Nighttime electricity	MWh	623	669	108	Nighttime electricity	t-CO ₂ /yr	346	372	108
	LPG	t	0	0	—	LPG	t-CO ₂ /yr	0	0	—
	City gas	1,000 m ³	5	5	104	City gas	t-CO ₂ /yr	12	12	104
	Water consumption	m ³	6,258	6,438	103	Water drainage	m ³	6,258	6,438	103
Production Scope of calculation: Tsukuba Works Ube Works Kasumigaura Works	Volume of raw materials used, energy consumption, CO₂ emissions, and waste generation in the process of major product**5 manufacturing									
	Energy consumption	GJ/yr	44,790	46,061	103	CO ₂ emissions	t-CO ₂ /yr	2,540	2,613	103
	Daytime electricity	MWh	3,558	3,674	103	Daytime electricity	t-CO ₂ /yr	1,975	2,039	103
	Nighttime electricity	MWh	389	381	98	Nighttime electricity	t-CO ₂ /yr	216	212	98
	Bunker A	kℓ	32	36	113	Bunker A	t-CO ₂ /yr	86	97	113
	LPG	t	88	88	100	LPG	t-CO ₂ /yr	264	265	100
	Kerosene	kℓ	0	0	—	Kerosene	t-CO ₂ /yr	0	0	—
	Water consumption	m ³	13,130	13,102	100	Water drainage	m ³	11,026	10,784	98
	Product parts and materials	t	6,200	5,079	82	Steam, water, and related emissions	m ³	0	0	—
	Metals	t	774	728	94	Products*5	t	8,403	7,489	89
	Plastic	t	832	893	107	Total PRTR substance emissions/transfers Emissions into the air Emissions into the waters Emissions into the soil Volume transferred to waste	kg 0 0 0 105 <small>Note 2</small>	0 0 0 93.3	— — — 89	
	Glass	t	0	0	93					
	Paper	t	1,402	1,518	108					
Other	t	3,192	1,940	61						
PRTR-regulated substances	t	2.0	2.7	137	Waste generation*1	t	699	656	94	
Sales, Logistics, and Transportation Scope of calculation: Logistics and transportation in Japan, operation of company-owned vehicles	Fuel consumption and CO₂ emissions from company-owned vehicles used in sales activities and maintenance services for customers, and energy consumption and CO₂ emissions from contracted transport such as product delivery and used product collection and transportation are calculated.									
	Energy consumption	GJ/yr	38,757	35,091	91	CO ₂ emissions	t-CO ₂ /yr	2,628	2,380	91
	Gasoline	kℓ	453	415	92	Gasoline	t-CO ₂ /yr	1,072	982	92
	Diesel	kℓ	1	1	95	Diesel	t-CO ₂ /yr	2	1	95
	Volume of contracted transport*6	10,000 t-km	771	733	95	Volume of contracted transport*6	t-CO ₂ /yr	1,554	1,396	90
	Collecting, Reusing, and Recycling Scope of calculation: Used products in Japan	Volumes of used products collected, reused, and recycled. Although RISO promotes the effective use of collected products, some collected products that cannot be recycled are processed for landfill disposal.								
		Collection of used products	t	2,561	2,286	89	Used product disposal volume	t	2,561	2,286
Digital duplicators and other printers		t	2,297	2,029	88	Volume transferred to recycling processes*7	t	163	191	117
Ink bottles		t	236	231	98	Volume recycled*2	t	2,373	2,074	87
Ink cartridges		t	28	26	93	Other*3	t	0	0	—
					Final disposal (landfill)*4	t	24	21	87	

*1 Waste generation: RISO classifies all unwanted substances generated from its operational processes, including valuable resources and resources to be recycled or reused, as waste.

*2 Volume recycled: Total volume of materials for recycling and thermal recycling, including valuable resources. The volume to be reused in operational processes is excluded.

*3 Other (waste generation): The volume of gas emissions from recycling processing and incineration.

*4 Final disposal (landfill): The volume to be disposed of in landfill sites, which includes residues and incinerated ash from intermediate processing such as recycling.

*5 Major products: ComColor high-speed color printers, RISOGRAPH digital duplicators, and inks, masters, and other supply products for ComColor and RISOGRAPH digital duplicators.

*6 Volume of contracted transport using external carriers: Volume of contracted transport (for delivery, procurement, collection, etc.) of products, parts, used products, and waste.

*7 Volume transferred to recycling processes: The amount of recycled materials to be reused as raw materials in operational processes.

Note 1 The scope of calculation was changed.

Note 2 There were errors in the figures for fiscal 2021 and accordingly, they have been corrected.

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Figure 6 Environmental Burden of Overseas Production Bases (Fiscal 2022)

Target	INPUT				OUTPUT					
		FY2021	FY2022	Compared to FY21		FY2021	FY2022	Compared to FY21		
Overseas production subsidiaries Scope of calculation: All overseas production bases of the Riso Kagaku Group: RISO TECHNOLOGY CHINA CO., LTD. ZHUHAI FACTORY, RISO TECHNOLOGY CHINA CO., LTD., RISO INDUSTRIES (SHENZHEN) LTD., RISO INDUSTRY SHANGHAI CO., LTD., RISO INDUSTRY (THAILAND) CO., LTD.	Volume of raw materials used, energy consumption, CO₂ emissions, and waste generation in overseas production subsidiaries									
	Energy consumption	GJ/yr	13,998 ^{Note 1}	14,056	100	CO ₂ emissions	t-CO ₂ /yr	977	972	99
	Electricity	MWh	1,321	1,331	101	Electricity	t-CO ₂ /yr	921	919	100
	Bunker A	kℓ	0	0	—	Bunker A	t-CO ₂ /yr	0	0	—
	Gasoline	kℓ	20 ^{Note 1}	19	94	Gasoline	t-CO ₂ /yr	47 ^{Note 1}	44	94
	Diesel	kℓ	3 ^{Note 1}	3	104	Diesel	t-CO ₂ /yr	9 ^{Note 1}	9	104
	Water consumption	m ³	13,890 ^{Note 1}	15,340	110	Water drainage	m ³	10,638	11,732	110
	Product parts and materials	t	1,935 ^{Note 1}	1,994	103	Steam, water, and related emissions	m ³	2,635 ^{Note 1}	2,954	112
	Metals	t	891	896	101	Products*5	t	2,551 ^{Note 1}	2,649	104
	Plastic	t	341 ^{Note 1}	352	103	Waste generation*1	t	213	201	94
	Glass	t	0	0	—	Volume transferred to recycling processes*7	t	0	0	—
	Paper	t	357	383	107	Volume recycled*2	t	181	168	93
	Other	t	346	363	105	Other*3	t	11.3	11.3	100
						Final disposal (landfill)*4	t	20.6	21.6	105

Figure 7 Environmental Burden of Overseas Sales Subsidiaries (Fiscal 2022)

Target	INPUT				OUTPUT					
		FY2021	FY2022	Compared to FY21		FY2021	FY2022	Compared to FY21		
All overseas sales subsidiaries Scope of calculation: 17 overseas subsidiaries [†] and sales bases*8	Energy consumption and CO₂ emissions at the head office and sales bases of overseas subsidiaries									
	Energy consumption per unit	GJ/person*9	42.7 ^{Note 2}	57.4	134	CO ₂ emissions per unit	t-CO ₂ /person*9	2.89 ^{Note 2}	3.62	125
	Energy consumption	GJ/yr	31,200 ^{Note 2}	39,886	128	CO ₂ emissions	t-CO ₂ /yr	2,111 ^{Note 2}	2,516	119
	Electricity	MWh	1,010 ^{Note 2}	1,293	128	Electricity	t-CO ₂ /yr	696 ^{Note 2}	707	102
	Natural gas	kℓ	9,000	10,323	115	Natural gas	t-CO ₂ /yr	19	21	111
	Gasoline	kℓ	478 ^{Note 2}	591	124	Gasoline	t-CO ₂ /yr	1,110 ^{Note 2}	1,371	124
	Diesel	kℓ	111 ^{Note 2}	162	146	Diesel	t-CO ₂ /yr	286 ^{Note 2}	417	146
	Water consumption	m ³	758 ^{Note 2}	592	78	Water drainage	m ³	758 ^{Note 2}	592	78

† RISO, INC., RISO FRANCE S.A., RISO (Deutschland) GmbH, RISO (U.K.) LTD., RISO IBERICA, S.A., RISOGRAPH ITALIA S.R.L., RISO AFRICA (PTY) LTD., RISO KOREA LTD., RISO HONG KONG LTD., RISO (Thailand) CO., LTD., RISO INDIA PRIVATE LTD., RISO TECHNOLOGY CHINA CO., LTD., RISO LATIN AMERICA, INC., RISO EURASIA LLC, RISO TURKEY BASKI COZUMLERI A.S, RISO (SG) PTE. LTD., RISO EURASIA KAZAKHSTAN LLC.

*1 Waste generation: RISO classifies all unwanted substances generated from its operational processes, including valuable resources and resources to be recycled or reused, as waste.

*2 Volume recycled: Total volume of materials for recycling and thermal recycling, including valuable resources. The volume to be reused in operational processes is excluded.

*3 Other (waste generation): The volume of gas emissions from recycling processing and incineration.

*4 Final disposal (landfill): The volume to be disposed of in landfill sites, which includes residues and incinerated ash from intermediate processing such as recycling.

*5 Major products: ComColor high-speed color printers, RISOGRAPH digital duplicators, and inks, masters, and other supply products for ComColor and RISOGRAPH digital duplicators.

*6 Volume of contracted transport using external carriers: Volume of contracted transport (for delivery, procurement, collection, etc.) of products, parts, used products, and waste.

*7 Volume transferred to recycling processes: The amount of recycled materials to be reused as raw materials in operational processes.

*8 The head office has primary responsibility for ascertaining the environmental burden of overseas sales subsidiaries, but data collection for sales bases such as branch offices is incomplete. The data supplement rate based on the ratio of employees registered at offices/bases in fiscal 2021 was 53.5%.

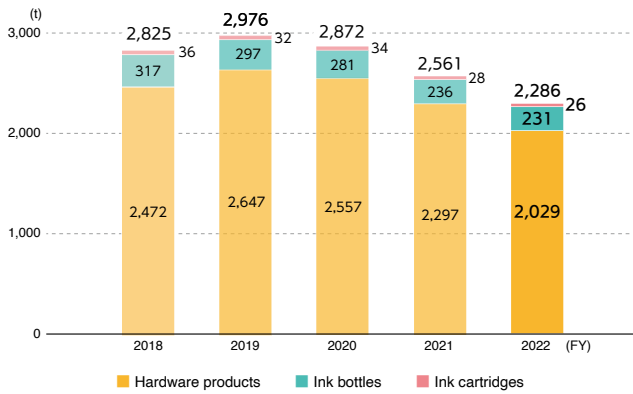
*9 Concerning overseas sales subsidiaries, because there are large fluctuations in topics such as office movement, the increase and decrease of personnel, and the propriety of surveys, the output level is calculated using the total number of employees belonging to the site where the survey was conducted as the denominator, and represents the change in efficiency.

^{Note 1} There were errors in the figures for fiscal 2021 and accordingly, they have been corrected.

^{Note 2} There were changes in the scope of calculation and accordingly, it has been corrected.

Environmental Data

Figure 8 Quantity of Used Products and Consumables Collected

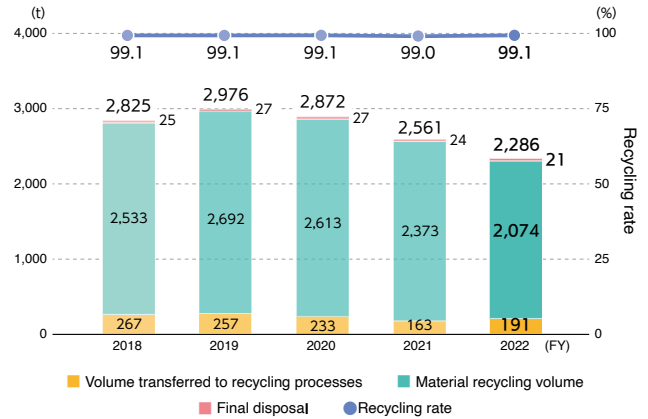


Scope of calculation: The amount of used RISO products in Japan (excluding second-hand digital duplicators that are returned or collected and then used as rental equipment)

KEY POINT

We are actively carrying out the collection and recycling of used hardware products and consumables based on the idea that used products are not wastes but precious resources. Even overseas, we are promoting the collection and recycling of used products based on local laws and social demands.

Figure 9 Recycling of Used Products and Recycling Rate

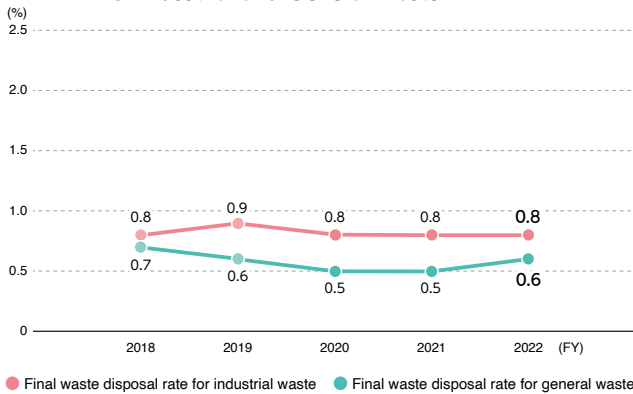


Scope of calculation: The amount of used RISO products in Japan (excluding second-hand digital duplicators that are returned or collected and then used as rental equipment)

KEY POINT

We continue to use products recycled from used products and to recycle parts and components which can't be reused.

Figure 10 Specific Final Waste Disposal Rates* for Industrial and General Waste



Scope of calculation: Industrial and general waste (including valuable resources and recyclable materials) generated at the Tsukuba Works, Ube Works, Kasumigaura Works, and R&D Division; volume of all used RISO products collected in Japan, materials recycled, and materials for other treatment processes (excluding rental equipment returned or reused by different users without refurbishment)

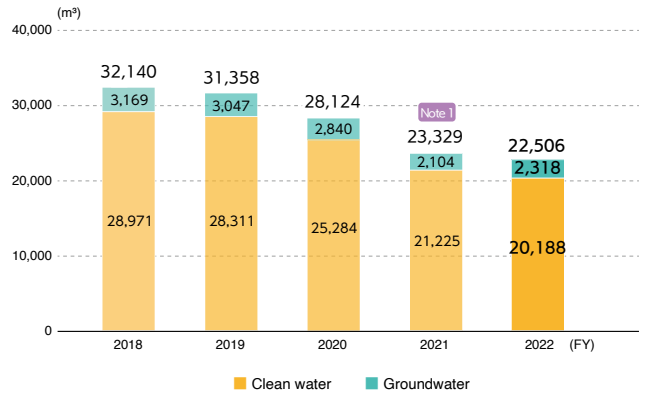
*Specific final waste disposal rate: RISO calculates the amount of specific final waste disposal as the total of the amount of waste incinerated, the residue and ashes resulting from recycling processes and used for landfill, and other waste used directly for landfill. Then, RISO calculates the specific final waste disposal rate as the ratio of the specific final waste disposal amount to the total waste it generates, including valuable and recyclable substances. RISO recognizes the incineration of waste as an inefficient treatment of resources. Therefore, the amount of waste incinerated is included in the amount of other waste directly used for landfill.

Target for fiscal 2023 for reducing waste:
The final waste disposal rate for industrial waste and general waste will not exceed 1.0%.

KEY POINT

Maintenance and management are being performed so that specific final waste disposal rates for industrial and general waste do not exceed current levels.

Figure 11 Water Consumption



Scope of calculation: Data is collected for water consumption volume in Japan.

Target for fiscal 2023:
The water consumption will reduce by 3% or higher from the previous fiscal year.

Note 1 The scope of calculation was changed.

KEY POINT

Approximately 10% of the water used at production sites are for raw materials and raw water for boiler steam, and the remaining 90% of water are for daily use such as toilets and dining halls. This water is discharged into the public waters and the sewage systems.
The amount used in fiscal 2022 decreased by approximately 823m³ (approximately 4%) from the previous fiscal year.

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Figure 12 Breakdown of Released and Transferred Volume of PRTR-Designated Chemical Substances

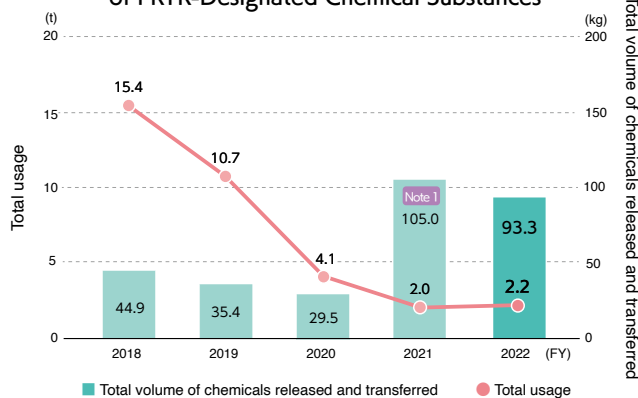
(kg)

	Total usage		Total volume of chemicals released and transferred									
	FY2021	FY2022	Emissions into the air		Emissions into the waters		Emissions into the soil		Waste generated			
			FY2021	FY2022	FY2021	FY2022	FY2021	FY2022	FY2021	FY2022		
Polyoxyethylene alkyl ether	109.9	124.3	—	—	—	—	—	—	—	—	—	—
BHT	180.0	160.0	16.0	16.0	—	—	—	—	—	—	16.0	16.0
Molybdenum and its compounds	83.6	115.2	—	—	—	—	—	—	—	—	—	—
2,3-Epoxypropyl methacrylate	1,555.1	1,724.5	37.0 <small>Note 1</small>	36.0	—	—	—	—	—	—	37.0 <small>Note 1</small>	36.0
2-Ethylhexanoic acid	3.4	20.4	—	17.0	—	—	—	—	—	—	—	17.0
Cobalt and its compounds	12.4	0.0	12.4 <small>Note 1</small>	0.0	—	—	—	—	—	—	12.4 <small>Note 1</small>	0.0
Methacrylic acid	1.5	1.5	1.5 <small>Note 1</small>	1.5	—	—	—	—	—	—	1.5 <small>Note 1</small>	1.5
Acetonitrile	35.1	17.3	35.1 <small>Note 1</small>	17.3	—	—	—	—	—	—	35.1 <small>Note 1</small>	17.3
Methyl methacrylate	2.0	1.5	2.0	1.5	—	—	—	—	—	—	2.0	1.5
Xylene	0.5	1.5	0.5 <small>Note 1</small>	1.5	—	—	—	—	—	—	0.5 <small>Note 1</small>	1.5
Ethylbenzene	0.5	1.5	0.5 <small>Note 1</small>	1.5	—	—	—	—	—	—	0.5 <small>Note 1</small>	1.5
Hexamethylene diacrylate	—	1.0	—	1.0	—	—	—	—	—	—	—	1.0
Total	1,984.1	2,168.8	105.0 <small>Note 1</small>	93.3	—	—	—	—	—	—	105.0 <small>Note 1</small>	93.3

Scope of calculation: Tsukuba Works, Ube Works, Kasumigaura Works, and RISO R&D Center

† Data based on the results of environmental inspections with regard to the release and transfer of substances that RISO handled 1 kg or more in weight on an annual basis.

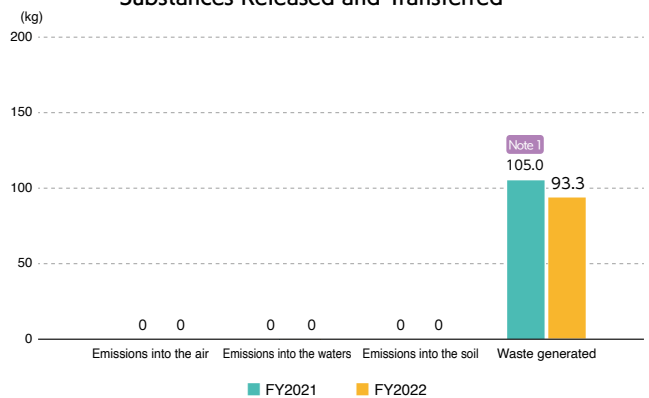
Figure 13 Consumption, Release and Transfer of PRTR-Designated Chemical Substances



Scope of calculation: Tsukuba Works, Ube Works, Kasumigaura Works, and RISO R&D Center

† Data based on the results of environmental inspections with regard to the release and transfer of substances that RISO handled 1 kg or more in weight on an annual basis.

Figure 14 Volume of PRTR-Designated Chemical Substances Released and Transferred



Scope of calculation: Tsukuba Works, Ube Works, Kasumigaura Works, and RISO R&D Center

† Data based on the results of environmental inspections with regard to the release and transfer of substances that RISO handled 1 kg or more in weight on an annual basis.

Note 1 There were errors in the figures for fiscal 2021 and accordingly, they have been corrected.

KEY POINT

We are investigating the environmental release and transfer of toxic chemicals listed in PRTR*. Based on this investigation, we examine the possibility of reducing toxic releases, or switching to alternatives, so that total releases and transfers during the manufacturing process are minimized.

Total usage of PRTR-designated chemical substances in fiscal 2022 was 2.2 tons, an increase of 0.2 tons compared with the previous fiscal year. Total volume of release and transfer decreased by 0.01 tons.

By constantly considering the use of alternative substances, we continue to strive to reduce the use of PRTR-listed substances.

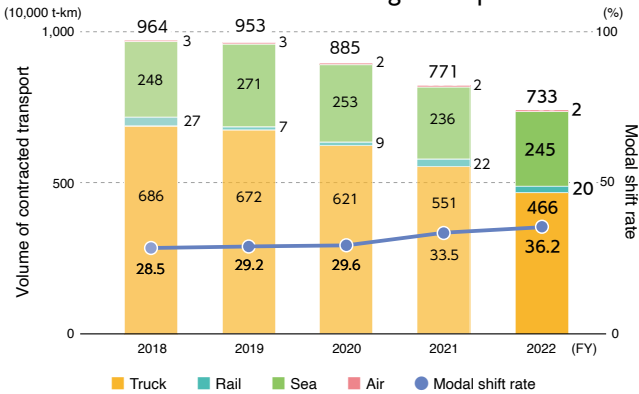
Target for fiscal 2023 for reducing PRTR-designated chemical substances:

The total of PRTR-designated chemical substances released and transferred will reduce by 5% or higher from the previous fiscal year.

*PRTR (Pollutant Release and Transfer Register): A system whereby business operators ascertain the volumes of chemical substances that may pollute the environment (atmosphere, water, soil) as well as the volumes transferred as waste, report the results to an administrative body, and disclose the results to promote the voluntary management by business operators and prevent impediments to environmental preservation.

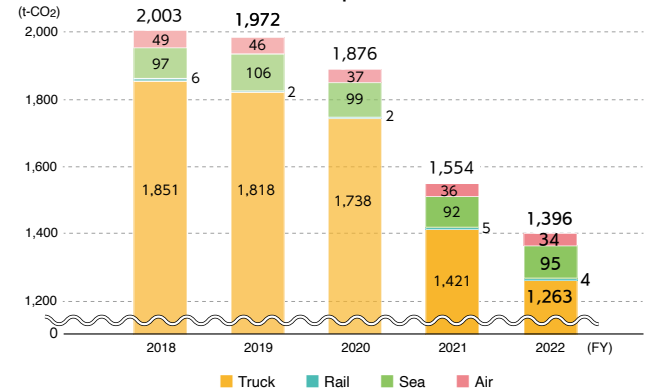
Environmental Data

Figure 15 Breakdown of Contracted Transport Volume and Modal Shift Rate throughout Japan



Scope of calculation: Volume of contracted transport (of products, components, raw materials, waste and used products) in Japan by the logistics department, sales department, plants, and the Center for Recycling

Figure 16 Breakdown of CO₂ Emissions from Contracted Transport



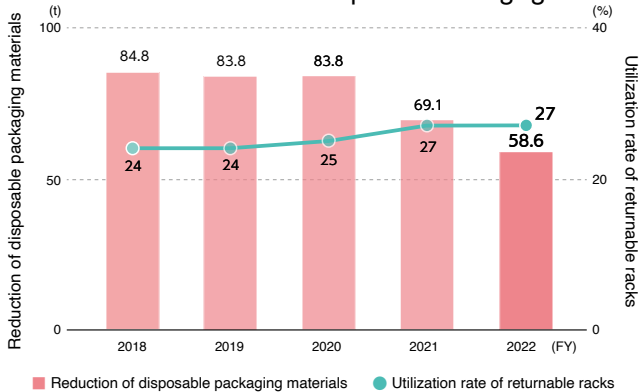
Scope of calculation: CO₂ emissions attributable to contracted transport (of products, components, raw materials, waste and used products) in Japan by the logistics department, sales department, plants, and the Center for Recycling

KEY POINT

Although our company is not included as a designated shipper under the Energy Conservation Act, in order to reduce environmental burden during product transportation, we are working to accurately understand the volume of contracted transport and reduce CO₂ emissions.

In fiscal 2022, we worked hard on a modal shift from trucks to ships for the transportation of consumables. Compared to fiscal 2021, the modal shift rate went from 33.5% to 36.2%, and CO₂ emissions decreased by 158 tons-CO₂, or 10%.

Figure 17 Utilization Rate of Returnable Racks and Reduction in Use of Disposable Packaging



Scope of calculation: Digital duplicators and high-speed color printers shipped from the Tsukuba Distribution Center to RISO's Japanese sales bases, sales representatives, and customers nationwide

KEY POINT

The use of returnable racks for product shipments reduces the volume of disposable packaging materials such as cardboard and polystyrene foam.

The returnable rack usage rate was 27% in fiscal 2022, which is equivalent to a 58.6-ton reduction in packaging materials.

Figure 18 Environmental Education Programs and Number of Participants (Fiscal 2022)

Type of education	Events (times)	Participants (employees)	Hours (aggregate)
Basic environmental education program	15	163	101
Internal auditor training	5	48	320
Environmental policy and EMP confirmation training	1	320	160
Special environmental education program	16	147	131
Accident/emergency drill	10	123	70
Disaster drill	3	96	64
Advanced EMS skill program	3	18	18
Workplace health and safety program	1	4	4
Total	54	919	868

Scope of calculation: Educational and training programs provided at RISO's domestic sites in Japan

† Table includes data for programs with an environmental focus.

KEY POINT

In order to raise the environmental awareness of each employee and carry out environmental conservation activities, a wide variety of programs are provided from general education to specialized trainings regarding internal quality environmental auditors, EMS external qualification, ISO, and so on.

Environmental Accounting

● Calculation method and idea

- Our calculations of the environmental protection costs and the economic effects are basically made in keeping with the "Environmental Account Guidebook (2005)" of the Ministry of the Environment. However, the classification of costs is modified to our own standard. Also, expenses related to environmental protection costs do not include depreciation. The economic effects are based on revenue and cost saving, both of which are considered to be actual effects (as they are calculated using actual figures), and not on presumed or estimated effects.
- Ideally, the environmental protection costs relating to environment-friendly design should be listed in the chart. However, due to the difficulty in accurately distinguishing which costs are directly related to environmental protection, the trend data presented on the securities report is based on total R&D expenditures.

● **Term:** Fiscal 2022 (April 1, 2021 to March 31, 2022)

● **Scope of calculation:** All of RISO KAGAKU CORPORATION'S domestic sites in Japan (Tsukuba Works, Kasumigaura Works, Ube Works, RISO R&D Center, the head office, and domestic sales bases).
For RISO's sales network, "resource conservation and recycling" as well as "EMS establishment and maintenance activities" are included in the scope of calculation.

Figure 19 Environmental Accounting Results for Fiscal 2022

(Thousands of Yen)

Activities	Classification	Environmental protection costs			Environmental protection effect	
		Environmental protection activities	Investment	Cost	Economic effect	Actions
Global warming prevention measures	•Reduction of fuel consumption •Reduction of electricity consumption	•Replacement of boilers with high efficiency models, pursuit of a modal shift strategy •Introduction of energy-saving equipment	1,310	60	150	•Reduction of CO ₂ emissions during manufacture and product transport •Reduction of electricity consumption
Promotion of resource conservation and recycling	•Effective utilization of used products •Effective utilization of wastes •Safe disposal of wastes	•Collection and recycling of used products •Separation and recycling of waste		2,350	279,058	•Reduction of costs through reuse •Improvement of resource recovery rates
Environmental communication	•Publication of product environmental data •Publication of information about environmental initiatives	•Acquisition of environmental label certification •Publication of the Environmental Data Book •Participation in events and exhibitions		4,230		•Acquisition of certification under the Eco Mark Program •Publication of the Environmental Data Book, website revisions, etc.
Green areas	•Clean-up and maintenance of green areas	•Clean-up and maintenance of green areas		2,350		•Clean-up and maintenance of green areas
Legal compliance (pollution control measures, environmental pollution control)	•Compliance activities (water, air, etc.) •Understanding of legal and regulatory trends	•Water drainage management •Gas emissions management •Inspection and maintenance of facilities •Monitoring of laws and regulations		20,887		•Environmental protection activities •Research for and understanding of legal and regulatory trends in Japan and overseas
Green procurement	•Collection and registration of environmental data relating to raw materials and parts	•Implementation of an environmental information system covering REACH and other regulations		7,524		•Environmental information updates, operation and maintenance
EMS establishment and maintenance activities	•ISO	•Acquisition and maintenance of ISO 14001 certification		4,230		•Updates and maintenance of ISO 14001 certification
Total			1,310	338,069	279,208	

Figure 20 Breakdown of Costs (Investment + Actual Costs)

(Thousands of Yen)

	FY2018	FY2019	FY2020	FY2021	FY2022
Global warming prevention measures	50,347	63,672	18,163	1,073	1,370
Promotion of resource conservation and recycling	344,356	391,304	383,016	333,979	291,048
Environmental communication	18,140	21,320	15,153	8,749	11,971
Green areas	3,000	3,000	3,000	2,686	2,350
Legal compliance	29,440	28,657	15,604	18,282	20,887
Green procurement	7,684	7,489	7,484	6,970	7,524
EMS establishment and maintenance activities	9,732	4,765	5,071	9,321	4,230

Figure 21 Breakdown of Economic Effects (Revenue + Cost Saving)

(Thousands of Yen)

	FY2018	FY2019	FY2020	FY2021	FY2022
Global warming prevention measures	1,948	1,142	676	148	150
Promotion of resource conservation and recycling	410,695	414,798	358,227	219,061	279,058

† Five categorized activities, including environmental communication, had no economic effects.

Figure 22 Status of Environmental Accounting

(Comparison of Figures Excluding Development Costs such as Environmental-Friendly Design for Products)

	FY2018	FY2019	FY2020	FY2021	FY2022
Costs (investment + actual costs) (Thousands of Yen)	462,699	520,208	447,491	381,059	339,379
Economic effect (Revenue + Cost saving) (Thousands of Yen)	412,643	415,941	358,903	219,209	279,208
Economic effect ratio (%)	89%	80%	80%	58%	82%

KEY POINT

In fiscal 2022, the cost of global warming prevention measures (investment + actual cost) increased by 297,000 yen in comparison with fiscal 2021. We continued to replace lighting and air conditioning equipment with units that have high energy-saving effects and implement other measures. The positive economic effect increased by 2,000 yen.

The number of used products collected and production using reused parts decreased, but the production volume of reused parts was flat. The cost of resource saving and recycling promotion decreased by 42,931,000 yen. The positive economic effect increased by 59,997,000 yen.

The ratio of cost (investment + actual costs) and economic effects (revenue + cost saving) was 82%.

Environmental Data for Major Plants and Offices

Figure 23

Tsukuba Works

Scope of calculation: Tsukuba Works

Overview

Address 127-7 Fukuda(Fukuda-Kougyou-danchi),
Ami-machi, Inashiki-gun, Ibaraki-ken,
Japan

Site Area 97,000m²
Total Floor Space 29,326m²
Number of Employees 285 (As of March 31, 2022)

Commencement of Operations October 1981

Major Products

RISOGRAPH digital duplicators and peripherals
ComColor high-speed color printers, inks, and peripherals

Registration of Specified Facilities

- Facilities that generate smoke (boilers), as specified under the Air Pollution Control Act
- Facilities specified in the ordinance regarding the prevention of eutrophication in Kasumigaura: Purification tank
- Facilities specified in the Vibration Regulation Law: Hydraulic and mechanical presses, air compressors, shear cutters, circular saw machines

Major Environmental Protection Activities

- ISO 14001: Certification updated in October 2017
- Designing environmentally friendly products to respond to the RoHS Directive and other environmental regulations
- Reduction of CO₂ emissions through energy conservation
- Implementation of green procurement
- Promotion of green purchasing
- Reduction of waste generation and promotion of recycling
- Recycling of used ink bottles



Environmental Data

	Unit	FY2018	FY2019	FY2020	FY2021	FY2022	YoY (%)
Electricity consumption	MWh	2,021	2,066	1,855	1,805	1,816	101
Water consumption	m ³	10,044	10,669	9,737	7,963	7,543	95
Clean water	m ³	10,044	10,669	9,737	7,963	7,543	95
Groundwater	m ³	0	0	0	0	0	—
Water drainage	m ³	10,044	10,669	9,737	7,963	7,543	95
Annual biochemical oxygen demand (BOD) emissions	kg	3.3	0.9	9.7	8.0	8.1	102
Annual nitrogen emissions	kg	95	92	78	72	72	101
Annual phosphorus emissions	kg	9.8	8.2	13.2	4.1	3.8	91 Note 2
Total waste generation	t	555	439	460	397	345	87 Note 1
Final disposal (landfill)	t	3.5	3.3	1.5	1.9	1.6	87 Note 1
Waste recycling rate	%	99.4	99.2	99.7	99.5	99.5	100

† Wastewater from Tsukuba Works is drained into the public waters.

[Note 1](#) Due to decreased production activities

[Note 2](#) The range of variation within the standard value

Figure 24

Kasumigaura Works

Scope of calculation: Kasumigaura Works, including the Center for Recycling

Overview

Address 282-2 Ami, Ami-machi,
Inashiki-gun, Ibaraki-ken, Japan

Site Area 28,265m²
Total Floor Space 16,821m²
Number of Employees 56 (As of March 31, 2022)

Commencement of Operations August 1965

Major Products

Digital duplicators

Registration of Specified Facilities

Facilities as specified under the Noise Regulation Law and the Vibration Regulation Law: machine tools, including compressors and shearing machines

Major Environmental Protection Activities

- ISO 14001: Certification updated in December 2017
- Recycling of used printers
- Reduction of waste generation and promotion of recycling
- Reduction of CO₂ emissions through energy conservation



Environmental Data

	Unit	FY2018	FY2019	FY2020	FY2021	FY2022	YoY (%)
Electricity consumption	MWh	480	511	464	449	443	99
Water consumption	m ³	1,573	1,155	843	843	900	107
Clean water	m ³	1,573	1,155	843	843	900	107
Groundwater	m ³	0	0	0	0	0	—
Water drainage	m ³	1,573	1,155	843	843	900	107
Annual biochemical oxygen demand (BOD) emissions	kg	29	8	5	11	5	48 Note 1
Annual nitrogen emissions	kg	90	49	30	41	40	96
Annual phosphorus emissions	kg	9.9	6.2	4.3	4.8	4.3	90 Note 1
Total waste generation	t	293	256	160	153	139	91
Final disposal (landfill)	t	0.6	2.5	0.3	1.1	0.3	27 Note 2
Waste recycling rate	%	99.8	99.0	99.8	99.2	99.8	101

† Wastewater from Kasumigaura Works is drained into the public sewage systems.

[Note 1](#) The range of variation within the standard value

[Note 2](#) The range of variation of the release frequency

Environmental Data for Major Plants and Offices

Figure 25

Ube Works

Scope of calculation: Ube Works

Overview	Address	Setobara-Kougyou-danchi, Ube-shi, Yamaguchi-ken, Japan	Site Area	75,871m ²
	Commencement of Operations	June 1986	Total Floor Space	15,598m ²
			Number of Employees	67 (As of March 31, 2022)

Major Products Inks and masters for digital duplicators

Registration of Specified Facilities There is no applicable facility.

Major Environmental Protection Activities

- ISO 14001: Certification updated in September 2017
- Designing environmentally friendly products to respond to the RoHS Directive and other environmental regulations
- Reduction of CO₂ emissions through energy conservation
- Reduction of waste generation and promotion of recycling
- Promotion of green purchasing
- Recycling of used ink bottles

Environmental Data

	Unit	FY2018	FY2019	FY2020	FY2021	FY2022	YoY (%)
Electricity consumption	MWh	2,303	2,182	2,109	1,693	1,797	106
Water consumption	m ³	5,854	5,528	5,309	4,324	4,659	108
Clean water	m ³	2,685	2,481	2,469	2,220	2,341	105
Groundwater	m ³	3,169	3,047	2,840	2,104	2,318	110 <small>Note 1</small>
Water drainage	m ³	2,685	2,481	2,469	2,220	2,341	105
Annual biochemical oxygen demand (BOD) emissions	kg	17	15	5	9	33	387 <small>Note 2</small>
Total waste generation	t	226	211	188	148	172	116 <small>Note 1</small>
Final disposal (landfill)	t	0.6	0.2	0.3	0.1	0.1	100
Waste recycling rate	%	99.2	99.5	98.7	99.4	99.4	100

† Wastewater from Ube Works is drained into the public waters.

Note 1 Due to increased production activitiesNote 2 The range of variation within the standard value

Figure 26

RISO R&D Center

Scope of calculation: RISO R&D Center

Overview	Address	2 Chome 8-1, Gakuenminami, Tsukuba-shi, Ibaraki-ken, Japan	Site Area	17,521m ²
	Commencement of Operations	June 2013	Total Floor Space	15,197m ²

Registration of Specified Facilities

Specified facilities related to the Water Pollution Prevention Act and Sewerage Act: 1 draft chamber, 5 sinks, 1 washing machine

Specified facilities related to the Noise Regulation Law: 4 ventilators, 3 hydraulic presses, 2 shearing machines

Specific facilities related to the Vibration Regulation Law: 3 hydraulic presses, 2 shearing machines

Facilities that generate smoke: 1 emergency generator

Major Environmental Protection Activities

- ISO 14001: Certification updated in November 9, 2020
- Reduction of CO₂ emissions through energy conservation
- Designing environmentally friendly products
- Reduction of waste generation and promotion of recycling

Environmental Data

	Unit	FY2018	FY2019	FY2020	FY2021	FY2022	YoY (%)
Electricity consumption	MWh	2,289	2,331	2,257	2,037	2,130	105
Water consumption	m ³	9,958	9,788	8,356	6,258	5,967	95
Clean water	m ³	9,958	9,788	8,356	6,258	5,967	95
Groundwater	m ³	0	0	0	0	0	—
Water drainage	m ³	9,958	9,788	8,356	6,258	5,967	95
Annual biochemical oxygen demand (BOD) emissions	kg	153	275	275	356	269	76 <small>Note 1</small>
Total waste generation	t	185	204	256	116	120	103
Final disposal (landfill)	t	1.9	1.7	1.4	0.8	0.8	94
Waste recycling rate	%	98.9	99.2	99.2	99.0	98.8	100

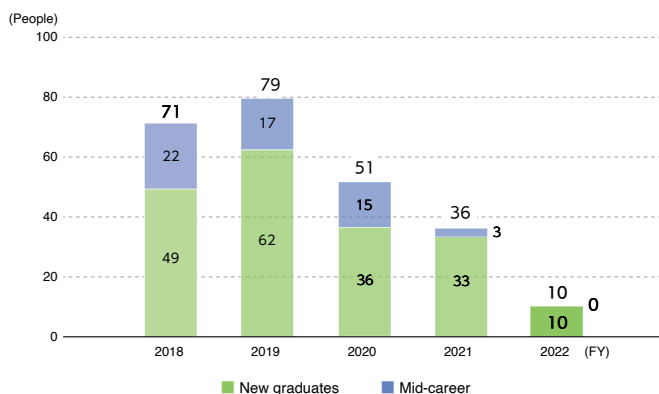
† Wastewater from RISO R&D Center is drained into the public sewage systems.

† Opened in June 2013. We continue to consider the environment.

Note 1 The range of variation within the standard value

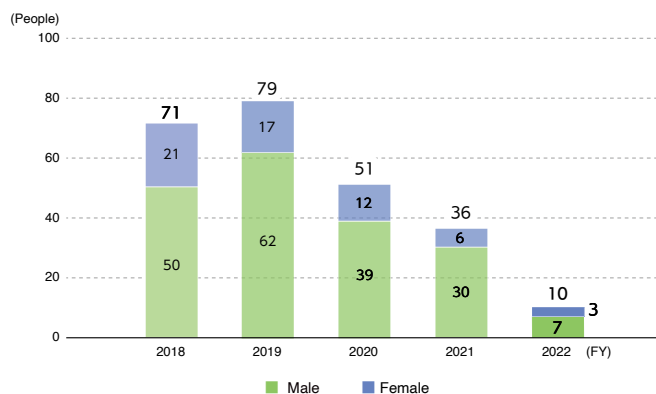
Social Data

Figure 27 Employment (Japan)
(New Graduates/Mid-career)



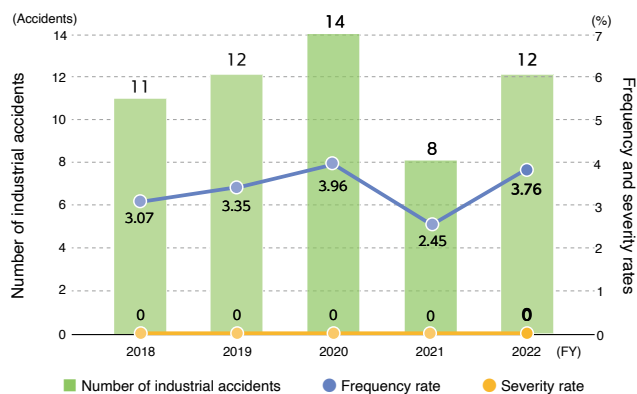
Scope of calculation: Non-consolidated basis (Japan)

Figure 28 Employment (Japan)
(Male/Female)



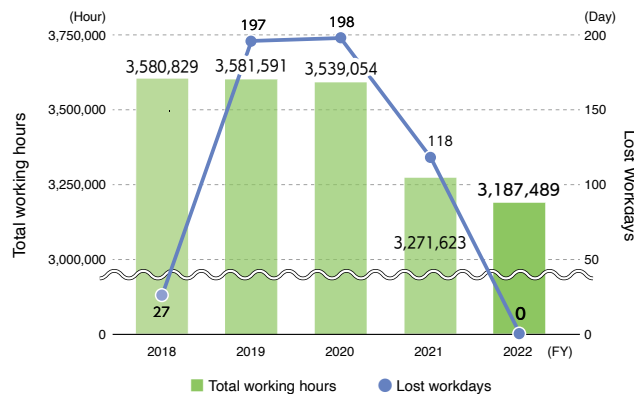
Scope of calculation: Non-consolidated basis (Japan)

Figure 29 Industrial Accidents:
Frequency and Severity Rate



Scope of calculation: Non-consolidated basis (Japan)

Figure 30 Total Working Hours and Lost Workdays



Scope of calculation: Non-consolidated basis (Japan)

KEY POINT

Occupational health and safety

Each production site has established an Occupational Health and Safety Committee to improve the work environment, identify and correct unsafe areas, and undertake voluntary safety activities in an effort to prevent accidents and disasters.

In addition, we have an Occupational Health and Safety page on the company intranet to raise awareness and educate employees about safety.

The number of industrial accidents in Japan in fiscal 2022 was 12, an increase of 4 from fiscal 2021. The lost workdays due to industrial accidents decreased by 118 days.

Promoting employee health

We are attentive toward the health of employees through the implementation of health checkups and concern toward mental health.

We conduct general health checkups, lifestyle-related disease checkups, and comprehensive medical exams in order to verify the health status of employees and provide guidance on lifestyle and health as seen needed.

In addition, to maintain not only physical health but also mental health, we have established a mental health inquiry and assistance service.

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