

ESG Data Book

FY2022

Rakuten Group, Inc.



Data marked with ✓ are subject to third-party assurance. Independent third-party assurance statement for FY2022 is available [here](#).

Notation in the Data Book

- Rakuten Group: Rakuten Group, including Rakuten Group, Inc.
- Rakuten Group, Inc.: Rakuten Group, Inc. (non-consolidated)

Item	Coverage	Unit	FY2020	FY2021	FY2022	FY2022 Assurance			
Environmental Data									
CO ₂ emissions	Total ^{*2}	Rakuten Group	t-CO ₂	1,114,326	2,074,625	9,471,995	✓		
	Scope 1	Rakuten Group	t-CO ₂	2,705	1,647	1,745	✓		
	Scope 2	Location-based	Rakuten Group	t-CO ₂	93,192	241,308	307,140	✓	
					Market-based	66,494	169,935	268,476	✓
	Scope 3	Rakuten Group	t-CO ₂	1,045,127	1,903,043	9,201,773	✓		
	Scope 3 breakdown	Purchased goods and services	Category 1	Rakuten Group	t-CO ₂	176,669	673,142	1,606,349 ^{*3}	✓
		Capital goods	Category 2	Rakuten Group	t-CO ₂	572,413	N/A ^{*1}	967,391	✓
		Fuel- and energy-related activities	Category 3	Rakuten Group	t-CO ₂	18,295	980,444	1,218,355	✓
		Upstream transportation and distribution	Category 4	Rakuten Group	t-CO ₂	138,039	N/A ^{*1}	478,254	✓
		Waste generated in operations	Category 5	Rakuten Group	t-CO ₂	772	416	11,585 ^{*4}	✓
		Business travel	Category 6	Rakuten Group	t-CO ₂	5,507	550	3,982 ^{*5}	✓
		Employee commuting	Category 7	Rakuten Group	t-CO ₂	5,968	6,820	7,581	✓
		Upstream leased assets	Category 8	Rakuten Group	t-CO ₂	37,464	N/A	1,457 ^{*6}	✓
		Use of sold products	Category 11	Rakuten Group	t-CO ₂	4,860	5,825	5,198	✓
		End-of-life treatment of sold products	Category 12	Rakuten Group	t-CO ₂	736	71	2,477 ^{*7}	✓
		Franchises	Category 14	Rakuten Group	t-CO ₂	528	N/A	N/A	
Investments	Category 15	Rakuten Group	t-CO ₂	83,875	235,775	4,899,145 ^{*8}	✓		
Energy consumption	Total	Rakuten Group	MWh	192,777	466,683	706,332	✓		
	Fuel	Gas	Rakuten Group	MWh	10,264	8,171	8,436	✓	
		Oil	Rakuten Group	MWh	3,568	691	874	✓	
	Electricity	Total	Rakuten Group	MWh	178,909	457,822	697,022	✓	
		Renewable	Rakuten Group	MWh	34,337	94,477	81,103	✓	
		Renewable ratio	Rakuten Group	%	19.2	20.6	11.6	✓	
	Cooling	Rakuten Group	MWh	37	N/A	N/A			
Water withdrawal	Total	Rakuten Group	1,000m ³	215	142	193 ^{*9}	✓		
Waste generation	Total	Rakuten Group	t	5,231	1,288	3,370 ^{*10}	✓		
	Recycled	Rakuten Group	t	3,979	544	87 ^{*11}	✓		

*1 Scope 3 categories 2 and 4 from FY2021 were combined into category 1 as part of procurement.

*2 The scope 2 data used are market-based.

*3 The increase in FY2022 is due to the change in the scope of data collection from 17 subsidiaries to Rakuten Group.

*4 The increase in FY2022 is due to the change in the scope of data collection from 4 sites to Rakuten Group.

*5 The increase in FY2022 is due to the change in the scope of data collection from 15 subsidiaries to Rakuten Group.

*6 Starting in FY2022, the calculation of emissions for category 8 includes emissions from the operation of event venues and some of the data centers that the Company rent.

*7 The increase of 2,406t-CO₂ in FY2022 relating to Rakuten-branded products is due to the change in the scope of calculation, from disposal of packaging materials only, to the disposal of packaging and products themselves.

*8 The increase of 4,334,689t-CO₂ in FY2022 is due to the change in the scope of data collection which includes investment in listed equity, bonds, business loans, project finance, etc. For FY2021 reporting, the scope included investments in and loans to listed companies and project finance for businesses with investments of ¥1 billion or more (excluding consumer mortgages and motor vehicle loans). Additionally, the increase of 328,681t-CO₂ in FY2022 was due to the inclusion of Rakuten General Insurance and Rakuten Life Insurance in the scope of collection. The data collected are for Rakuten Bank, Rakuten Card, Rakuten General Insurance, and Rakuten Life Insurance. We exclude emissions from the LULUCF emissions.

*9 The scope of data collection was expanded from 4 to 24 sites, resulting in a water withdrawal increase of 55,000m³ in FY2022 for the newly added sites.

*10 The scope of data collection was expanded from 4 to 23 sites, resulting in a waste generation of 1,822t in FY2022 for the newly added sites.

*11 For FY2022, only the amount of waste whose actual recycling was verified by documentation or other means is included.

■ Collection Period

FY2022 (January 1, 2022 – December 31, 2022)

■ Collection Scope

Rakuten Group (total of 55 domestic subsidiaries and 92 overseas subsidiaries)

※ Comments are left in the applicable sections where scope of collection varies.

Major companies are listed below. For major consolidated subsidiaries, click [here](#).

Segment	Domestic	Overseas
Internet Service	<ul style="list-style-type: none"> • Rakuten Group, Inc. • Rakuten Baseball, Inc. • Rakuten Vissel Kobe, Inc. • Rakuten Farm, Inc. • Rakuten Seiyu Netsuper, Inc. 	<ul style="list-style-type: none"> • Ebates Performance Marketing, Inc. • Rakuten Marketing LLC • Rakuten Kobo Inc. • Rakuten USA, Inc. • RAKUTEN FRANCE S.A.S. • Ebates Inc. • Taiwan Rakuten Sports Entertainment, Inc.
FinTech	<ul style="list-style-type: none"> • Rakuten Card Co., Ltd. • Rakuten Bank, Ltd. • Rakuten Securities Holdings, Inc. • Rakuten Securities, Inc. • Rakuten General Insurance Co., Ltd. • Rakuten Life Insurance Co., Ltd. 	<ul style="list-style-type: none"> • Rakuten Europe Bank S.A. • Rakuten Securities Hong Kong Limited • Rakuten International Commercial Bank Co., Ltd.
Mobile	<ul style="list-style-type: none"> • Rakuten Mobile, Inc. • Rakuten Communications Corp. • Rakuten Energy, Inc. • Rakuten Symphony, Inc. 	<ul style="list-style-type: none"> • AltioStar Networks, Inc. • Robin Systems, Inc. • Rakuten Symphony Singapore Pte Ltd

■ Referenced Guidelines

- Act on Rationalizing Use of Energy and Shifting to Non-fossil Energy
- Act on Special Measures Concerning Procurement of Electricity from Renewable Energy Sources by Electricity Utilities
- Act on Promotion of Global Warming Countermeasures
- Waste Management and Public Cleansing Act
- Ministry of the Environment and Ministry of Economy, Trade and Industry's Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain
- WBSC/WRI GHG Protocol
- The Global GHG Accounting and Reporting Standard by the Partnership for Carbon Accounting Financials (PCAF)

■ Calculation Scope and Methodology

From FY2022, the calculation targets and methods have been changed to improve the accuracy of CO₂ emissions, energy consumption, water withdrawal, and waste generation. Please refer to page 2 for the significant impact of the change. No retroactive adjustments have been made to past data.

Item		Calculation Scope	Calculation Methodology	
CO ₂ emission	Scope 1	Direct GHG emissions from in-house fuel use. Only energy-derived CO ₂ . Major offices, factories, warehouses, sports stadiums, company vehicles, and data centers (5 domestic and 4 overseas companies)	Calculated by multiplying the annual fuel consumption or purchase volume by the CO ₂ emission factor for each energy source. Emission factors for both domestic and overseas consumption are based on the Greenhouse Gas Accounting, Reporting, and Publication System under the Act on Promotion of Global Warming Countermeasures.	
	Scope 2	Location-based	<p>Indirect GHG emissions from the use of purchased electricity. Only energy-derived CO₂. Major offices*, data centers, factories*, sports stadiums*, group centers, base stations, distribution centers*, warehouses* (14 domestic, 15 overseas companies)</p> <p>*Scope: Facilities that meet any of the following</p> <ol style="list-style-type: none"> Contract Electricity: High voltage (50~2,000kW) or extra high voltage (2,000kW~) Estimated annual electricity use: over 131,400kWh 	<p>Calculated by multiplying annual electricity consumption by regional CO₂ emission factors.</p> <p>For Japanese operations, we use alternative emission factor for each electric power provider based on the Act on Promotion of Global Warming Countermeasures.</p> <p>For overseas operations, we use country-based emission factors by the International Energy Agency (IEA).</p>
		Market-based	Same as above	<p>Calculated by multiplying the annual electricity consumption by the CO₂ emission factor for each electric power provider.</p> <p>For Japanese operations, we use the adjusted emission factors for each electric power provider based on the Act on Promotion of Global Warming Countermeasures.</p> <p>For overseas operations, we use emission factors according to the hierarchy of the GHG Protocol Scope 2 Guidance. The emission factor for renewable energy is assumed to be zero.</p>
	Scope 3	Category 1	Manufacture of purchased products and services (collected for the businesses accounting for 70% of consolidated cost of sales with the remainder as estimates)	Calculated by multiplying the GHG emissions of major suppliers' own company and supply chain by the ratio of our purchase amount. If the supplier's GHG emissions are unavailable, the amount paid is multiplied by the emissions intensity based on the input-output table. We use the Ministry of the Environment's emissions intensity DB to calculate the GHG emissions of organizations through their supply chains.
		Category 2	Construction or manufacture of capital goods purchased or acquired	Calculated by multiplying total capital investment by industry-based emission intensity. We use the Ministry of the Environment's emissions intensity DB to calculate the GHG emissions of organizations through their supply chains.
		Category 3	Extraction, production and transportation of purchased fuel and electricity not included in Scope 1 and 2, as well as procurement and sales in the electricity retail business (Rakuten Energy)	Calculated by multiplying fuel and electricity consumption and Rakuten Energy's electricity procurement and sales by emission intensity by energy type. We use the Ministry of the Environment's emissions intensity DB and IDEA (Inventory Database for Environmental Analysis) of the National Institute of Advanced Industrial Science and Technology (AIST) to calculate the GHG emissions of organizations through their supply chains.
		Category 4	Procurement logistics and shipping logistics for which we are the shipper (collected for the businesses accounting for 70% of consolidated cost of sales with the remainder as estimates)	Calculated by multiplying transported weight and distance by emission intensity of each means of transportation and vehicle type. If transportation weight is unavailable, emission intensity is calculated by multiplying the amount paid by the emission intensity based on the input-output table. We use the Ministry of the Environment's emissions intensity DB to calculate the GHG emissions of organizations through their supply chains.
		Category 5	Disposal and processing of industrial and general waste generated in factories, warehouses, sports stadiums, and offices	Calculated by multiplying waste emissions by type-based and treatment method-based emissions intensities. We use the Ministry of the Environment's emissions intensity DB and IDEA (Inventory Database for Environmental Analysis) of the National Institute of Advanced Industrial Science and Technology (AIST) to calculate the GHG emissions of organizations through their supply chains.

■ Calculation Scope and Methodology

Item		Calculation Scope	Calculation Methodology
CO ₂ emission	Scope 3	Category 6 Business travel	Calculated by multiplying the amount of business travel expenses by the emissions intensity of each means of transportation. If the amount of business travel expenses is unavailable, the value is calculated by multiplying the number of employees by the emission intensity per employee. We use the Ministry of the Environment's emissions intensity DB to calculate the GHG emissions of organizations through their supply chains.
		Category 7 Employee commuting	Calculated by multiplying the number of employees by the number of operating days per year, and then by the emission intensity for each city category. We use the Ministry of the Environment's emissions intensity DB to calculate the GHG emissions of organizations through their supply chains.
		Category 8 Operation of event venues and data centers the Company rents	Calculated by multiplying the proprietary size of the venue by the emission intensity for each building usage purpose. Some data center's electricity consumption was multiplied by the CO ₂ emission factors for each electric power provider. We use the Ministry of the Environment's emissions intensity DB to calculate the GHG emissions of organizations through their supply chains, as well as adjusted emission factors for each electric power provider based on the Act on Promotion of Global Warming Countermeasures.
		Category 11 Use of sold products	Calculated by multiplying the electricity consumption per unit quantity over the useful life of the product by the CO ₂ emission factor and then multiplying by the annual sales quantity of the product in question. We use alternative emission factor for each electric provider based on the Act on Promotion of Global Warming Countermeasures.
		Category 12 End-of-life treatment of sold products	Calculated by multiplying the amount of emissions from products and packaging materials by the emissions intensity for each waste type and disposal method. We use the Ministry of the Environment's emissions intensity DB to calculate the GHG emissions of organizations through their supply chains.
		Category 14 Scope 1 and 2 of major mobile store franchisees (for stores with electricity usage of 131,400 kWh and over)	Calculated by multiplying the electricity consumption of the subject store by the CO ₂ emission factor. We use alternative emission factor for each electric provider based on the Act on Promotion of Global Warming Countermeasures.
		Category 15 Investment in listed equity and corporate bonds, business loans, project finance, etc. of Rakuten Bank, Rakuten Card, Rakuten General Insurance, and Rakuten Life Insurance, which provide investment and financial services (excluding consumer mortgages and motor vehicle loans)	In accordance with PCAF standards, we use the following formula for each asset class. Financed emissions = Σ (GHG emissions of the investee x Attribution Factor) The response for each asset class is as follows. <Investments and loans to non-sovereign bonds> GHG emissions of the borrower: Calculated by multiplying the GHG emissions of the borrower by the company's published GHG emissions or by the GHG emission factor per net sales. Attribution Factor: Calculated by dividing the balance of investments and loans by the total amount of funding (EVIC or Total company equity+debt) of the investee. <Sovereign Debt> GHG emissions of the investee: We use country-based GHG emissions. Attribution Factor: calculated by dividing outstanding investments by purchase power parity-adjusted GDP.

■ Calculation Scope and Methodology

Item		Calculation Scope	Calculation Methodology	
Energy Consumption	Fuel	Gas	<p>Sum of actual consumption (or purchase amount if consumption is unknown) of various fossil fuels. Conversion factors to MWh are as follows:</p> <ul style="list-style-type: none"> • City gas 12.4MWh/1000Nm² • Gasoline 9.6MWh/kL • Diesel oil 10.5MWh/kL • LP gas 14.1MWh/kL • Kerosene 10.2MWh/kL • Heavy oil 10.9MWh/kL <p>Calculated based on the heating value by fuel type in the system for calculating, reporting, and announcing greenhouse gas emissions based on the Act on Promotion of Global Warming Countermeasures, and the standard heating value by energy source of the Ministry of Economy, Trade and Industry.</p>	
		Oil		
	Electricity	Total	<p>Major offices*, data centers, factories*, sports stadiums*, group centers, base stations, distribution centers*, warehouses* (14 domestic, 15 overseas companies)</p> <p>*Scope: Facilities that meet any of the following</p> <ol style="list-style-type: none"> 1. Contract Electricity: High voltage (50~2,000kW) or extra high voltage (2,000kW~) 2. Estimated annual electricity use: over 131,400kWh 	<p>Sum of purchased electricity and on-site power generation (solar). The conversion factor to MWh is as follows; Purchased electricity 0.584MWh/kVA</p> <p>Calculated assuming a load factor of 80%, 1 year = 8,760h.</p>
		Renewable	Same as above	Sum of the amount of electricity used from on-site power generation (solar), the amount of electricity purchased from renewable energy menus, and the amount of renewable electricity from J-Credits and FIT Non-Fossil Certificates.
Water withdrawal		<p>Offices*, factories, warehouses, sports stadiums</p> <p>Scope*: Facilities with top 90% of employees (12 domestic, 3 overseas facilities)</p>	Water withdrawal whose quantities can be verified by documentation or other means.	
Waste Generation	Recycled	<p>Offices*, factories, warehouses, sports stadiums</p> <p>Scope*: Facilities with top 90% of employees (11 domestic, 2 overseas facilities)</p>	Amount recycled whose weight can be verified by documentation or other means. Plastic bottles, bottles, cans, mixed beverage containers, cardboard, newspapers, magazines, pamphlets, used paper, and plastics are included. Waste whose unit conversion to weight could not be verified by documentation or other means is excluded.	
	Total	Same as above	Sum of general waste, industrial waste, and recyclables whose weight can be confirmed by documentation or other means.	

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Notation in the Data Book

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- Rakuten Group, Inc.: Rakuten Group, Inc. (Non-consolidated)

Item	Coverage	Unit	FY2020	FY2021	FY2022	FY2022 Assurance	
Social Data							
Total no. of employees	Rakuten Group	people	23,841	28,261	32,079		
Region		Japan	people	18,128	20,433	25,931	
		APAC (ex. Japan)	people	1,893	4,231	2,598	
		Americas	people	2,939	3,072	2,994	
		EMEA	people	881	525	556	
		Contract	Permanent	people	22,078	26,606	30,666
Temporary			people	1,763	1,655	1,413	
Employment rate of people with disabilities	Rakuten Group ^{*1}	%	2.32	2.47	2.38	✓	
Total no. of employees in each of the following diversity categories	Rakuten Group, Inc.	people	9,090	10,067	10,931		
Age		Under 30	people	3,178	3,606	4,113	
		30 – 50	people	5,677	6,179	6,473	
		Over 50	people	234	282	344	
Gender		Female	people	3,598	4,052	4,420	
		Male	people	5,492	6,015	6,509	
Nationality		Unregistered	people	-	-	2	
		Japanese	people	7,116	8,012	8,595	
	Non-Japanese	people	1,974	2,055	2,336		
Total no. of new full-time employees hired	Rakuten Group, Inc.	people	2,099	1,770	2,099		
Gender		Female	people	811	684	769	
		Male	%	38.6	38.6	36.6	
Unregistered		people	1,288	1,086	1,328		
		%	61.4	61.4	63.3		
Total no. of managers in each of the following diversity categories	Rakuten Group, Inc.	people	2,165	2,356	2,493		
Gender		Female	people	611	678	750	
		Male	people	1,554	1,678	1,742	
		Unregistered	people	-	-	1	
Nationality		Japanese	people	1,780	1,949	2,049	
		Non-Japanese	people	385	407	444	
Total no. of employees that were entitled to parental leave	Rakuten Group, Inc.	people	350	503	477		
Gender		Female	people	83	174	192	
		Male	people	267	329	285	
Total no. and percentage of employees that took parental leave	Rakuten Group, Inc.	people	128	300	320		
Gender		Female	people	79	186	200	
		%	95.2	106.9	104.2		
Male		people	49	114	120		
		%	18.4	34.7	42.1		
Return to work rate after parental leave	Rakuten Group, Inc.	%	98	95	97		
Gender		Male	%	100	98	98	

Item		Coverage	Unit	FY2020	FY2021	FY2022	FY2022 Assurance
Average annual paid vacation per employee	Days granted	Rakuten Group, Inc.	days	13.1	15.9	16.1	
	Days taken		days	8	11	13	
	Taken/Granted ratio		%	61.2	71.3	78.7	
Average hours of training per employee		Rakuten Group, Inc.	hours	54.9	70.3	65.0	
Ratio of employees who received a regular performance and career development review		Rakuten Group, Inc.	%	100	100	100	
Average age		Rakuten Group, Inc.	years	33.8	34.3	33.7	
Gender pay gap ratio	All employees	Rakuten Group, Inc.	%	—	—	75.6	✓
	Permanent employees ^{*2}			—	—	82.0	
	Contract employees ^{*3}			—	—	71.1	
Average length of service		Rakuten Group, Inc.	years	4.5	4.7	4.7	✓
Gender	Female			4.6	4.8	4.9	
	Male			4.4	4.6	4.6	
Total no. of employee fatalities		Rakuten Group, Inc.	people	0	0	0	✓
Lost-time occupational injury frequency rate		Rakuten Group, Inc.	n/million hours worked	0	0	0.06	✓
Lost-time occupational disease frequency rate		Rakuten Group, Inc.	n/million hours worked	0	0.06	0.06	✓

*1 Coverage includes Rakuten Group, Inc., Rakuten Socio Business, Inc., and Rakuten Communications Corp. among Rakuten Group

*2 Permanent employees are full-time employees with no fixed term.

*3 Contract employees are part-time employees and employees with a fixed term.

■ **Collection Period**

FY2022 (January 1, 2022 – December 31, 2022)

■ **Collection Scope**

Rakuten Group, Inc. (non-consolidated)

※ Comments are left in the applicable sections where scope of collection varies.

■ **Calculation Scope and Methodology for Major Social Metrics**

Item	Calculation Scope	Calculation Methodology
Average length of service (total for both genders)	Permanent employees	Average length of service = Total number of years of service of permanent employees / Number of permanent employees The base date is the last day of the subject period.
Gender pay gap ratio (all employees)	Permanent and contract employees, excluding executive officers and employees seconded to other companies.	Calculated based on the methods of calculating wage differentials between men and women published by the Ministry of Health, Labor and Welfare. The number of employees is calculated using the average number of people at the end of each month from the beginning to the end of the subject period.
Employment rate of people with disabilities	Permanent and contract employees, excluding employees with less than 20 work hours per week.	Calculated in the same way as the calculation method based on the Act to Facilitate the Employment of Persons with Disabilities of the Ministry of Health, Labor and Welfare, with December 1 as the base date. The number of people with disabilities is calculated in accordance with the method used to count the number of people with disabilities in the calculation of the statutory employment rate.
Total no. of employee fatalities	Permanent and contract employees.	Sum of fatalities claiming worker's insurance under the Industrial Accident Compensation Insurance Act out of those reported in the "Workers' Accident Situation List".
Lost-time occupational injury frequency rate	Permanent and contract employees, excluding employees seconded to other companies.	Lost-time occupational injury frequency rate = Number of injured workers due to occupational accidents resulting in one or more days of absence from work and loss of body parts or functions/Total number of actual working hours x 1,000,000 hours Sum of injured persons who claim workers' insurance based on the Industrial Accident Compensation Insurance Act out of those reported in the "Workers' Accident Situation List".
Lost-time occupational disease frequency rate	Permanent and contract employees, excluding employees seconded to other companies.	Lost-time occupational disease frequency rate = Number of diseased workers due to occupational accidents resulting in one or more days of absence from work/Total number of actual working hours x 1,000,000 hours Sum of diseased persons who claim workers' insurance based on the Industrial Accident Compensation Insurance Act among those reported in the "Workers' Accident Situation List".

■ **Collection Period**

As of March 30 of each year

■ **Collection Scope**

Rakuten Group, Inc. (non-consolidated)

Item	Unit	FY2020	FY2021	FY2022
Governance Data				
Board of Directors				
No. of directors	people	7	9	9
No. of female directors	people	1	1	1
No. of external directors	people	4	5	5
No. of independent directors	people	4	5	5
Board of Auditors				
No. of directors	people	4	4	4
No. of external directors	people	3	3	3
No. of independent directors	people	3	3	3