

Environmental Data

Key Initiatives	Classification	Sources	Scope	FY2020	FY2021	FY2022	FY2023	Unit
Carbon Neutrality	Energies	Electricity	Global total	533,095	503,399	405,636	377,064	thousand kWh
			Japan	127,521	93,177	80,972	64,306	
			Outside Japan	405,573	410,221	324,664	312,758	
		CO ₂ free electricity	Global total	201,858	265,242	424,719	442,208	thousand kWh
			Japan	194,051	226,690	289,010	310,430	
			Outside Japan	7,807	38,552	135,709	131,778	
		Natural gas & City gas	Global total	71,600	68,084	59,718	63,004	thousand m ³
			Japan	31,498	31,153	22,696	22,339	
			Outside Japan	40,101	36,930	37,022	40,666	
		Coal	Global total	57,968	60,203	55,502	53,492	t
			Japan	0	0	0	0	
			Outside Japan	57,968	60,203	55,502	53,492	
		Steam	Global total	343,067	355,317	345,182	314,789	t
			Japan	152,076	152,010	139,282	129,757	
			Outside Japan	190,991	203,307	205,900	185,032	
		LNG	Global total	14,104	16,142	18,735	18,371	t
			Japan	13,823	15,729	18,735	18,371	
			Outside Japan	281	413	0	0	
		A HFO	Global total	7,945	5,025	2,762	2,183	kL
			Japan	7,945	5,025	2,762	2,183	
			Outside Japan	0	0	0	0	
		LPG	Global total	5,870	5,990	5,523	5,323	t
			Japan	5,596	5,664	5,473	5,278	
			Outside Japan	274	327	50	45	
		Diesel	Global total	436	452	554	964	kL
			Japan	58	20	18	17	
			Outside Japan	378	432	536	948	
Kerosene	Global total	130	133	139	133	kL		
	Japan	130	133	139	133			
	Outside Japan	0	0	0	0			
Gasoline	Global total	115	48	52	35	kL		
	Japan	115	48	52	35			
	Outside Japan	0	0	0	0			
Steam (non industrial)	Global total	1,084	1,198	1,397	1,025	GJ		
	Japan	1,084	1,198	1,397	1,025			
	Outside Japan	0	0	0	0			
Hot water	Global total	2,567	1,371	1,461	1,579	GJ		
	Japan	173	138	162	139			
	Outside Japan	2,393	1,233	1,299	1,440			
Cold water	Global total	11,774	3,897	4,087	4,910	GJ		
	Japan	11,774	3,897	4,087	4,910			
	Outside Japan	0	0	0	0			

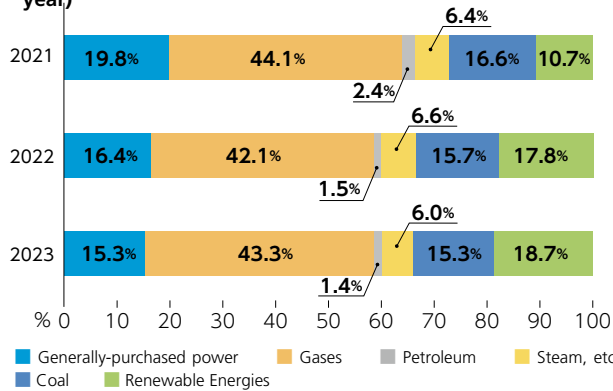
Key Initiatives	Classification	Sources	Scope	FY2020	FY2021	FY2022	FY2023	Unit	
Carbon Neutrality	Renewable Energies	Solar power	Global total	3,869	6,727	15,152	20,492	thousand kWh	
			Japan	1,409	4,069	4,417	5,628		
			Outside Japan	2,459	2,658	10,735	14,864		
		Biomass power	Global total	7	13	17	14	thousand t	
			Japan	0	0	0	0		
			Outside Japan	7	13	17	14		
	CO ₂	CO ₂ emissions	Global total	706	684	576	522,671	thousand t-CO ₂	
			Japan	207,281	188,999	164,784	153,727	t-CO ₂	
			Outside Japan	498,754	494,704	411,032	368,944		
		CO ₂ emissions per sales	Global total	0.50	0.46	0.33	0.26	t/¥ million	
		GHG emissions throughout the value chain ^{*1}		1,118	1,030	1,110	1,107	thousand t-CO ₂	
		Scope1 ^{*1}		125,038	130,391	112,229	109,739		
		Scope2 ^{*1}		36,647	9,731	3,215	1,395		
		Scope3 ^{*1}	Category 1 (Purchased goods and services)		635,542	592,537	648,624	664,646	
			Category 2 (Capital goods)		52,402	38,763	85,592	62,083	
			Category 3 (Fuel and energy-related activities not included in Scopes 1 and 2)		45,579	34,167	30,272	35,423	
			Category 4 (Transportation and distribution)(Upstream)		70,621	70,519	72,548	73,671	
			Category 5 (Waste generated in operations)		12,836	13,535	10,966	10,254	
			Category 6 (Business travel)		6,030	5,413	8,285	13,576	
			Category 7 (Employee commuting)		5,773	5,917	5,679	6,126	t-CO ₂
Category 8 (Leased assets) (Upstream)			6,356	7,258	7,294	6,940			
Category 9 (Transportation and distribution) (Downstream)			20,407	20,736	22,480	21,608			
Category 10 (Processing of used products)				N/A					
Category 11 (Use of sold products)		80,209	79,452	80,051	79,728				
Category 12 (End-of-life treatment of sold products)		20,751	21,163	22,879	21,542				
Category 13 (Leased assets) (Downstream)			N/A						
Category 14 (Franchise)			N/A						
Category 15 (Investment)			N/A						
Water Neutrality	Water usage	Global total	17,732	17,680	18,488	19,389	thousand m ³		
		Japan	11,605	10,909	11,629	12,553			
		Outside Japan	6,127	6,772	6,859	6,836			
	Water use efficiency	Global total	12.5	11.8	10.6	9.61	m ³ /¥ million		
		Japan	—	9,654	10,399	11,316			
	Municipal water (including industrial water)	Asia, the Middle East, etc.	—	3,275	3,264	3,325	thousand m ³		
		North and South America	—	407	390	445			
		Europe	—	212	220	195			
	Water intake by water source	River water	Japan	—	123	96	85	thousand m ³	
			Asia, the Middle East, etc.	—	0	0	0		
			North and South America	—	0	0	0		
		Ground water	Europe	—	2	2	1		
			Japan	—	1,131	1,134	1,152	thousand m ³	
			Asia, the Middle East, etc.	—	2,708	2,755	2,698		
North and South America	—	137	201	148					
		Europe	—	32	26	24			

*1 Five group companies: Otsuka Pharmaceutical, Otsuka Pharmaceutical Factory, Taiho Pharmaceutical, Otsuka Chemical, and Otsuka Foods

Key Initiatives	Classification	Sources	Scope	FY2020	FY2021	FY2022	FY2023	Unit						
Water Neutrality	Water	Wastewater by destination	Rivers, lakes and marshes	11,717	11,194	10,560	10,275	thousand m ³						
			Underground seepage	60	4	1	1							
			Area of ocean	1,002	1,051	1,118	1,246							
			Third-party processing (municipal sewage, etc.)	2,886	2,873	2,729	2,883							
			Total Amount of Wastewater	15,666	15,122	14,407	14,404							
Circular Economy	Material ^{*1}	Material	Global total	114,847	114,771	119,541	124,353	t						
			Packaging material ^{*1}	Plastics	PET	11,963	12,028	14,416	15,593	t				
				Others	16,028	14,998	15,675	15,833						
	Paper and cardboard	Others	33,149	32,481	36,173	35,446	t							
		Others	89,826	88,949	92,812	81,073								
	Waste			Total amount of waste	Global total	91,838	93,895	92,943	85,036	t				
				Japan	35,723	35,246	30,820	33,576						
					Outside Japan	56,115	58,649	62,123	51,460					
				Recycled materials	Global total	64,487	65,314	64,891	47,341		t			
					Japan	31,110	30,352	27,279	20,010					
				Outside Japan	33,377	34,962	37,612	27,331	t					
					Material Recycling	39,703	37,723	37,487			17,409	t		
				Thermal Recycle	9,528	11,911	12,639	14,503	t					
					Composting and feed	15,256	15,680	14,765			15,428			
				Total (Including valuables)			Global total	4,378	5,532		3,370	2,577	t	
							Simple Incineration	Japan	3,606		3,983	2,529		1,860
								Outside Japan	772		1,549	841		717
				Landfill disposal	Global total	12,594	13,695	14,660	12,657		t			
					Japan	99	112	207	83					
				Outside Japan	12,495	13,583	14,453	12,574	t					
					Global total	10,379	9,355	10,022			3,359	t		
				Bio-processing and chemical processing	Japan	909	799	804	776		t			
					Outside Japan	9,470	8,556	9,218	2,584					
				Total amount of waste			Global total	9,884	10,831		10,543	10,085	t	
							Japan	3,836	4,513		3,279	2,525		
							Outside Japan	6,048	6,318		7,264	7,560		
				Recycled materials			Global total	4,549	5,450		6,365	6,585	t	
							Japan	1,653	2,174		1,932	1,784		
				Outside Japan	2,897	3,276	4,433	4,801	t					
					Recycled materials	1,832	2,257	3,155			3,446	t		
Thermal Recycle				1,556	3,193	3,210	3,139	t						
				Composting and feed	0	0	0		0					
Hazardous ^{*2}						Global total	2,443	2,694	1,661		1,090	t		
						Simple Incineration	Japan	2,047	2,235		1,201		678	
							Outside Japan	396	459		460		412	
Permanent disposal (Landfill disposal)	Global total	1,914	2,265	2,003	1,932	t								
	Japan	1	1	2	2									
Outside Japan	1,913	2,264	2,001	1,931	t									
	Global total	978	421	514		478	t							
Bio-processing and chemical processing	Japan	135	102	144	61	t								
	Outside Japan	843	319	370	416									

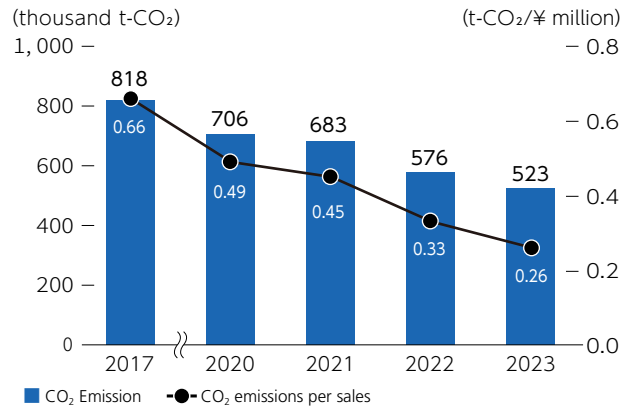
*1 Five group companies: Otsuka Pharmaceutical, Otsuka Pharmaceutical Factory, Taiho Pharmaceutical, Otsuka Chemical, and Otsuka Foods *2 Specially controlled industrial waste by Japanese regulations; in other countries, the classification is based on the respective national standards

Global energy composition (converted to heat quantity: GJ/year)

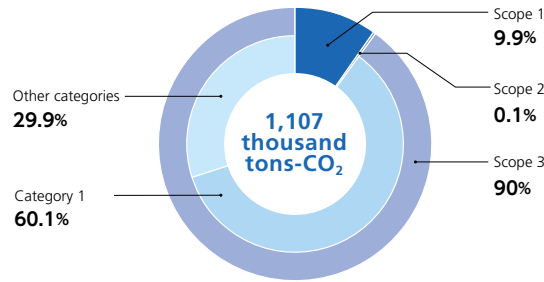


*Electricity: Calculated using a conversion factor 3.6MJ/kWh based on secondary energy consumption.
 Energies other than electricity: Comply with the procedures for entry in periodic reports and medium- and long-term plans specified in the FY 2024 version of the Act on Rationalizing Energy Use.

CO₂ emissions per sales

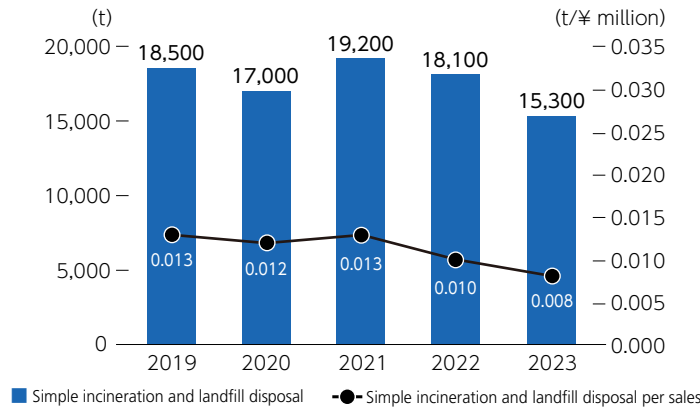


GHG Emissions throughout the Value Chain

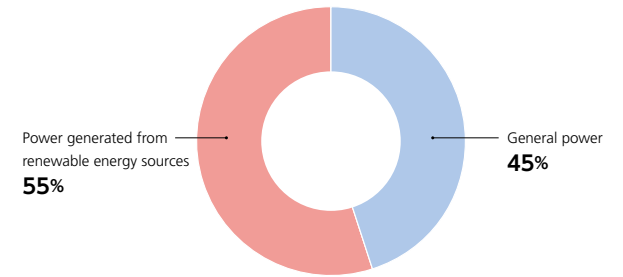


Scope: Five group companies: Otsuka Pharmaceutical, Otsuka Pharmaceutical Factory, Taiho Pharmaceutical, Otsuka Chemical, and Otsuka Foods

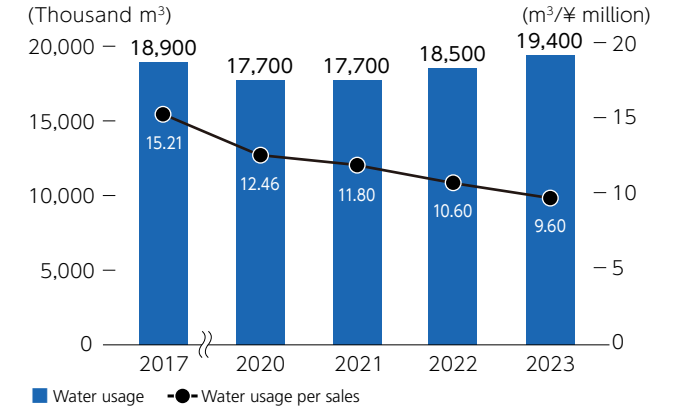
Simple incineration and landfill disposal per sales



Global renewable energy ratio



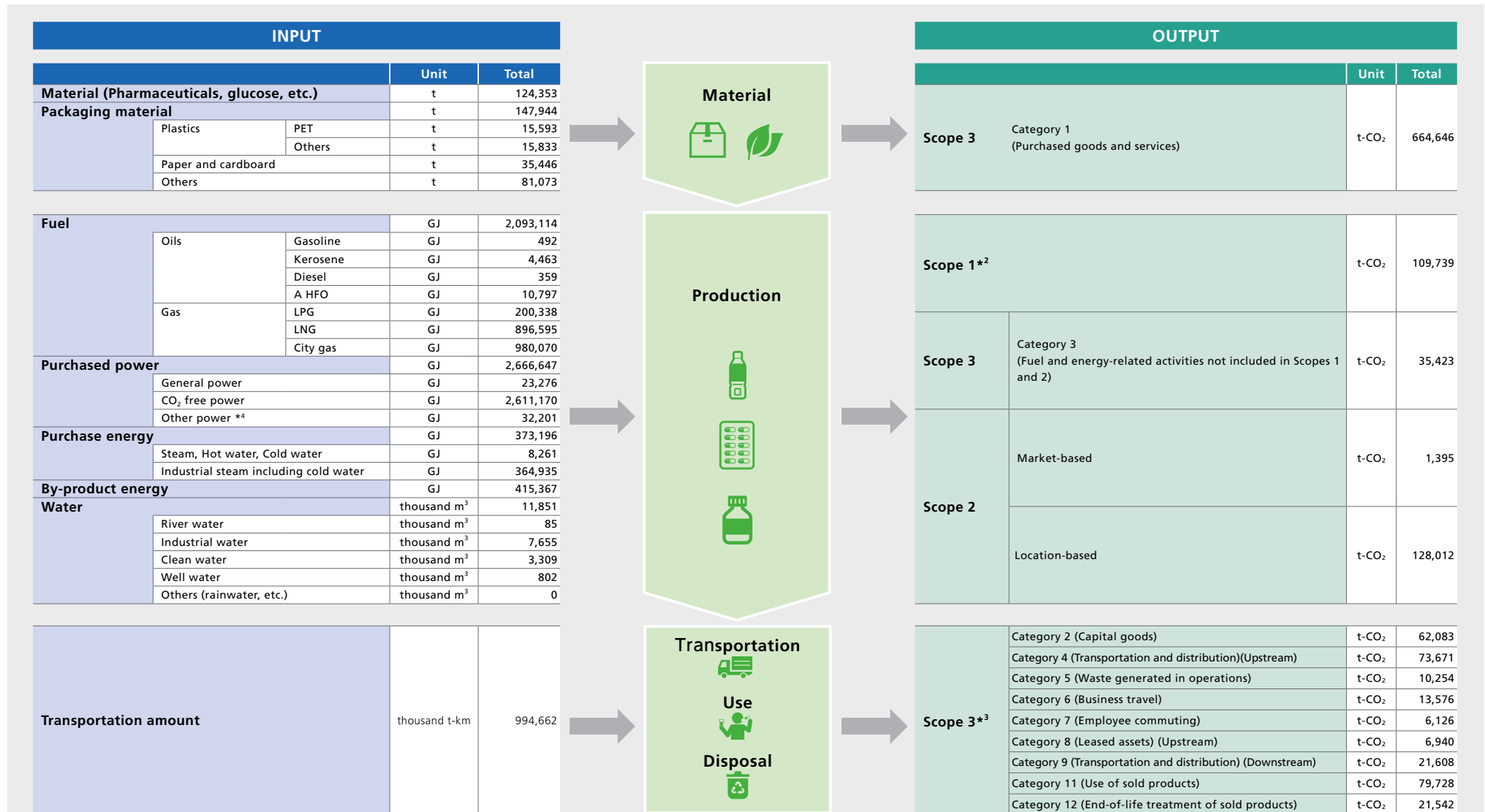
Water Usage, Water Usage per Sales



Reporting of Violations of Environmental Laws and Regulations

In FY 2023, the Otsuka Group had 11 violations of environmental laws and regulations (inadequate reporting, inadequate storage and handling of combustibles, and waste water exceeding the standards). We have completed the correction of the violations, and will make efforts to prevent recurrence. We were not assessed any environmental fines.

Material Balance over the Life Cycle of the Business*1



*1 Five group companies: Otsuka Pharmaceutical, Otsuka Pharmaceutical Factory, Taiho Pharmaceutical, Otsuka Chemical, and Otsuka Foods *2 Indirect emissions from energy sources and indirect emissions from freon leak volume and during the production of carbonated beverages, etc. *3 Categories 10 and 13 to 15 are not applicable *4 Power generation by co-generation systems

Environmental Management System

Acquisition of Integrated ISO 14001 Certification for the Otsuka Group

To strengthen Group-wide efforts toward more efficient and effective environmental activities, the Otsuka Group began acquiring ISO14001 integrated certification in August 2020. In 2023, the certification expanded to include eight companies*1 in Japan and Otsuka Holdings, the supervising organization. Under the integrated environmental goals and management systems outlined in the certification, we will further strengthen our environmental initiatives and make Group-wide efforts to achieve the goals.

The Otsuka group has acquired ISO 14001 certification including integrated certification at 12 companies in Japan and 15 overseas (as of the end of December 2023).

*1 Otsuka Pharmaceutical, Otsuka Pharmaceutical Factory, Taiho Pharmaceutical (including its subsidiary, Okayama Taiho Pharmaceutical), Otsuka Chemical, Otsuka Foods, Otsuka Techno, EN Otsuka Pharmaceutical, and Higashiyama Film



ISO 14001 Certification

■ Otsuka Group's subsidiaries' acquisition of ISO 14001 certification

Acquisition rate 58.3% (Japan80.0%, Outside Japan39.2%)

* All production sites of the consolidated Otsuka Group

Japan: 12 Companies (Certified Companies)	Integrated certification as Otsuka Holdings (Otsuka Pharmaceutical Co., Ltd. , Otsuka Pharmaceutical Factory, Inc, Otsuka Chemical Co., Ltd. , Otsuka Food Co., Ltd., Otsuka Techno Corporation, EN Otsuka Pharmaceutical Co., Ltd., Higashiyama Film Co., Ltd.) Otsuka Packaging Industries Co., Ltd. J.O. Pharma Co., Ltd. Otsuka Electronics Co., Ltd. Otsuka Ohmi Ceramics Co., Ltd.
Outside Japan: 15 Companies (Certified Companies)	Taiwan Otsuka Pharmaceutical Co., Ltd. Korea Otsuka Pharmaceutical Co., Ltd. Nutrition & Sante SAS Nutrition & Sante Iberia SL Otsuka Pakistan Ltd. PT Amerta Indah Otsuka PT Otsuka Indonesia Zhejiang Otsuka Pharmaceutical Co., Ltd. Egypt Otsuka Pharmaceutical Co., S.A.E. PT Widatra Bhakti P.T.Lautan Otsuka Chemical Zhangjiagang Otsuka Chemical Co., Ltd. Hebron S.A. Otsuka Techno Vietnam Co., Ltd. Tianjin Otsuka Beverage

As of December, 2023

Third-Party Assurance

To improve the transparency and reliability of its environmental data, we have received a third-party assurance from KPMG AZSA Sustainability Co., Ltd. We have received assurances for greenhouse gas emissions Scopes 1 and 2 (CO₂ emissions from energy sources, including energy consumption) and Scope 3 (category 1). We are making efforts to understand the trends in emissions and improve them. We will continue to expand the scope of verification and further enhance the reliability of our data.

 [Third-Party Assurance Report](#)