

Environmental Data

Overall picture of business activities and environmental impacts throughout the supply chain

INPUT

Energy	97,796kL		
Gasoline	499kL		
Kerosene	328kL	Liquefied petroleum gas	4,448 t
Diesel Oil	1,115kL	Liquefied natural gas	0 t
A Fuel Oil	16,419kL	Town gas	11,516(thousand)m³
B & C Fuel Oil	0kL	Electricity	268,907(thousand)kWh

Scope: Domestic Group companies

Water withdrawal	17,006(thousand)m³
Water supply	3,186(thousand)m³
Industrial water	4,190(thousand)m³
Groundwater	3,136(thousand)m³
Rivers and lakes	0(thousand)m³

Scope: Domestic Group companies + 20 overseas production bases

OUTPUT

Emissions to Atmosphere	
Energy Derived	220,639t
Refrigerant Derived	13,283t
CO2 Emissions (Scope 1 and 2)	
Scope 1	83,805t
Scope 2	136,833t

Scope: Domestic Group companies

Wastewater	14,761(thousand)m³
Sewer Systems	3,459(thousand)m³
Public Water Systems	11,302(thousand)m³

Scope: Domestic Group companies + 20 overseas production bases

Waste	53,290t
Industrial waste	22,364t
Specially controlled waste	10t
General waste	2,812t
Valuable material	28,104t

Food waste		
Production stage	Food Waste Generated	24,229t
	Amount Recycled	23,975t
	Percent Recycled	99%
Distribution	Food Loss Disposed	95t
	Food Loss Donated	51t

Energy Use and CO2 Emissions

(data) item		FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
	Total (t-CO2) (Scope1 + 2)	254,423	243,193	250,508	243,828	247,208	231,348	222,267	220,639
	Scope1 (t-CO2)	95,913	88,568	101,840	97,804	99,035	87,155	82,980	83,805
	Scope2 (t-CO2)	158,510	154,625	148,667	146,024	148,173	144,193	139,286	136,833
	Scope3 (t-CO2)	—	—	—	—	—	5,813,398	6,004,617	6,349,821
	Category 1: Purchased products and services	—	—	—	—	—	3,900,278	4,076,851	4,337,732
	Category 2: Capital goods	—	—	—	—	—	28,511	18,945	21,482

CO2 Emissions		Category 3: Energy-related activities	—	—	—	—	—	37,852	36,444	36,060
		Category 4: Transportation, delivery (upstream)	—	—	—	—	—	287,370	283,028	287,455
		Category 5: Waste from operations	—	—	—	—	—	7,099	7,175	6,969
		Category 6: Business travel	—	—	—	—	—	1,464	1,459	1,454
		Category 7: Employee commuting	—	—	—	—	—	4,878	4,851	4,832
		Category 8: Leased assets (upstream)	—	—	—	—	—	not subject to calculation	not subject to calculation	not subject to calculation
		Category 9: Transportation, delivery (downstream)	—	—	—	—	—	295,482	283,710	330,553
		Category 10: Processing of sold	—	—	—	—	—	288,908	307,437	318,884
		Category 11: Use of products sold	—	—	—	—	—	937,398	961,645	982,753
		Category 12: Disposal of products sold	—	—	—	—	—	24,156	23,072	21,647
		Category 13: Leasing (downstream)	—	—	—	—	—	not subject to calculation	not subject to calculation	not subject to calculation
		Category 14: Franchising	—	—	—	—	—	not subject to calculation	not subject to calculation	not subject to calculation
		Category 15: Investment	—	—	—	—	—	not subject to calculation	not subject to calculation	not subject to calculation
Energy Use	Total	(crude oil equivalent: kL)	118,435	112,934	114,866	112,015	114,284	110,765	97,941	97,796
		Gasoline (kL)	703	671	617	487	497	528	517	499
		Kerosene (kL)	746	769	480	441	416	367	341	328
		Diesel Oil (kL)	1,174	1,212	1,198	1,264	1,098	1,177	1,100	1,115
		Fuel Oil A (kL)	14,788	12,476	18,821	17,839	18,243	15,147	15,624	16,419
		Fuel Oil B/C (kL)	442	454	349	0	0	0	0	0
		LPG (t)	5,017	5,005	4,687	4,913	4,938	4,801	4,605	4,448
		LNG (t)	0	0	0	0	0	0	0	0
		City Gas (thousand m³)	14,674	14,244	13,450	13,110	13,348	13,658	11,970	11,516
		Electricity (thousand kWh)	299,417	290,352	279,890	274,756	279,914	277,322	270,318	268,907

Scope: Domestic Group companies

Waste and other emissions, Recycling rate

(data) item			FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
Amount of waste, etc. discharged	Total(t)		60,458	60,517	58,253	54,350	55,061	55,232	57,044	53,290
		Industrial waste emissions (t)	29,005	27,609	27,443	25,792	25,572	23,164	23,577	22,364
		Specially controlled industrial waste (t)	43	32	32	34	12	36	16	10
		General waste (t)	1,957	2,278	3,177	2,440	2,479	3,585	3,288	2,812
		Valuable waste (t)	29,453	30,598	27,600	26,084	26,998	28,447	30,164	28,104
Waste recycling rate (%)			95.70%	95.90%	95.00%	95.70%	95.80%	96.00%	92.90%	94.80%

Scope: Domestic Group companies

Water consumption

(data) item			FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
Water consumption	Total (thousand m³)	Total	6,412	6,291	5,850	17,760	17,683	17,222	17,236	17,006
		Water supply	1,898	1,824	1,739	3,786	3,611	3,612	3,314	3,186
		Industrial water	1,443	1,400	1,335	4,626	4,270	3,909	4,161	4,190
		Groundwater	3,068	3,049	2,776	2,895	3,342	3,627	3,263	3,136
		Brackish/seawater	-	-	-	6,452	6,460	6,074	6,498	6,495
		Rivers/lakes	4	18	0	0	0	0	0	0

Scope: Domestic Group companies(FY2017~2019) + 20 overseas production bases(FY2020~2024)

Wastewater

(data) item			FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
Wastewater	Total (thousand m³)	Total	1,600	1,497	1,521	15,058	15,087	14,451	14,911	14,761
		Drainage System	640	557	570	3,428	3,501	3,831	3,857	3,459
		Public Water System	960	939	951	11,629	11,586	10,620	11,055	11,302

Scope: Domestic Group companies(FY2017~2019) + 20 overseas production bases(FY2020~2024)

Recycled water

(data) item			FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
Recycled water	Total (thousand m³)	Total	0	0	6	21	25	27	46	105

Scope: Domestic Group companies(FY2017~2019) + 20 overseas production bases(FY2020~2024)