

Global Warming Prevention

Trends in greenhouse gas emissions at business sites

Indicator		Unit	FY2021	FY2022	FY2023	FY2024
Total GHG emissions		kton-CO ₂	600	540	516	498
	CO ₂ emissions (*1)	kton-CO ₂	598	538	513	495
	Emissions other CO ₂ (*2)	kton-CO ₂	2	2	3	3

- *1 CO₂ emissions : The CO₂ conversion factor for purchased electricity in the Environmental Action Plan results report is calculated as 0.441 ton-CO₂/MWh in FY 2021, 0.436 ton-CO₂/MWh in FY 2022, 0.437 ton-CO₂/MWh in FY 2023 and 0.421 ton-CO₂/MWh in FY 2024.
- *2 Emissions other CO₂ : These are converted to equivalent amounts of CO₂ using the global warning potential (GWP) of each gas.

Trends in Energy Usage

Indicator	Unit	FY2021	FY2022	FY2023	FY2024
Energy usage for manufacturing (total)	PJ	5.57	5.09	4.88	4.90
Energy usage for distribution	PJ	1.03	0.63	0.47	0.23
Usage of renewable energy	GWh	242	320	440	472
Ratio of renewable energy to total electricity consumption	%	20.7	30.0	42.7	47.5
Energy used in data centers	GWh	425	389	353	319
PUE in data centers	-	1.56	1.57	1.60	1.58

Trend in CO₂ emission from Transportation

Indicator	Unit	FY2021	FY2022	FY2023	FY2024
CO ₂ emission from Transportation	kton-CO ₂	71	44	32	16

Global Warming Prevention

GHG Emissions Report Based on GHG Protocol (*3)

Indicator		FY2020		FY2021		FY2022		FY2023		FY2024	
Upstream (Scope3)		kton-CO ₂	% (*4)	kton-CO ₂	% (*4)	kton-CO ₂	% (*4)	kton-CO ₂	% (*4)	kton-CO ₂	% (*4)
	Purchased goods and services	1,192	21.4	1,304	18.2	1,361	25.0	1,086	27.3	2,748 (*8)	51.7
	Capital goods	15	0.3	13	0.2	11	0.2	7	0.2	24	0.5
	Fuel and energy-related activities not included in Scopes 1 and 2	99	1.8	94	1.3	85	1.6	82	2.1	81	1.5
	Transportation and distribution (Upstream)	53	0.9	71	1.0	44	0.8	32	0.8	16	0.3
	Waste generated in operations	4	0.1	4	0.1	4	0.1	3	0.1	3	0.0
	Business travel	27	0.5	23	0.3	48	0.9	71	1.8	82	1.5
	Employee commuting	5	0.1	6	0.1	5	0.1	5	0.1	6	0.1
	Leased assets (Upstream)	88	1.6	64	0.9	72	1.3	43	1.1	44	0.8
Reporting company (Scope1, 2)											
	Direct emissions (Scope 1)	75	1.3	70	1.0	65	1.2	64	1.6	69	1.3
	Indirect emissions from energy sources (Scope 2)	583 (*5) 540 (*6)	- 9.7	530 (*5) 428 (*6)	- 6.0	476 (*5) 341 (*6)	- 6.3	451 (*5) 268 (*6)	- 6.7	429 (*5) 237 (*6)	- 4.5
Downstream (Scope3)											
	Transportation and distribution (Downstream)	N/A	-	N/A	-	N/A	-	N/A	-	N/A	-
	Processing of sold products	12	0.2	16	0.2	16	0.3	12	0.3	11	0.2
	Use of sold products	3,470	62.2	5,073	70.7	3,358	61.7	2,283	57.4	1,982	37.3
	End-of-life treatment of sold products	1	0.0	8	0.1	6	0.1	4	0.1	3	0.1
	Leased assets (Downstream)	N/A (*7)	-	N/A	-	N/A	-	N/A	-	N/A	-
	Franchises	N/A	-	N/A	-	N/A	-	N/A	-	N/A	-
	Investment	N/A	-	N/A	-	27	0.5	17	0.4	14	0.3
Scope3 total		4,966	89.0	6,676	93.1	5,037	92.5	3,645	91.7	5,014	94.2

*3 GHG emissions quantification is subject to uncertainty when measuring activity data, determining emission factors, and considering scientific uncertainty inherent in the Global Warming Potential.

*4 The percentage of total GHG emissions (Scope 1 + Scope 2 [Market-based] + Scope 3) when Scope 2 emissions are calculated using the market-based method.

*5 Location-based

*6 Market-based

*7 N/A : Not Applicable

*8 From FY2024, the scope has been expanded. For details, refer to the [“Environmental Performance Data Calculation Standards”](#)