

NSG Group: Environment Data

CO2 emissions

		CY2011	CY2012	CY2013	CY2014	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023	CY2024
CO2 (Kt)	Scope 1	3,875	3,526	3,201	3,136	2,962	2,933	2,855	3,103	2,970	2,817	3,028	2,910	2,922	2,817
	Scope 2 Location	1,079	1,015	1,032	1,031	937	956	896	1,050	885	728	749	719	715	702
	Scope 2 Market	-	-	-	-	-	-	-	891	790	530	622	542	501	528
	Scope 3	-	-	-	-	-	-	-	3,924	3,728	3,696	4,005	3,755	3,677	3,707

(Reference) CO2 emissions in Japan

		CY2018	CY2019	CY2020	CY2021	CY2022	CY2023	CY2024
CO2 (Kt)	Scope 1	471	516	423	393	336	349	329
	Scope 2 Location	183	179	158	111	105	130	131
	Scope 2 Market	183	159	122	142	128	99	124
	Scope 3	252	267	345	200	178	208	205

Breakdown of CO2 emissions (Scope 3)

category	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023	CY2024
1. Purchased Goods & Services	2,261	2,033	2,026	2,278	2,101	1,827	1,760
2. Capital goods	42	100	67	75	75	79	72
3. Fuel & Energy related materials	557	550	489	595	541	527	572
4. Upstream transportation & Distribution	62	60	58	62	61	62	61
5. Waste generated in Operations	11	11	17	12	15	2	2
6. Business Travel	9	8	2	0.4	3	6	3
7. Employee Commuting	13	10	2	2	2	16	15
8. Upstream leased assets	0	0	0	0	0	0	0
9. Downstream transportation & distribution	158	145	224	168	175	289	241
10. Processing of sold products	600	600	600	600	600	615	714
11. Use of sold products	0	0	0	0	0	0	0
12. End of life treatment of sold producers	11	11	11	12	12	11	6
13. Downstream leased assets	0	0	0	0	0	0	0
14. Franchises	0	0	0	0	0	0	0
15. Investments	200	200	200	200	170	243	261
Other	0	0	0	0	0	0	0
Total all 15 categories (Kt)	3,924	3,728	3,696	4,005	3,755	3,677	3,707

CO2 reduction per unit of production volume

	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
CO2 emission (ton) / equivalent product (ton)	0.75	0.73	0.74	0.79	0.74	0.73	0.69	0.67

Air emissions (except CO2)

	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023	CY2024
NOx (Kt)	16	17	17	16	16	16	17	15
SOx (Kt)	6	6	6	6	6	6	5	5

Energy

	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023	CY2024
Natural gas (TJ)	30,547	32,968	32,016	30,746	34,095	32,379	32,385	32,288
Heavy fuel oil (TJ)	4,595	4,927	5,764	5,124	4,744	4,748	3,671	3,180
Electricity (TJ)	7,331	7,478	7,275	6,074	6,760	6,636	6,613	6,670

Water

	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023	CY2024
Water usage (Mm3)	19.5	17.6	17.4	15.9	16.0	14.8	14.8	14.3

Operational waste to landfill

	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023	CY2024
Waste glass to landfill	4.5	3.8	3.5	3.9	2.1	3.3	3.0	3.4
Non-glass waste to landfill	18.6	19.6	18.6	14.5	17.5	18.3	18.6	19.0
Total (Kt)	23.2	23.4	22.1	18.4	19.6	21.6	21.6	22.4

Recycling

	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023	CY2024
Recycling (not glass) (Kt)	48.8	52.6	40.5	35.5	34.2	36.0	42.0	37.1