

NSG Group: Environment Data

CO2 emissions

		CY2011	CY2012	CY2013	CY2014	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023
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
	Scope 2 Location	1,079	1,015	1,032	1,031	937	956	896	1,050	885	728	749	719	715
	Scope 2 Market	-	-	-	-	-	-	-	891	790	530	622	542	501
	Scope 3	-	-	-	-	-	-	-	2,513	2,819	2,952	3,556	3,276	3,235

(Reference) CO2 emissions in Japan

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

Breakdown of CO2 emissions (Scope 3)

category	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023
1. Purchased Goods & Services	1,055	1,289	1,532	1,939	1,656	1,536
2. Capital goods	0	4	4	4	5	6
3. Fuel & Energy related materials	356	547	472	588	534	501
4. Upstream transportation & Distribution	0	6	6	6	61	56
5. Waste generated in Operations	12	10	15	12	33	12
6. Business Travel	6	7	1	0.4	6	4
7. Employee Commuting	10	10	2	2	10	11
8. Upstream leased assets	0	0	0	0	0	0
9. Downstream transportation & distribution	140	145	119	168	175	260
10. Processing of sold products	735	600	600	600	600	553
11. Use of sold products	0	0	0	0	0	0
12. End of life treatment of sold producrs	0	0	0	37	35	11
13. Downstream leased assets	0	0	0	0	0	0
14. Franchises	0	0	0	0	0	0
15. Investments	200	200	200	200	170	243
Other	0	0	0	0	0	0
Total all 15 categories (Kt)	2,513	2,819	2,952	3,556	3,284	3,235

CO2 reduction per unit of production volume

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

Air emissions (except CO2)

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

Energy

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

Water

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

Operational waste to landfill

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

Recycling

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