

Environmental data

Response to climate change for decarbonization

Item		Coverage	Unit	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	
CO2 emission reduction rate (compared to 2013)		Group	%	2.2	8.0	11.3	5.0	12.0	9.8	
Gross profit basic unit index (compared to 2013) (CO2 emissions / gross profit)		Group	%	57	55	48	42	39	51	
Energy intensity index (compared to 2015) (Energy amount / Production amount)		Group	%	102	109	107	105	109	119	
CO2 emissions	Scope 1	heavy oil	Group	Thousand tons	14.2	13.8	11.6	14.4	11.9	13.0
		Natural gas			8.6	8.2	8.6	8.4	8.4	7.6
		subtotal			22.8	22.1	20.2	22.8	20.3	20.6
	Scope 2	Electric power			14.9	14.2	13.3	13.6	13.5	14.3
		Non-energy origin			9.3	8.0	9.1	9.3	8.6	8.5
		subtotal			24.2	22.2	22.4	22.9	22.1	22.7
	total					47.0	44.3	42.6	45.7	42.3
Amount of energy	Electric power	Group	KL	6,600	6,891	6,997	7,548	7,290	7,902	
	heavy oil			5,296	5,156	4,312	5,379	4,418	4,752	
	Natural gas			4,462	4,258	4,321	4,347	4,275	3,870	
	others			8	7	6	13	10	8	
	total			16,367	16,311	15,637	17,287	15,993	16,531	
So x emissions		Group	tons	7.6	6.4	3.7	7.5	6.2	7.4	
No x emissions		Group	tons	17.0	15.5	17.2	16.0	15.6	15.4	

Wastewater and waste management

Item		Coverage	Unit	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Recycling rate		Group	%	18.9	19.3	21.5	20.0	20.0	23.0
In-house processing rate		Group	%	64	62	61	62	65	66
Final disposal rate		Group	%	0.7	0.8	0.7	0.8	0.6	0.5
Amount of industrial waste generated		Group	tons	18,099	17,835	19,053	20,900	20,400	17,700
In-house processing amount		Group	tons	11,601	11,094	11,601	13,000	13,200	11,800
External emissions		Group	tons	6,498	6,741	7,452	7,900	7,200	6,000
Final landfill disposal amount		Group	tons	133	143	137	170	132	95
Reuse Recycled amount	External	Group	tons	886	1,312	1,455	1,961	1,753	1,854
	Internal		tons	2,539	2,125	2,651	2,207	2,270	2,153
	Total		tons	3,425	3,437	4,105	4,168	4,023	4,007
Water discharge (COD load)		Group	tons	20.5	21.4	18.0	20.3	17.7	17.2
Water discharge (SS load)		Group	tons	9.6	8.9	16.7	21.9	13.3	6.6

Securing water resources

Item		Coverage	Unit	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Water (usage)		Group	10,000 tons	625	589	594	599	580	594

Expand sales of eco-friendly products

Item		Coverage	Unit	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Production volume of environment-friendly products (to total production volume)		Osaka Organic Chemistry	%		-		9.4	8.9	9.0

Thorough environmental compliance

Item		Coverage	Unit	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
PRTR emission reduction rate (compared to FY2019)		Osaka Organic Chemistry	%	-	-	3.2	4.5	15.1	25.1
PRTR emissions	n-hexane	Osaka Organic Chemistry	tons	16.0	5.1	4.8	5.6	5.6	5.0
	Methyl methacrylate		tons	11.6	2.1	1.8	1.0	1.7	1.7
	Methyl acrylate		tons	12.4	2.3	2.6	3.0	1.9	2.0
	others		tons	26.1	11.6	11.2	10.6	8.7	7.0
	Total		tons	66.1	21.1	20.4	20.1	17.9	15.8
Number of serious environmental accidents / legal violations		Group	number	※0	0	0	0	0	0

※One environmental accident in 2018.

The cause of the leakage of methyl chloride (low concentration) is due to equipment abnormality, and there is no external influence.

• Data period : From April of the reporting year to March of the following year