

4.7.2.1 Public disclosure of key environmental aspects

Since the foundation of the company and based on the corporate motto: "Respect the Divine and Love People", the Kyocera Group has focused all corporate activities on three pillars of Living Together-- Coexisting with Our Community, Coexisting with Global Society, and Coexisting with Nature. Kyocera engages in environmental management to achieve sustainable corporate development, while pursuing the coexistence of ecological and economic goals.

Our aim is to grow together with society by constantly striving to provide even better products and services, while responding to the needs of society through environmental preservation and social contributions.

Kyocera's key environmental aspects are as follows; Greenhouse Gas Emissions, Water, Waste and Toxics.

The following section identifies the data for each aspect.

1.Greenhouse Gas Emission (Scoop 1,2)

Boundary : Major R&D and Production companies

(Unit : t-CO₂)

	2013	2014	2015	2016	2017	2018	2019
Scoop 1	3,493	3,403	3,455	3,426	3,380	3,524	3,361
Scoop 2	49,027	44,027	43,511	46,793	48,141	51,221	54,244
Total	52,520	47,409	46,967	50,220	51,520	54,745	57,605
Amount of reduction (from the defined baseyear : 2013)	-	-5,111	-5,553	-2,300	-1,000	2,225	5,085
Percentage of reduction (from the defined baseyear : 2013)	-	-0.7%	-10.6%	-4.4%	-1.9%	4.2%	9.6%

We calculated the greenhouse gas emissions based on a GHG protocol (WRI/WBCSD).

Target : Reduce 30% by 2030 compared 2013 levels

2.Water

		2015	2016	2017	2018	2019
Total amount of water use by source (Unit: m ³)	Industrial water	367,870	360,190	375,100	397,022	373,951
	City water	72,649	75,962	113,032	128,290	112,175
	Groundwater	34,163	29,178	29,649	32,495	55,856
	Total	474,682	465,330	517,781	557,807	541,982
Total amount of water reduced (Unit : m ³)	Total amount of water reduced	-76,922	-9,352	52,451	40,026	-15,825
	Reduction in water usage (from previous year)	-13.9%	-1.9%	11.3%	7.7%	-2.8%
Total amount of water recycled (Unit : m ³)	Total amount of water recycled (Percentage of water recycled)	11,453 (2.4%)	11,628 (2.5%)	18,697 (3.6%)	19,923 (3.6%)	21,856 (4.0%)
Total amount of water discharge (Unit : m ³)	River	23,685	28,820	39,959	50,240	15,785
	Sewage	370,192	337,277	376,565	397,619	407,067
Total amount of water discharge by quality	River	Average_BOD	5 mg/L	3 mg/L	2 mg/L	5 mg/L
		Average_SS	2 mg/L	2 mg/L	3 mg/L	7 mg/L
	Sewage	Average_BOD	48 mg/L	96 mg/L	101 mg/L	67 mg/L
		Average_SS	43 mg/L	25 mg/L	13 mg/L	38 mg/L

Target : 1% reduction in water usage (per toner production volume) compared to previous year

3.Waste

(Unit : kg)

		2015	2016	2017	2018	2019
Waste	Total amount of solid waste generation	742,340	997,173	857,400	807,944	1,098,690
	Total amount of waste reduced	-671,201	254,833	-139,773	-49,456	290,746
	Reduction in waste emissions (from the defined base year : 2015)	-	34.3%	-18.8%	-6.7%	39.2%
	Amount of recycling	740,898	993,473	854,915	806,326	1,096,591
	Amount of landfill	1,442	3,699	2,485	1,618	2,099

Target : 1% reduction in industrial waste emissions base unit (per total production) compared to previous year

The defined base year : 2015

4.Toxics

(Unit : kg)

		Substances subject	2015	2016	2017	2018	2019
Total handing amount	30	Linear alkylbenzenesulfonate and the chemical compound	11,014	11,009	9,574	5,566	5,397
	31	Antimony and the chemical compound	2,448	2,841	2,757	3,140	2,998
	412	Manganese and the chemical compound	233	206	32,740	39,814	40,722
		Other	669	977	1,081	1,691	1,958
	Total of substances subject		14,364	14,683	46,152	50,211	51,075
Total amount of release and transfer	Amount of consumption		13,422	13,853	44,997	47,793	50,653
	Amount of release		63	71	68	25	162
	Amount of transported		879	759	1,087	594	260
	amount of substances released without proper treatment		0	0	0	0	0

Target : Minimize the amount of chemical substances emitted from plants and offices,
and reduce the amount of substances released without proper treatment to zero.

2019 List of chemical substances subjected to the PRTR Act

(Unit : kg)

Directive No.	Substance name	Total handling amount	Atmospheric	Public waterway	Soil system
30	Linear alkylbenzenesulfonate	5,397	0	0	0
31	Antimony and the chemical	2,998	0	0	0
412	Manganese and the chemical	40,722	0	0	0
13	Acetonitrile	13	0.6	0	0
18	Aniline	0	0	0	0
53	Ethylbenzene	0.1	0	0	0
66	1,2-Epoxybutane	0	0	0	0
80	Xylene	9.8	0.5	0	0
81	Quinoline	0.1	0	0	0
82	Silver and its water-soluble	0.5	0	0	0
125	Chlorobenzene	0.6	0	0	0
127	Chloroform	235	12	0	0
232	N,N- dimethylformamide	6	0.3	0	0
300	Toluene	116	6	0	0
305	Lead compound	0	0	0	0
316	Nitrobenzene	0.7	0	0	0
384	1- bromopropane	1,570	143	0	0
392	n- hexane	7	0.3	0	0
407	Poly(oxyethylene)=alkylether	0.1	0	0	0
460	Tricresyl phosphate	0.1	0	0	0

2018 List of chemical substances subjected to the PRTR Act

(Unit : kg)

Directive No.	Substance name	Total handling amount	Atmospheric	Public waterway	Soil system
30	Linear alkylbenzenesulfonate	5,566	0	0	0
31	Antimony and the chemical	3,140	0	0	0
412	Manganese and the chemical	39,814	0	0	0
13	Acetonitrile	5	0	0	0
18	Aniline	0	0	0	0
53	Ethylbenzene	0	0	0	0
66	1,2-Epoxybutane	57	0	0	0
80	Xylene	0	0	0	0
81	Quinoline	0	0	0	0
82	Silver and its water-soluble	0.7	0	0	0
125	Chlorobenzene	0	0	0	0
127	Chloroform	296	15	0	0
232	N,N- dimethylformamide	12	0.6	0	0
300	Toluene	173	8	0	0
305	Lead compound	0.5	0	0	0
316	Nitrobenzene	0	0	0	0
384	1- bromopropane	1,130	0	0	0
392	n- hexane	19	0.8	0	0
407	Poly(oxyethylene)=alkylether	0	0	0	0
460	Tricresyl phosphate	0	0	0	0