

EPEAT4.7.2.1 Public disclosure of key environmental aspects

Plan with goals, targets and objectives

Canon environmental Goal is the achievement of Canon Environmental Vision. Through technological innovation and improved management efficiency, Canon aims to realize a society that promotes both enriched lifestyles and the global environment.
<http://www.canon.com/environment/vision/vision.html>

Canon has formulated an action plan and monitors the progress of its activities to systematically promote efforts to achieve its Environmental Vision. The results of activities are evaluated and verified each year with a view to incorporating this feedback into future activities.

<http://www.canon.com/environment/management/>

The key environmental aspects show as follows;

- a) Greenhouse Gas Emissions: Canon has long understood the importance of preventing global warming. We have promoted energy conservation activities across the Group, including developing technologies to prevent global warming and making improvements to production facilities and air conditioning equipment that consume substantial amounts of energy.

The following table shows the data for main sites.

		(t-CO2)	
		2014	2015
Greenhouse Gas Emissions	Scope 1	176,878	169,974
	Scope 2	1,052,007	1,053,222
	Scope 1&2	1,228,884	1,223,196

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

- b) Water: Canon aims to reduce the amount of water used in the business activities of the entire Canon group (global). To this end, we promote water-saving measures and recycling and reduce the use of water from natural water systems such as rivers and groundwater.

The following table shows the data for main sites.

		2014	2015	
Total water withdrawal by source (thousand m ³)	Industrial water	3,038	3,211	
	Groundwater	1,580	1,728	
	Municipal water	5,138	4,798	
	Total water withdrawal	9,756	9,737	
Total volume of water recycled	Total volume of water recycled	1,868	1,828	
	A ratio for total water	19.2	18.8	
Total water discharge by quality and destination	Public water body	Total water discharge (thousand m ³)	2,612	1,726
		Average_BOD (mg/L)	12	6
		Average_SS (mg/L)	11	4
	Sewage	Total water discharge (thousand m ³)	5,239	6,140
		Average_BOD (mg/L)	44	33
		Average_SS (mg/L)	30	22

c) Waste: Canon has focused on enhancing technologies for the reuse of resources in a bid to further restrict the generation of actual waste. In 2015, Canon proceeded with various waste reduction efforts at our production sites, such as recycling waste generated in plastic molding processes, reducing press material waste, and reducing parts packaging volume.

The following table shows the data for main sites.

		2014	2015
Waste	All solid waste generated	98,303	99,638
	Discard that have been reduced (from the defined base year:previous year)	4,769	-1,335
	Discard that have been reused or recycled	87,369	87,094
	Solid waste that is landfilled	2,382	2,188
	Solid waste that sent to waste-to-energy	4,004	5,327
	Solid waste that sent to incineration	4,549	5,029
	Solid waste that sent to other disposal facilities	0t	0t

- d) Toxics: Canon strives to eliminate or reduce hazardous chemical substances used in the manufacturing process. For substances difficult to eliminate or reduce, our policy is to minimize their release into the air or water.

In 2015, emissions of substances listed in the Pollution Release and Transfer Register (PRTR) were down 30% year-on-year, to 36 tons.

The following table shows the data for main sites.

2015 List of chemical substances subjected to the PRTR Act (Global) (Unit: kg)

Directive No.	Name	Emissions volume		Transfer volume		
		Atmospheric emissions amount	Public waterway emissions amount	Amount Transferred to sewage system	Amount of waste transferred	Amount of recovered substance transferred
7	n-butyl acrylate	1	0	0	0	4
20	2-aminoethanol	54	0	4	0	12,221
31	antimony and its compounds	15	0	0	0	767
53	ethylbenzene	268	0	0	0	26,903
71	ferric chloride	0	0	0	0	31,051
80	xylene	1,879	0	0	0	152,689
125	monochlorobenzene	6,265	0	0	0	101,677
128	chloromethane; methyl chloride	15	0	0	0	0
150	1,4-dioxane	605	0	0	0	895
203	Diphenyl amine	0.00	0.00	0.00	0.00	0.04
232	N,N-dimethylformamide	437	0	0	0	632
240	styrene	248	0	0	0	48
259	Tetraethylthiuram disulfide	0	0	0	0	1
296	1,2,4-trimethylbenzene	8,344	0	0	0	11,330
298	tolylene diisocyanate	0	0	0	0	355
300	toluene	17,325	0	0	4,845	53,627
308	nickel	0	0	0	0	921
309	nickel compounds	0	0	0	25	4,658
343	pyrocatechol (aka, catechol)	8	0	0	0	2,349
349	phenol	45	0	0	0	85
374	hydrogen fluoride and its water-soluble salts	3	1	1,542	0	849
395	water-soluble salts of peroxydisulfuric acid	1	0	0	0	1
410	poly(oxyethylene)nonylphenyl ether	0	0	151	0	1,379
412	manganese and its compounds	0	0	0	0	462
438	Methylnaphthalene	171	0	0	0	970
448	methylenebis (4,1-cyclohexylene) diisocyanate	0	0	0	0	3,271

2014 List of chemical substances subjected to the PRTR Act (Global)

(Unit: kg)

Directive No.	Name	Emissions volume		Transfer volume		
		Atmospheric emissions amount	Public waterway emissions amount	Amount Transferred to sewage system	Amount of waste transferred	Amount of recovered substance transferred
7	n-butyl acrylate	11	0	0	0	1,145
20	2-aminoethanol	108	0	6	0	15,421
31	antimony and its compounds	47	0	0	0	2,631
53	ethylbenzene	284	0	0	0	25,717
57	ethylene glycol monoethyl ether	423	0	0	3	416
58	ethylene glycol monomethyl ether	128	0	0	0	143
71	ferric chloride	0	0	0	0	121,357
80	xylene	4,635	0	0	20	145,623
125	monochlorobenzene	6,122	0	0	0	99,359
128	chloromethane; methyl chloride	8	0	0	0	0
150	1,4-dioxane	585	0	0	0	841
181	dichlorobenzene	0	0	0	0	24
202	divinylbenzene	0	0	0	0	1
232	N,N-dimethylformamide	425	0	0	0	612
240	styrene	991	0	0	0	10,106
296	1,2,4-trimethylbenzene	8,059	0	0	0	11,172
298	tolylene diisocyanate	0	0	0	0	390
299	toluidine	2	0	0	0	0
300	toluene	23,316	0	0	6,485	64,472
306	hexamethylene diacrylate	0	0	0	0	1
308	nickel	0	0	0	0	886
309	nickel compounds	0	0	6	10	4,525
343	pyrocatechol (aka, catechol)	8	0	0	0	2,230
349	phenol	34	0	0	0	93
374	hydrogen fluoride and its water-soluble salts	4	6	1,547	0	424
384	1-bromopropane	266	0	0	9	2,485
392	n-hexane	5,356	0	0	257	771
395	water-soluble salts of peroxodisulfuric acid	0	0	0	0	1
405	boron compounds	0	0	0	15	1,329
410	poly(oxyethylene)nonylphenyl ether	0	0	0	0	2,102
412	manganese and its compounds	0	0	0	0	151
448	methylenebis (4,1-cyclohexylene) diisocyanate	0	0	0	0	2,581