


# Kyocera Group Environmental Impact Data

## Kyocera Corporation Shiga Yohkaichi Plant



**Profile**

Location	1166-6 Hebimizo-cho, Higashiomi-shi, Shiga
Products manufactured	Fine ceramic components, single crystal products, structural components, solar cells, cutting tools, photoreceptor drums
Number of employees	1,642
Land area	293,871 m <sup>2</sup>
Total floor space	144,453 m <sup>2</sup>

### Environmental Performance

Items	Units		FY2010		FY2011	
	Amount	Specific consumption	Amount	Specific consumption	Amount	Specific consumption
Energy	kℓ (crude oil based)	kℓ/M Yen	47,236	0.70	59,562	0.60
CO <sub>2</sub>	t-CO <sub>2</sub>	t-CO <sub>2</sub> /M Yen	70,105	1.04	75,177	0.76
Water	m <sup>3</sup>	m <sup>3</sup> /M Yen	1,285,197	19.0	1,530,772	15.5
Industrial waste emissions	kg	kg/M Yen	3,384,138	50.1	4,929,068	49.9
Effluent	m <sup>3</sup>	m <sup>3</sup> /M Yen	974,173	14.4	1,127,575	11.4

### Air related

Items	Facility	Legal standard	Internal criteria	Self-management standard	Performance for FY2011		
					Ave	Max	Measurement frequency
Soot and dust (g/Nm <sup>3</sup> )	Compound intermediate processing plant	0.15	0.12	0.072	0.023	0.023	Twice/year
	3-4 factory, No.12 electric furnace	0.25	0.2	0.04	0.001	0.001	Twice/year
	3-4 factory, No.13 electric furnace	0.25	0.2	0.04	0.01	0.01	Twice/year
NOx (ppm)	Compound intermediate processing plant	250	200	103	26	26	Twice/year
	3-4 factory, No.12 electric furnace	180	144	129	24	36	Twice/year
	3-4 factory, No.13 electric furnace	180	144	129	18	20	Twice/year
SOx (K value)	Compound intermediate processing plant	—	—	—	0.0063	0.0063	Twice/year

### Air emission: total impact (units: tons)

Items	Total emission	
	FY2010	FY2011
NOx	2.61	6.48
SOx	0.23	0.09

### Water quality

(units: mg/ℓ)

Items	Legal standard	Internal criteria	Self-management standard	Performance for FY2011		
				Ave	Max	Measurement frequency
Hydrogen ion concentration (pH)	6.0 ~ 8.5	6.2 ~ 8.2	6.4 ~ 8.0	7.2	7.4	3 times/day
Biochemical oxygen demand (BOD)	20	10	9	0.5	4.0	Once/week
Chemical oxygen demand (COD)	20	10	9	1.1	6.1	Once/day
Suspended solid (SS)	20	5	4.7	1.2	2.6	Once/week
N-hexane extracts weight	3	1	0.7	<0.1	<0.1	Once/month
Phenols content	1	0.5	0.3	<0.01	<0.01	Once/year
Copper content	1	1	0.05	0.03	0.03	Once/year
Zinc content	1	1	0.5	0.02	0.02	Once/month
Dissolved iron content	10	5	0.3	0.01	0.01	Once/year
Dissolved manganese content	10	5	0.3	0.1	0.1	Once/year
Coliform group number (colonies/ mℓ)	3,000	350	12	0	0	Once/month
Nitrogen content	8	8	5	1.0	2.2	Once/day
Phosphorous content	0.5	0.5	0.4	0.1	0.2	Once/week

### Water pollution: total impact (units: tons)

Items	Total emission	
	FY2010	FY2011
Chemical oxygen demand (COD)	1.16	1.24
Biochemical oxygen demand (BOD)	0.65	0.54
Nitrogen	1.07	1.06
Phosphorous	0.06	0.08

### Bad odors

No incidents exceeded standards.

### Noise and vibration

No incidents exceeded standards.

### PRTR substances

(units: tons)

Number	Substance	Handled amounts	Releases			Transfers to		Other amounts		
			Air	Water	Soil	Waste	Sewage	Recycled	Consumption	Removed by process
82	silver and its water-soluble compounds	56.6	0.0	0.0	0.0	0.0	0.0	1.4	55.2	0.0
132	cobalt and its compounds	5.5	0.0	0.0	0.0	0.1	0.0	0.1	5.3	0.0
243	dioxins	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
308	nickel	1.3	0.0	0.0	0.0	0.9	0.0	0.1	0.3	0.0
309	nickel compounds	8.8	0.0	0.0	0.0	2.1	0.0	0.0	6.6	0.0
374	hydrogen fluoride and its water-soluble salts	318.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	318.1
405	boron compounds	52.3	0.0	0.0	0.0	52.3	0.0	0.0	0.0	0.0
Target chemical substances total		442.8	0.0	0.0	0.0	55.6	0.0	1.6	67.5	318.1