

Refineries ①

Hokkaido Refinery

25-1 Masago-cho, Tomakomai-city, Hokkaido 059-1392

Section	Indicator	Unit	FY2010	FY2011	FY2012	FY2013	FY2014
Crude oil throughput		thousand kiloliter	5,950	6,606	6,121	6,856	7,305
Prevention of global warming	Total energy consumption	thousand kiloliter of crude oil equivalent	471	521	479	536	530
	Unit energy consumption	liter of crude oil equivalent/kiloliter	8.60	8.03	8.19	8.22	8.08
Air pollution	SOx	tonnes	2,209	2,578	3,193	3,417	3,735
	NOx	tonnes	1,159	1,202	1,112	1,194	1,203
	Soot/dust	tonnes	12.5	15.0	15.1	14.8	8.7
	Benzene	tonnes	1.2	1.4	1.2	1.5	1.4
Water source	Service water	thousand tonnes	9,853	9,985	9,743	10,140	10,033
	Seawater	thousand tonnes	137,655	125,758	130,573	144,415	121,982
Water pollution	Wastewater	thousand tonnes	147,508	135,743	140,316	154,555	132,015
	COD	tonnes	27.0	30.9	24.0	35.0	27.3
	Total Nitrogen	tonnes					
	Total Phosphorus	tonnes					
Waste	Emitted	tonnes	13,908	12,598	12,047	13,072	11,969
	Reduced by intermediate treatment	tonnes	663	744	1,002	699	1,419
	Recycled	tonnes	13,240	11,848	11,038	12,366	10,536
	Final disposal	tonnes	5	6	7	7	14

※The tabulation period for SOx is January -December .

<PRTR-listed chemical substances discharged and transferred in FY2014 >

unit: tonnes

CAS No.	Substance name	Discharged into air	Discharged into water	Discharged into soil	Transferred to locations outside	total
1332-21-4	asbestos	0.0	0.0	0.0	1.5	1.5
100-41-4	ethylbenzene	0.3	0.0	0.0	0.0	0.3
1330-20-7	xylene	1.1	0.0	0.0	0.0	1.1
127-18-4	tetrachloroethylene	0.0	0.0	0.0	1.5	1.5
108-88-3	toluene	3.8	0.0	0.0	0.0	3.8
110-54-3	n-hexane	19.0	0.0	0.0	0.0	19.0
71-43-2	benzene	1.4	0.0	0.0	0.0	1.4
	Total PRTR-listed chemical substances	25.6	0.0	0.0	3.0	28.6



Note : Chemicals are not listed if the discharged and transferred amounts are less than 0.1 tons.
 Figures indicated in graphs and tables within this report are rounded off and therefore may not exactly match the totals shown.

Refineries ②

Chiba Refinery

2-1 Anesakikaigan, Ichihara-city, Chiba 299-0192

Section	Indicator	Unit	FY2010	FY2011	FY2012	FY2013	FY2014
Crude oil throughput		thousand kiloliter	10,345	9,168	10,032	9,168	10,936
Prevention of global warming	Total energy consumption	thousand kiloliter of crude oil equivalent	861	767	844	794	873
	Unit energy consumption	liter of crude oil equivalent/kiloliter	8.51	8.94	8.99	9.00	8.64
Air pollution	SOx	tonnes	2,111	1,628	2,195	1,932	2,151
	NOx	tonnes	1,635	1,205	1,397	1,309	1,480
	Soot/dust	tonnes	174.8	88.6	111.2	95.5	154.7
	Benzene	tonnes	0.5	0.8	0.5	0.7	0.8
Water source	Service water	thousand tonnes	18,534	17,449	18,558	18,689	19,034
	Seawater	thousand tonnes	329,205	295,669	334,516	307,927	327,124
Water pollution	Wastewater	thousand tonnes	347,739	313,118	353,074	326,616	346,158
	COD	tonnes	23.2	25.1	26.2	29.6	27.1
	Total Nitrogen	tonnes	51.4	52.8	58.0	66.4	70.7
	Total Phosphorus	tonnes	0.1	0.1	0.2	0.2	0.3
Waste	Emitted	tonnes	83,808	88,210	87,549	84,296	89,546
	Reduced by intermediate treatment	tonnes	26,891	29,983	26,688	28,140	25,937
	Recycled	tonnes	56,910	58,200	60,851	56,147	63,597
	Final disposal	tonnes	7	27	10	9	12

※The tabulation period for SOx is January -December .

<PRTR-listed chemical substances discharged and transferred in FY2014 >

CAS No.	Substance name	unit: tonnes					total
		Discharged into air	Discharged into water	Discharged into soil	Transferred to locations outside		
141-43-5	2-aminoethanol	0.0	0.0	0.0	2.2	2.2	
1332-21-4	asbestos	0.0	0.0	0.0	1.8	1.8	
100-41-4	ethylbenzene	0.2	0.0	0.0	0.0	0.2	
1330-20-7	xylene	0.6	0.0	0.0	0.0	0.6	
95-63-6	1,2,4-trimethylbenzene	0.1	0.0	0.0	0.0	0.1	
108-88-3	toluene	4.4	0.0	0.0	0.0	4.4	
112-02-7	hexadecyltrimethylammonium chloride	0.0	9.8	0.0	0.0	9.8	
110-54-3	n-hexane	11.0	0.0	0.0	0.0	11.0	
71-43-2	benzene	0.8	0.0	0.0	0.0	0.8	
	Total PRTR-listed chemical substances	17.0	9.8	0.0	4.0	30.8	



Note : Chemicals are not listed if the discharged and transferred amounts are less than 0.1 tons.
 Figures indicated in graphs and tables within this report are rounded off and therefore may not exactly match the totals shown.

Refineries ③

Aichi Refinery

11 Minamihama-machi, Chita-city, Aichi 478-8555

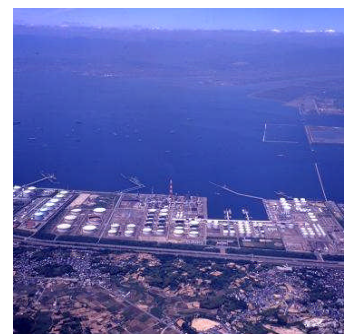
Section	Indicator	Unit	FY2010	FY2011	FY2012	FY2013	FY2014
Crude oil throughput		thousand kiloliter	7,213	7,440	7,974	6,978	8,825
Prevention of global warming	Total energy consumption	thousand kiloliter of crude oil equivalent	654	665	665	613	681
	Unit energy consumption	liter of crude oil equivalent/kiloliter	8.82	8.89	8.65	8.75	8.24
Air pollution	SOx	tonnes	1,385	1,095	900	792	955
	NOx	tonnes	1,296	1,259	1,283	1,179	1,302
	Soot/dust	tonnes	46.0	42.1	51.6	40.6	47.7
	Benzene	tonnes	1.6	1.8	1.0	0.9	1.5
Water source	Service water	thousand tonnes	12,530	12,582	12,567	12,495	12,474
	Seawater	thousand tonnes	214,318	227,061	240,107	213,855	233,581
Water pollution	Wastewater	thousand tonnes	226,848	239,643	252,674	226,350	246,055
	COD	tonnes	8.1	9.4	8.9	8.5	8.7
	Total Nitrogen	tonnes	6.9	6.1	6.5	5.5	6.9
	Total Phosphorus	tonnes	1.1	1.1	0.6	0.5	0.7
Waste	Emitted	tonnes	77,420	84,353	86,610	90,320	93,486
	Reduced by intermediate treatment	tonnes	41,244	41,692	47,588	49,544	52,365
	Recycled	tonnes	36,172	42,630	39,001	40,729	41,099
	Final disposal	tonnes	5	31	21	47	22

※The tabulation period for SOx is January -December .

<PRTR-listed chemical substances discharged and transferred in FY2014 >

CAS No.	Substance name	unit: tonnes					total
		Discharged into air	Discharged into water	Discharged into soil	Transferred to locations outside		
1332-21-4	asbestos	0.0	0.0	0.0	1.6	1.6	
100-41-4	ethylbenzene	0.2	0.0	0.0	0.0	0.2	
1330-20-7	xylene	0.9	0.0	0.0	0.0	0.9	
108-88-3	toluene	3.4	0.0	0.0	0.0	3.4	
110-54-3	n-hexane	11.0	0.0	0.0	0.0	11.0	
71-43-2	benzene	1.5	0.0	0.0	0.0	1.5	
	Total PRTR-listed chemical substances	17.1	0.0	0.0	1.6	18.7	

Note : Chemicals are not listed if the discharged and transferred amounts are less than 0.1 tons.
 Figures indicated in graphs and tables within this report are rounded off and therefore may not exactly match the totals shown.



Refineries ④

Former Tokuyama Refinery 1-1 Shingu-cho, Shunan-city, Yamaguchi 745-8613

At the end of fiscal 2013, Idemitsu terminated the crude oil refining function of the Tokuyama Refinery and renamed the facility the Tokuyama Complex. Accordingly, the facility's environmental performance data in fiscal 2014 is presented as part of data for the Tokuyama Complex.

Section	Indicator	Unit	FY2010	FY2011	FY2012	FY2013	FY2014
Crude oil throughput		thousand kiloliter	5,417	6,116	5,029	5,537	-
Prevention of global warming	Total energy consumption	thousand kiloliter of crude oil equivalent	403	428	363	405	-
	Unit energy consumption	liter of crude oil equivalent/kiloliter	10.43	9.92	10.49	9.97	-
Air pollution	SOx	tonnes	181	222	191	207	-
	NOx	tonnes	605	596	492	567	-
	Soot/dust	tonnes	14.1	27.2	16.2	18.3	-
	Benzene	tonnes	0.4	0.5	0.4	0.4	-
Water source	Service water	thousand tonnes	3,227	4,787	4,418	4,631	-
	Seawater	thousand tonnes	205,728	200,973	176,655	208,747	-
Water pollution	Wastewater	thousand tonnes	208,955	205,760	181,073	213,378	-
	COD	tonnes	15.6	13.4	13.0	13.8	-
	Total Nitrogen	tonnes	9.2	7.7	7.3	8.9	-
	Total Phosphorus	tonnes	0.3	0.2	0.2	0.3	-
Waste	Emitted	tonnes	3,636	3,501	4,220	3,491	-
	Reduced by intermediate treatment	tonnes	1,130	1,176	1,343	812	-
	Recycled	tonnes	2,465	2,297	2,843	2,664	-
	Final disposal	tonnes	41	28	34	15	-

※The tabulation period for SOx is January -December.



Petrochemical Plant

Chiba Plant

1-1 Anesakikaigan, Ichihara-city, Chiba 299-0193

Prime Polymer Co., Ltd.'s Anesaki Works is included.

Section	Indicator	Unit	FY2010	FY2011	FY2012	FY2013	FY2014
Production of ethylene equivalent		thousand tonnes	2,112	1,877	1,934	2,061	1,938
Prevention of global warming	Total energy consumption	thousand kiloliter of crude oil equivalent	643	583	634	637	628
	Unit energy consumption	kiloliter of crude oil equivalent/tonnes	0.305	0.311	0.328	0.309	0.324
Air pollution	SOx	tonnes	7.7	11.2	18.8	17.2	16.4
	NOx	tonnes	967	962	1,058	1,019	955
	Soot/dust	tonnes	5.2	12.3	6.5	13.4	7.7
Water source	Service water	thousand tonnes	4,140	3,962	3,777	3,631	3,462
	Seawater	thousand tonnes	123,432	105,500	114,107	117,173	127,202
Water pollution	Wastewater	thousand tonnes	125,492	107,655	116,126	118,933	128,709
	COD	tonnes	9.7	9.5	8.5	8.0	8.1
	Total Nitrogen	tonnes	15.9	15.5	12.9	13.0	10.2
	Total Phosphorus	tonnes	0.4	0.3	0.2	0.2	0.1
Waste	Emitted	tonnes	16,283	11,933	12,423	10,528	11,679
	Reduced by intermediate treatment	tonnes	3,350	747	116	937	716
	Recycled	tonnes	12,917	11,176	12,303	9,582	10,960
	Final disposal	tonnes	16	10	4	9	3

※The tabulation period for SOx is January -December .

<PRTR-listed chemical substances discharged and transferred in FY2014 >

unit: tonnes

CAS No.	Substance name	Discharged into air	Discharged into water	Discharged into soil	Transferred to locations outside	total
141-43-5	2-aminoethanol	0.0	0.0	0.0	39.0	39.0
1332-21-4	asbestos	0.0	0.0	0.0	0.8	0.8
80-05-7	4,4'-isopropylidenediphenol; bisphenol A	0.0	0.0	0.0	3.6	3.6
100-41-4	ethylbenzene	4.2	0.0	0.0	15.0	19.2
1330-20-7	xylene	1.6	0.0	0.0	0.0	1.6
75-45-6	chlorodifluoromethane; HCFC-22	3.3	0.0	0.0	0.0	3.3
75-09-2	dichloromethane; methylene dichloride	69.0	0.0	0.0	200.0	269.0
100-42-5	styrene	7.9	0.0	0.0	3.8	11.7
121-44-8	triethylamine	0.0	12.0	0.0	0.0	12.0
75-69-4	trichlorofluoromethane; CFC-11	0.0	0.0	0.0	2.0	2.0
95-63-6	1,2,4-trimethylbenzene	0.6	0.0	0.0	0.0	0.6
108-67-8	1,3,5-trimethylbenzene	0.2	0.0	0.0	0.0	0.2
108-88-3	toluene	0.3	0.0	0.0	0.3	0.6
108-95-2	phenol	0.3	0.0	0.0	1.6	1.9
110-54-3	n-hexane	43.0	0.0	0.0	0.0	43.0
71-43-2	benzene	2.0	0.0	0.0	0.3	2.3
	Total PRTR-listed chemical substances	132.4	12.0	0.0	266.4	410.7



Note : Chemicals are not listed if the discharged and transferred amounts are less than 0.1 tons.
 Figures indicated in graphs and tables within this report are rounded off and therefore may not exactly match the totals shown.

Complex

Tokuyama Complex

1-1 Shingu-cho, Shunan-city, Yamaguchi 745-8613

Cray Valley Idemitsu Corporation is included.

At the end of fiscal 2013, Idemitsu terminated the crude oil refining function of the Tokuyama Refinery and renamed the facility the Tokuyama Complex.

Section	Indicator	Unit	FY2010	FY2011	FY2012	FY2013	FY2014
Production of ethylene equivalent		thousand tonnes	1,731	1,628	1,329	1,629	1,464
Prevention of global warming	Total energy consumption	thousand kiloliter of crude oil equivalent	674	625	525	630	759
	Unit energy consumption	kiloliter of crude oil equivalent/tonnes	0.390	0.384	0.395	0.382	0.518
Air pollution	SOx	tonnes	1,160	1,234	1,013	1,025	1,109
	NOx	tonnes	1,384	1,340	1,110	1,337	1,446
	Soot/dust	tonnes	18.7	8.3	9.5	9.2	12.4
Water source	Service water	thousand tonnes	12,161	10,878	10,840	13,159	14,918
	Seawater	thousand tonnes	298,578	292,517	251,234	289,706	389,337
Water pollution	Wastewater	thousand tonnes	310,740	303,395	265,074	302,865	404,255
	COD	tonnes	13.9	14.0	9.9	10.2	14.6
	Total Nitrogen	tonnes	14.0	12.7	12.6	11.2	12.0
	Total Phosphorus	tonnes	0.3	0.2	0.3	0.2	0.4
Waste	Emitted	tonnes	28,718	30,721	23,850	25,985	27,181
	Reduced by intermediate treatment	tonnes	12,398	15,401	12,333	12,388	14,586
	Recycled	tonnes	16,289	15,294	11,498	13,561	12,570
	Final disposal	tonnes	32	26	19	36	25

Notes:

1. Environmental performance data in fiscal 2013 and before represents data from the former Tokuyama Petrochemical Plant.
2. The tabulation period for SOx is January – December.

<PRTR-listed chemical substances discharged and transferred in FY2014 >

CAS No.	Substance name	unit: tonnes					total
		Discharged into air	Discharged into water	Discharged into soil	Transferred to locations outside		
141-43-5	2-aminoethanol	0.0	0.0	0.0	7.4	7.4	
100-41-4	ethylbenzene	1.5	0.0	0.0	0.0	1.5	
1330-20-7	xylene	2.4	0.0	0.0	0.0	2.4	
77-73-6	dicyclopentadiene	0.3	0.0	0.0	0.0	0.3	
68-12-02	N,N-dimethylformamide	0.0	0.0	0.0	27.0	27.0	
100-42-5	styrene	10.0	0.0	0.0	6.8	16.8	
95-63-6	1,2,4-trimethylbenzene	0.3	0.0	0.0	0.0	0.3	
108-88-3	toluene	3.9	0.0	0.0	1.2	5.1	
91-20-3	naphthalene	0.1	0.0	0.0	0.0	0.1	
110-54-3	n-hexane	3.0	0.0	0.0	0.0	3.0	
71-43-2	benzene	1.5	0.0	0.0	0.0	1.5	
1336-36-3	polychlorinated biphenyls; PCBs	0.0	0.0	0.0	36.0	36.0	
	Total PRTR-listed chemical substances	23.0	0.0	0.0	78.4	101.4	



Note : Chemicals are not listed if the discharged and transferred amounts are less than 0.1 tons.
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