

ZEON Corporation		FY2008	FY2009	FY2010	FY2011	FY2012
Toxic substances	Butadiene consumption (tons)	346,749	349,841	388,507	346,223	334,270
	Butadiene emissions (tons)	18	5.2	5.5	4.0	3.9
	Acrylonitrile consumption (tons)	21,839	23,922	28,950	24,367	24,472
	Acrylonitrile emissions (tons)	14	13	15	13	14
Substances subject to PRTR law	Consumption (tons)	747,304	724,284	922,429	877,912	868,400
	Amount emitted (tons)	46	30	37	34	36
Industrial waste	Amount generated (before volume reduction) (tons)	99,068	97,231	129,151	131,566	128,969
	Amount generated (after volume reduction) (tons)	14,766	12,387	15,116	15,608	13,906
	Amount sent to landfill (tons)	464	159	181	4.1	9.6
Atmospheric emissions	CO ₂ emissions (tons)	642,904	523,151	571,798	555,686	490,917
	SO _x emissions (tons)	564	460.5	495.4	513.0	333.8
	NO _x emissions (tons)	408	421	459	375	336
Water resources (Industrial water + Ground water + Waterworks) consumption (1,000 m ³)		16,987	16,011	16,595	18,734	18,503
Waste water	Total waste water discharge (1,000 m ³)	15,786	14,981	14,210	15,715	17,029
	COD emissions (tons)	140	126	140	136	127
	Total phosphorus discharge (tons)	2.9	1.5	1.6	2.1	2.1
	Total nitrogen discharge (tons)	129	135	153	149	176
Energy	Total consumption (crude oil equivalent, kL)	235,486	194,694	211,338	207,735	188,819
	Unit consumption index (1990 = 100)	93%	72%	66%	72%	68%
Production of PDR equivalent (tons)		1,215,808	1,288,325	1,527,934	1,375,870	1,334,471
CO ₂ emissions Unit consumption index (1990 = 100)		99%	76%	70%	75%	69%

ZEON Corporation each worksites (0.0 = less than 0.05)

Takaoka Plant		FY2008	FY2009	FY2010	FY2011	FY2012
Substances subject to PRTR law	Consumption (tons)	116	114	210	223	125
	Amount emitted (tons)	0.1	0.1	0.2	0.2	0.1
Industrial waste	Amount generated (before volume reduction) (tons)	3,199	2,130	3,458	4,730	4,882
	Amount generated (after volume reduction) (tons)	764	388	671	529	535
	Amount sent to landfill (tons)	312	129	174	0.0	3.4
Atmospheric emissions	CO ₂ emissions (tons)	20,981	17,817	24,208	20,132	23,469
	SO _x emissions (tons)	14	8.7	7.0	6.8	9.5
	NO _x emissions (tons)	17	19	14	15	19
Water resources (Industrial water + Ground water + Waterworks) consumption (1,000 m ³)		4,141	3,183	3,732	3,808	4,052
Waste water	Total waste water discharge (1,000 m ³)	4,284	3,516	3,050	3,398	4,408
	COD emissions (tons)	12	12	9.2	13	14
	Total phosphorus discharge (tons)	0.9	0.4	0.2	0.7	0.5
	Total nitrogen discharge (tons)	23	19	10	16	19
Energy	Total consumption (crude oil equivalent, kL)	8,465	8,112	9,750	8,994	8,661
	Unit consumption index (1990 = 100)	102%	93%	94%	96%	103%
Production of PDR equivalent (tons)		4,337	4,523	5,419	4,866	4,295

Kawasaki Plant		FY2008	FY2009	FY2010	FY2011	FY2012
Toxic substances	Butadiene consumption (tons)	21,902	21,758	26,613	23,054	22,841
	Butadiene emissions (tons)	3.1	2.3	4.8	2.6	2.7
	Acrylonitrile consumption (tons)	9,576	9,556	12,034	10,670	10,872
	Acrylonitrile emissions (tons)	14	12	15	12	13
Substances subject to PRTR law	Consumption (tons)	44,085	44,101	51,781	46,186	44,709
	Amount emitted (tons)	27	21	30	26	26
Industrial waste	Amount generated (before volume reduction) (tons)	34,500	30,163	44,132	47,718	50,878
	Amount generated (after volume reduction) (tons)	4,641	3,136	5,315	5,383	5,037
	Amount sent to landfill (tons)	118	13	0.4	0.4	0.9
Atmospheric emissions	CO ₂ emissions (tons)	31,030	33,900	36,478	27,609	27,674
	SO _x emissions (tons)	1.0	0.6	0.7	0.1	0.1
	NO _x emissions (tons)	17	18	10	7.6	8.0
Water resources (Industrial water + Ground water + Waterworks) consumption (1,000 m ³)		2,618	2,719	2,575	2,963	3,313
Waste water	Total waste water discharge (1,000 m ³)	1,598	1,602	1,836	1,793	1,904
	COD emissions (tons)	37	35	41	40	42
	Total phosphorus discharge (tons)	0.8	0.2	0.1	0.2	0.2
	Total nitrogen discharge (tons)	60	74	93	89	115
Energy	Total consumption (crude oil equivalent, kL)	15,829	15,167	16,239	16,220	16,539
	Unit consumption index (1990 = 100)	97%	92%	78%	90%	91%
Production of PDR equivalent (tons)		73,587	74,803	94,340	81,790	82,757

Tokuyama Plant		FY2008	FY2009	FY2010	FY2011	FY2012
Toxic substances	Butadiene consumption (tons)	191,364	188,743	217,074	186,784	181,275
	Butadiene emissions (tons)	15	2.8	0.7	1.4	1.2
	Acrylonitrile consumption (tons)	12,263	14,366	16,916	13,697	13,600
	Acrylonitrile emissions (tons)	0.7	0.7	0.6	0.6	0.6
Substances subject to PRTR law	Consumption (tons)	417,519	386,572	464,767	388,603	391,766
	Amount emitted (tons)	18	7.6	2.2	3.1	2.7
Industrial waste	Amount generated (before volume reduction) (tons)	25,881	19,845	21,516	18,718	16,939
	Amount generated (after volume reduction) (tons)	4,512	3,857	3,756	3,762	3,505
	Amount sent to landfill (tons)	15	10	0.0	0.0	0.0
Atmospheric emissions	CO ₂ emissions (tons)	275,000	252,091	294,112	248,294	241,974
	SO _x emissions (tons)	547	446.9	483.0	502.3	321.5
	NO _x emissions (tons)	311	308	358	272	243
Water resources (Industrial water + Ground water + Waterworks) consumption (1,000 m ³)		8,455	8,630	7,824	9,482	8,788
Waste water	Total waste water discharge (1,000 m ³)	7,704	7,713	6,942	7,884	8,288
	COD emissions (tons)	79	68	77	69	58
	Total phosphorus discharge (tons)	0.8	0.5	0.7	0.6	0.6
	Total nitrogen discharge (tons)	32	31	33	27	27
Energy	Total consumption (crude oil equivalent, kL)	100,502	93,485	107,497	90,955	90,469
	Unit consumption index (1990 = 100)	106%	102%	98%	99%	102%
Production of PDR equivalent (tons)		518,702	503,567	599,400	498,167	487,782

Mizushima Plant		FY2008	FY2009	FY2010	FY2011	FY2012
Toxic substances	Butadiene consumption (tons)	133,483	139,340	144,820	136,385	130,154
	Butadiene emissions (tons)	0.0	0.0	0.0	0.0	0.0
Substances subject to PRTR law	Consumption (tons)	285,584	293,497	405,671	442,900	431,800
	Amount emitted (tons)	1.0	1.0	4.4	4.4	4.6
Industrial waste	Amount generated (before volume reduction) (tons)	35,488	45,093	60,045	60,400	56,270
	Amount generated (after volume reduction) (tons)	4,849	5,006	5,374	5,935	4,830
	Amount sent to landfill (tons)	19	6.6	6.8	3.7	5.4
Atmospheric emissions	CO ₂ emissions (tons)	315,893	219,343	217,000	259,651	197,800
	SO _x emissions (tons)	2	4.3	4.6	3.8	2.7
	NO _x emissions (tons)	63	75	77	80	66
Water resources (Industrial water + Ground water + Waterworks) consumption (1,000 m ³)		2,343	2,189	2,378	2,481	2,351
Waste water	Total waste water discharge (1,000 m ³)	2,200	2,150	2,382	2,640	2,429
	COD emissions (tons)	11	11	13	15	13
	Total phosphorus discharge (tons)	0.5	0.4	0.6	0.6	0.7
	Total nitrogen discharge (tons)	15	12	17	16	15
Energy	Total consumption (crude oil equivalent, kL)	110,690	77,930	77,852	91,566	73,150
	Unit consumption index (1990 = 100)	84%	51%	44%	56%	46%
Production of PDR equivalent (tons)		563,495	648,665	760,900	731,500	705,400

ZEON Group (Japan) (0 = less than 0.5, 0.0 = less than 0.05)

ZEON Group (Japan)		FY2008	FY2009	FY2010	FY2011	FY2012
Substances covered by PRTR law	Number of substances	59	62	62	62	62
	Consumption (tons)	280	335	1,486	2,125	1,961
	Amount emitted (tons)	7.0	1.6	2.6	2.7	2.1
Industrial waste	Amount generated (before volume reduction) (tons)	1,589	1,695	1,783	1,914	1,996
	Amount sent to landfill (tons)	457	268	130	42	27
CO ₂ emissions (tons)		33,206	29,072	23,134	18,024	19,382
Energy consumption (crude oil equivalent, kL)		14,395	15,933	16,454	14,987	15,630
ZEON Kasei Co., Ltd. Ibaraki Factory		FY2008	FY2009	FY2010	FY2011	FY2012
Substances covered by PRTR law	Number of substances	4	5	7	7	8
	Consumption (tons)	90	70	95	61	40
	Amount emitted (tons)	5.5	0.0	0.0	0.0	0.0
Industrial waste	Amount generated (before volume reduction) (tons)	550	530	648	529	446
	Amount sent to landfill (tons)	176	95	69	0.0	0.0
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m ³)		14	22	34	41	30
CO ₂ emissions (tons)		4,440	3,309	4,257	3,845	3,283
Energy consumption (crude oil equivalent, kL)		1,833	1,992	2,328	2,191	1,807
Zeon Kasei Co., Ltd. Yamaguchi Factory		FY2008	FY2009	FY2010	FY2011	FY2012
Substances covered by PRTR law	Number of substances	1	3	3	3	3
	Consumption (tons)	0.8	0.0	0.0	0.0	0.0
	Amount emitted (tons)	0.4	0.0	0.0	0.0	0.0
Industrial waste	Amount generated (before volume reduction) (tons)	71	187	99	91	57
	Amount sent to landfill (tons)	0.0	0.0	0.0	0.0	0.0
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m ³)		0.3	0.2	0.2	0.2	0.2
CO ₂ emissions (tons)		234	213	231	412	416
Energy consumption (crude oil equivalent, kL)		97	105	94	147	151
ZEON Polymix Inc. Otsu Plant		FY2008	FY2009	FY2010	FY2011	FY2012
Substances covered by PRTR law	Number of substances	5	5	5	5	5
	Consumption (tons)	90	194	148	165	146
	Amount emitted (tons)	0.0	0.0	0.0	0.0	0.0
Industrial waste	Amount generated (before volume reduction) (tons)	167	201	195	171	155
	Amount sent to landfill (tons)	101	95	25	4.0	0.0
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m ³)		—	—	—	45	50
CO ₂ emissions (tons)		2,250	1,987	2,230	1,938	2,631
Energy consumption (crude oil equivalent, kL)		1,329	1,507	1,697	1,573	1,534
ZEON Polymix Inc. Kawagoe Plant		FY2008	FY2009	FY2010	FY2011	FY2012
Substances covered by PRTR law	Number of substances	3	3	3	—	—
	Consumption (tons)	81	56	10	—	—
	Amount emitted (tons)	0.0	0.0	0.0	—	—
Industrial waste	Amount generated (before volume reduction) (tons)	90	48	46	—	—
	Amount sent to landfill (tons)	51	8.9	11.8	—	—
CO ₂ emissions (tons)		855	414	103	—	—
Energy consumption (crude oil equivalent, kL)		352	266	56	—	—
ZEON Medical Inc.		FY2008	FY2009	FY2010	FY2011	FY2012
Substances covered by PRTR law	Number of substances	1	1	1	1	1
	Consumption (tons)	1.1	1.5	2.3	2.2	1.6
	Amount emitted (tons)	1.1	1.5	2.3	2.2	1.6
Industrial waste	Amount generated (before volume reduction) (tons)	5.0	5.4	7.6	22	10
	Amount sent to landfill (tons)	5.0	5.3	7.6	11	5.0
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m ³)		—	—	—	12	14.3
CO ₂ emissions (tons)		1,000	969	970	969	1,143
Energy consumption (crude oil equivalent, kL)		412	472	462	431	511

ZEON North Co., Ltd.		FY2008	FY2009	FY2010	FY2011	FY2012
Substances covered by PRTR law	Number of substances	0	0	0	0	0
	Consumption (tons)	0.0	0.0	0.0	0.0	0.0
	Amount emitted (tons)	0.0	0.0	0.0	0.0	0.0
Industrial waste	Amount generated (before volume reduction) (tons)	43	38	36	38	25
	Amount sent to landfill (tons)	31	14	8.0	5.0	5.2
CO ₂ emissions (tons)		195	152	155	160	152
Energy consumption (crude oil equivalent, kL)		81	76	84	80	85
RIMTEC Corporation		FY2008	FY2009	FY2010	FY2011	FY2012
Substances covered by PRTR law	Number of substances	0	0	0	0	0
	Consumption (tons)	0.0	0.0	0.0	0.0	0.0
	Amount emitted (tons)	0.0	0.0	0.0	0.0	0.0
Industrial waste	Amount generated (before volume reduction) (tons)	149	48	52	29	52
	Amount sent to landfill (tons)	66	1.9	3.6	3.4	15
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m ³)		—	—	—	4.4	3.6
CO ₂ emissions (tons)		673	213	187	167	188
Energy consumption (crude oil equivalent, kL)		281	180	160	145	160
ZEON Yamaguchi Co., Ltd.		FY2008	FY2009	FY2010	FY2011	FY2012
Substances covered by PRTR law	Number of substances	40	40	40	40	40
	Consumption (tons)	0.0	0.0	0.0	0.0	0.0
	Amount emitted (tons)	0.0	0.0	0.0	0.0	0.0
Industrial waste	Amount generated (before volume reduction) (tons)	77	105	187	135	207
	Amount sent to landfill (tons)	1.2	32	2.0	18	1.4
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m ³)		0.2	0.2	0.2	0.2	0.3
CO ₂ emissions (tons)		12	11	12	11	11
Energy consumption (crude oil equivalent, kL)		6.0	5.7	6.0	6.0	4.7
ZEON Chemicals Yonezawa Co., Ltd.		FY2008	FY2009	FY2010	FY2011	FY2012
Substances covered by PRTR law	Number of substances	4	4	2	5	4
	Consumption (tons)	17	13	1,231	1,897	1,773
	Amount emitted (tons)	0.0	0.0	0.4	0.5	0.5
Industrial waste	Amount generated (before volume reduction) (tons)	223	59	87	186	187
	Amount sent to landfill (tons)	10	4.2	0.4	0.4	0.0
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m ³)		—	—	—	14,165	10
CO ₂ emissions (tons)		1,170	489	815	940	1,017
Energy consumption (crude oil equivalent, kL)		509	290	455	505	439
Optes Inc. Sano Plant		FY2008	FY2009	FY2010	FY2011	FY2012
Substances covered by PRTR law	Number of substances	1	1	1	1	1
	Consumption (tons)	0.1	0.1	0.0	0.0	0.0
	Amount emitted (tons)	0.1	0.1	0.0	0.0	0.0
Industrial waste	Amount generated (before volume reduction) (tons)	16	11	7.2	5.9	7.0
	Amount sent to landfill (tons)	16	11	0.7	0.0	0.0
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m ³)		18	4.0	4.4	3.7	5.2
CO ₂ emissions (tons)		1,580	1,711	1,015	1,105	919
Energy consumption (crude oil equivalent, kL)		888	981	611	664	625
Optes Inc. Toyama Plant		FY2008	FY2009	FY2010	FY2011	FY2012
Substances covered by PRTR law	Number of substances	0	0	0	0	0
	Consumption (tons)	0.0	0.0	0.0	0.0	0.0
	Amount emitted (tons)	0.0	0.0	0.0	0.0	0.0
Industrial waste	Amount generated (before volume reduction) (tons)	200	462	419	707	849
	Amount sent to landfill (tons)	0.0	0.8	1.5	0.0	0.0
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m ³)		—	40	50	31	29
CO ₂ emissions (tons)		20,798	19,604	13,159	8,499	9,622
Energy consumption (crude oil equivalent, kL)		8,608	10,058	10,501	9,390	10,313

ZEON Group (Overseas)

ZEON Group (Overseas)		FY2008	FY2009	FY2010	FY2011	FY2012
Substances covered by PRTR law	Number of substances	13	12	12	13	13
	Consumption (tons)	35,312	18,689	33,557	34,201	30,380
	Amount emitted (tons)	112	78	121	119	79
Industrial waste	Amount generated (before volume reduction) (tons)	4,216	3,474	3,988	4,132	3,363
	Amount sent to landfill (tons)	2,945	2,421	2,929	2,666	2,580
CO ₂ emissions (tons)		85,591	62,461	91,218	87,763	83,884
Energy consumption (crude oil equivalent, kL)		31,950	23,798	35,221	33,530	32,215

Zeon Chemicals L.P. (USA): Kentucky		FY2008	FY2009	FY2010	FY2011	FY2012
Substances covered by PRTR law	Number of substances	8	7	7	8	8
	Consumption (tons)	18,835	6,459	17,691	18,189	16,260
	Amount emitted (tons)	56	33	39	43	28
Industrial waste	Amount generated (before volume reduction) (tons)	721	671	770	720	572
	Amount sent to landfill (tons)	679	645	736	689	552
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m ³)		—	—	—	1,080	965
CO ₂ emissions (tons)		35,996	22,799	34,648	34,755	32,217
Energy consumption (crude oil equivalent, kL)		11,870	6,909	11,170	11,048	10,136

Zeon Chemicals L.P. (USA): Texas		FY2008	FY2009	FY2010	FY2011	FY2012
Substances covered by PRTR law	Number of substances	0	0	0	0	0
	Consumption (tons)	0.0	0.0	0.0	0.0	0.0
	Amount emitted (tons)	0.0	0.0	0.0	0.0	0.0
Industrial waste	Amount generated (before volume reduction) (tons)	34	24	42	39	32
	Amount sent to landfill (tons)	1.4	3.9	1.4	1.0	1.2
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m ³)		—	—	—	1,646	234
CO ₂ emissions (tons)		8,118	5,419	10,426	10,325	9,965
Energy consumption (crude oil equivalent, kL)		2,332	1,509	3,093	3,065	2,945

Zeon Chemicals L.P. (USA): Mississippi		FY2008	FY2009	FY2010	FY2011	FY2012
Substances covered by PRTR law	Number of substances	3	3	3	3	3
	Consumption (tons)	3,923	2,633	5,466	5,160	4,444
	Amount emitted (tons)	53	39	76	70	47
Industrial waste	Amount generated (before volume reduction) (tons)	50	57	53	41	22
	Amount sent to landfill (tons)	50	57	53	41	22
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m ³)		—	—	—	152	134
CO ₂ emissions (tons)		15,099	13,097	22,375	19,256	17,925
Energy consumption (crude oil equivalent, kL)		6,323	5,350	9,652	8,157	7,514

Zeon Chemicals Europe Ltd. (UK)		FY2008	FY2009	FY2010	FY2011	FY2012
Substances covered by PRTR law	Number of substances	2	2	2	2	2
	Consumption (tons)	12,554	9,596	10,400	10,852	9,676
	Amount emitted (tons)	3.3	5.0	6.0	6.0	4.4
Industrial waste	Amount generated (before volume reduction) (tons)	1,302	818	930	680	1,116
	Amount sent to landfill (tons)	1,280	808	908	644	1,069
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m ³)		—	—	—	303	245
CO ₂ emissions (tons)		15,099	10,369	11,583	12,597	11,379
Energy consumption (crude oil equivalent, kL)		6,661	5,480	6,111	6,619	6,302

ZEON Chemicals Thailand Co., Ltd.		FY2008	FY2009	FY2010	FY2011	FY2012
Industrial waste	Amount generated (before volume reduction) (tons)	1,022	1,163	1,186	1,436	1,194
	Amount sent to landfill (tons)	659	846	1,166	1,050	936
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m ³)		—	—	206	213	182
CO ₂ emissions (tons)		5,229	5,878	5,686	4,610	5,128
Energy consumption (crude oil equivalent, kL)		2,050	2,340	2,262	1,834	2,041

ZEON Advanced Polymix Co., Ltd		FY2008	FY2009	FY2010	FY2011	FY2012
Industrial waste	Amount generated (before volume reduction) (tons)	1,088	741	1,007	1,216	427
	Amount sent to landfill (tons)	277	61	65	241	0.0
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m ³)		31	18	29	30	32
CO ₂ emissions (tons)		6,050	4,898	6,500	6,220	7,270
Energy consumption (crude oil equivalent, kL)		2,714	2,210	2,933	2,807	3,277