

**Zeon Group Environmental Data**

("0" indicates less than 0.5, and "0.0" indicates less than 0.05)

Zeon Corporation only		FY 2012	FY 2013	FY 2014	FY 2015	FY2016
Toxic substances	Butadiene consumption (tons)	334,270	337,787	334,962	355,326	298,397
	Butadiene emissions (tons)	3.9	3.3	3.7	2.7	3.6
	Acrylonitrile consumption (tons)	24,472	27,118	25,784	27,729	24,483
	Acrylonitrile emissions (tons)	13.6	11.7	11.9	5.5	4.1
Substances subject to the PRTR Act	Consumption (tons)	868,407	887,078	921,688	942,613	800,074
	Emissions (tons)	37.8	33.5	36.7	30.1	27.4
Industrial waste	Amount generated before compacting (tons)	129,156	139,141	156,502	145,482	135,996
	Amount generated after compacting (tons)	14,001	14,535	16,530	14,020	15,074
	Amount sent to landfills (tons)	11	1.3	6.5	3.5	1.7
Atmospheric emissions	CO <sub>2</sub> emissions (tons)	498,451	517,803	506,348	552,940	480,631
	SO <sub>x</sub> emissions (tons)	334	476	509	624	605
	NO <sub>x</sub> emissions (tons)	336	272	240	253	274
	Soot emissions (tons)	6.5	4.3	2.8	11.4	4.8
	Fluorocarbon leaks (tons of CO <sub>2</sub> )	—	—	—	51.5	298.1
Water resources	Total water resource consumption (1,000 m <sup>3</sup> )	18,591	18,508	18,703	18,454	18,593
	Waterworks water consumption (1,000 m <sup>3</sup> )	265	245	273	260	256
	Groundwater consumption (1,000 m <sup>3</sup> )	0.0	0.0	0.0	0.0	0.0
	Industrial water consumption (1,000 m <sup>3</sup> )	18,326	18,264	18,431	18,195	18,338
Wastewater	Total wastewater discharge (1,000 m <sup>3</sup> )	17,029	17,761	15,894	15,940	15,919
	COD emissions (tons)	127	129	119	119	119
	Total phosphorus discharge (tons)	2.1	2.4	1.6	1.6	1.7
	Total nitrogen discharge (tons)	176	158	167	142	124
Energy	Total consumption (crude oil equivalent, kL)	189,216	194,242	192,930	214,921	193,757
	Per-unit energy consumption (kL/t-PDR)	0.1418	0.1363	0.1317	0.1424	0.1295
	Energy efficiency indicator (FY 1990=100)	68%	65%	63%	68%	62%
Production equivalent (tons)		1,334,471	1,425,480	1,464,936	1,509,679	1,495,840
Per-unit CO <sub>2</sub> emissions indicator (FY 1990=100)		70%	68%	65%	68%	60%

**Zeon Corporation each worksites**

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Takaoka Plant		FY 2012	FY 2013	FY 2014	FY 2015	FY2016
Substances subject to the PRTR Act	Consumption (tons)	125	16	21	17	22
	Emissions (tons)	0.1	0.0	0.0	0.0	0.0
Industrial waste	Amount generated before compacting (tons)	4,882	12,494	8,794	7,959	6,751
	Amount generated after compacting (tons)	535	1,056	437	396	336
	Amount sent to landfills (tons)	3	0.0	0.0	0.0	0.0
Atmospheric emissions	CO <sub>2</sub> emissions (tons)	23,329	22,546	20,825	20,964	20,654
	SO <sub>x</sub> emissions (tons)	9.5	3.2	0.0	0.0	0.0
	NO <sub>x</sub> emissions (tons)	19	13	2	2.5	0.2
	Soot emissions (tons)	0.0	0.0	0.0	0.0	0.0
	Fluorocarbon leaks (tons of CO <sub>2</sub> )	—	—	—	47.6	0.6
Water resources	Total water resource consumption (1,000 m <sup>3</sup> )	4,052	3,732	3,848	3,804	4,079
	Waterworks water consumption (1,000 m <sup>3</sup> )	58	56	57	56	54
	Groundwater consumption (1,000 m <sup>3</sup> )	0.0	0.0	0.0	0.0	0.0
	Industrial water consumption (1,000 m <sup>3</sup> )	3,993	3,676	3,791	3,748	4,025
Wastewater	Total wastewater discharge (1,000 m <sup>3</sup> )	4,408	4,890	3,322	3,213	3,428
	COD emissions (tons)	14.3	18.9	12.7	12.6	16.1
	Total phosphorus discharge (tons)	0.5	0.8	0.3	0.3	0.3
	Total nitrogen discharge (tons)	19	20	14	14	15
Energy	Total consumption (crude oil equivalent, kL)	8,868	8,986	8,290	9,380	9,605
	Energy efficiency indicator (FY 1990=100)	103%	104%	92%	102%	116%
Production equivalent (tons)		4,295	4,433	4,617	4,617	4,260

Kawasaki Plant		FY 2012	FY 2013	FY 2014	FY 2015	FY2016
Toxic substances	Butadiene consumption (tons)	22,841	20,372	23,534	21,758	23,040
	Butadiene emissions (tons)	2.7	2.4	2.6	2.0	1.9
	Acrylonitrile consumption (tons)	10,872	9,653	11,405	10,746	11,007
	Acrylonitrile emissions (tons)	13	11	11	5	4
Substances subject to the PRTR Act	Consumption (tons)	44,709	40,203	45,847	43,954	43,954
	Emissions (tons)	26	26	27.9	21.4	19.0
Industrial waste	Amount generated before compacting (tons)	50,878	48,039	52,900	44,380	56,330
	Amount generated after compacting (tons)	5,037	4,024	4,401	3,412	4,704
	Amount sent to landfills (tons)	0.9	0.0	0.0	0.0	0.0
Atmospheric emissions	CO <sub>2</sub> emissions (tons)	27,968	20,917	25,778	23,443	21,409
	SO <sub>x</sub> emissions (tons)	0.1	0.2	0.1	0.3	0.1
	NO <sub>x</sub> emissions (tons)	8	7.4	5.7	5.6	5.9
	Soot emissions (tons)	0.8	0.8	0.6	0.5	0.5
	Fluorocarbon leaks (tons of CO <sub>2</sub> )	—	—	—	0.0	0.0
Water resources	Total water resource consumption (1,000 m <sup>3</sup> )	3,313	3,092	3,657	3,241	3,244
	Waterworks water consumption (1,000 m <sup>3</sup> )	35	39	40	47	50
	Groundwater consumption (1,000 m <sup>3</sup> )	0.0	0.0	0.0	0.0	0.0
	Industrial water consumption (1,000 m <sup>3</sup> )	3,278	3,053	3,617	3,194	3,194
Wastewater	Total wastewater discharge (1,000 m <sup>3</sup> )	1,904	2,031	2,185	2,265	2,030
	COD emissions (tons)	42	45	44	35	42
	Total phosphorus discharge (tons)	0.2	0.3	0.2	0.2	0.2
	Total nitrogen discharge (tons)	115	93	115	89	72
Energy	Total consumption (crude oil equivalent, kL)	16,552	14,406	14,700	13,355	12,857
	Energy efficiency indicator (FY 1990=100)	91%	75%	84%	65%	77%
Production equivalent (tons)		82,757	73,834	85,441	80,229	82,271

Tokuyama Plant		FY 2012	FY 2013	FY 2014	FY 2015	FY2016
Toxic substances	Butadiene consumption (tons)	181,275	206,710	170,327	195,538	152,247
	Butadiene emissions (tons)	1.2	0.8	1.1	0.7	1.6
	Acrylonitrile consumption (tons)	13,600	17,464	14,379	16,983	13,476
	Acrylonitrile emissions (tons)	0.6	0.6	0.7	0.6	0.6
Substances subject to the PRTR Act	Consumption (tons)	391,766	453,075	397,637	422,439	347,496
	Emissions (tons)	2.7	2.0	2.7	2.1	2.9
Industrial waste	Amount generated before compacting (tons)	16,939	19,201	24,063	23,163	24,738
	Amount generated after compacting (tons)	3,505	3,377	4,674	4,737	5,208
	Amount sent to landfills (tons)	0.0	0.0	0.0	0.0	0.0
Atmospheric emissions	CO <sub>2</sub> emissions (tons)	239,609	279,750	237,362	263,215	228,574
	SO <sub>x</sub> emissions (tons)	322	471	507	622	603
	NO <sub>x</sub> emissions (tons)	243	205	179	191	200
	Soot emissions (tons)	5.7	3.5	2.2	10.9	4.3
	Fluorocarbon leaks (tons of CO <sub>2</sub> )	—	—	—	3.9	273.3
Water resources	Total water resource consumption (1,000 m <sup>3</sup> )	8,788	8,927	8,393	8,812	8,703
	Waterworks water consumption (1,000 m <sup>3</sup> )	63	45	50	52	52
	Groundwater consumption (1,000 m <sup>3</sup> )	0.0	0.0	0.0	0.0	0.0
	Industrial water consumption (1,000 m <sup>3</sup> )	8,725	8,882	8,344	8,760	8,651
Wastewater	Total wastewater discharge (1,000 m <sup>3</sup> )	8,288	8,165	7,785	8,051	8,148
	COD emissions (tons)	58	49	42	57	49
	Total phosphorus discharge (tons)	0.6	0.7	0.6	0.8	0.7
	Total nitrogen discharge (tons)	27	28	27	28	25
Energy	Total consumption (crude oil equivalent, kL)	90,648	103,000	92,423	104,326	93,669
	Energy efficiency indicator (FY 1990=100)	102%	99%	106%	107%	108%
Production equivalent (tons)		487,782	573,961	477,797	531,865	475,500

Mizushima Plant		FY 2012	FY 2013	FY 2014	FY 2015	FY2016
Toxic substances	Butadiene consumption (tons)	130,154	110,704	141,100	138,029	123,109
	Butadiene emissions (tons)	0.0	0.0	0.0	0.0	0.0
Substances subject to the PRTR Act	Consumption (tons)	431,800	393,777	478,178	476,200	408,600
	Emissions (tons)	4.6	5.3	6.0	6.5	5.4
Industrial waste	Amount generated before compacting (tons)	56,270	59,253	70,584	69,824	47,980
	Amount generated after compacting (tons)	4,830	5,999	6,956	5,418	4,717
	Amount sent to landfills (tons)	5.4	1.3	6.5	3.5	1.7
Atmospheric emissions	CO <sub>2</sub> emissions (tons)	197,855	182,800	211,420	235,360	201,700
	SO <sub>x</sub> emissions (tons)	2.7	1.2	1.4	1.1	2.2
	NO <sub>x</sub> emissions (tons)	66	47	54	54	68
	Soot emissions (tons)	0.0	0.0	0.0	0.0	0.0
	Fluorocarbon leaks (tons of CO <sub>2</sub> )	—	—	—	0.0	0.0
Water resources	Total water resource consumption (1,000 m <sup>3</sup> )	2,351	2,665	2,713	2,510	2,487
	Waterworks water consumption (1,000 m <sup>3</sup> )	64	66	88	66	64
	Groundwater consumption (1,000 m <sup>3</sup> )	0.0	0.0	0.0	0.0	0.0
	Industrial water consumption (1,000 m <sup>3</sup> )	2,287	2,599	2,625	2,444	2,423
Wastewater	Total wastewater discharge (1,000 m <sup>3</sup> )	2,429	2,674	2,602	2,411	2,313
	COD emissions (tons)	13	17	20	15	12
	Total phosphorus discharge (tons)	0.7	0.6	0.5	0.4	0.5
	Total nitrogen discharge (tons)	15	17	12	12	12
Energy	Total consumption (crude oil equivalent, kL)	73,148	67,850	77,517	87,860	77,626
	Energy efficiency indicator (FY 1990=100)	46%	41%	40%	45%	3660%
Production equivalent (tons)		705,400	714,800	840,400	834,400	880,300

R&D Center		FY 2012	FY 2013	FY 2014	FY 2015	FY2016
Toxic substances	Butadiene consumption (tons)	0	1.09	0.80	0.72	0.90
	Butadiene emissions (tons)	0.01	0.05	0.03	0.03	0.10
	Acrylonitrile consumption (tons)	0.14	0.39	0.24	0.26	0.28
	Acrylonitrile emissions (tons)	0.0	0.0	0.0	0.0	0.0
Substances subject to the PRTR Act	Consumption (tons)	7.0	7.3	5.4	3.9	2.1
	Emissions (tons)	4.8	0.1	0.1	0.1	0.1
Industrial waste	Amount generated before compacting (tons)	187	154	160	157	197
	Amount generated after compacting (tons)	94	79	62	57	109
	Amount sent to landfills (tons)	1.3	0.0	0.0	0.0	0.0
Atmospheric emissions	CO <sub>2</sub> emissions (tons)	9,690	11,790	10,963	9,958	8,294
	Fluorocarbon leaks (tons of CO <sub>2</sub> )	—	—	—	0.0	24.2
Water resources	Total water resource consumption (1,000 m <sup>3</sup> )	88	93	92	88	80
	Waterworks water consumption (1,000 m <sup>3</sup> )	45	38	37	38	34
	Groundwater consumption (1,000 m <sup>3</sup> )	0.0	0.0	0.0	0.0	0.0
	Industrial water consumption (1,000 m <sup>3</sup> )	43	54	55	50	45
Energy	Total consumption (crude oil equivalent, kL)	5,255	6,091	5,720	5,236	5,810

Head Office		FY 2012	FY 2013	FY 2014	FY 2015	FY2016
Atmospheric emissions	CO <sub>2</sub> emissions (tons)	336	338	287	285	293
	Fluorocarbon leaks (tons of CO <sub>2</sub> )	—	—	—	0.0	
Water resources (Waterworks) consumption (1,000 m <sup>3</sup> )		1.56	1.44	1.31	1.18	1.50
Energy	Total consumption (crude oil equivalent, kL)	222	205	182	180	186

Zeon Group companies in Japan

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Zeon Group companies in Japan		FY 2012	FY 2013	FY 2014	FY 2015	FY2016
Substances subject to the PRTR Act	No. of substances (total)	62	65	62	59	61
	Consumption (tons)	1,961	1,801	1,924	1,710	1,712
	Emissions (tons)	2.1	2.1	2.1	2.4	2.4
Industrial waste	Amount generated before compacting (tons)	1,996	2,608	6,235	2,358	3,237
	Amount sent to landfills (tons)	26.7	11.2	10.6	5.9	2.9
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m <sup>3</sup> )		143	143	163	163	284
CO <sub>2</sub> emissions (tons)		19,382	37,937	44,552	48,474	46,195
Energy consumption (crude oil equivalent, kL)		15,630	17,926	18,454	19,696	19,345
Electric energy consumption (1000 kWh)		—	63,773	67,294	72,785	71,557

Zeon Kasei Co., Ltd. Ibaraki Factory		FY 2012	FY 2013	FY 2014	FY 2015	FY2016
Substances subject to the PRTR Act	No. of substances (total)	8	7	6	6	5
	Consumption (tons)	40	35	49	15	18
	Emissions (tons)	0.0	0.0	0.0	0.0	0.1
Industrial waste	Amount generated before compacting (tons)	446	478	389	258	284
	Amount sent to landfills (tons)	0.0	0.0	0.0	0.0	0.0
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m <sup>3</sup> )		30	29	19	18	163
CO <sub>2</sub> emissions (tons)		3,283	3,723	3,468	2,768	2,475
Energy consumption (crude oil equivalent, kL)		1,807	1,875	1,545	1,265	1,145
Electric energy consumption (1000 kWh)		—	5,032	3,869	2,906	2,667

Zeon Kasei Co., Ltd. Yamaguchi Factory		FY 2012	FY 2013	FY 2014	FY 2015	FY2016
Substances subject to the PRTR Act	No. of substances (total)	3	3	3	3	3
	Consumption (tons)	0.0	0.0	0.0	0.2	0.0
	Emissions (tons)	0.0	0.0	0.0	0.2	0.0
Industrial waste	Amount generated before compacting (tons)	57	91	151	63	48
	Amount sent to landfills (tons)	0.0	0.0	0.0	0.0	0.0
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m <sup>3</sup> )		0.2	0.3	0.0	0.0	0.0
CO <sub>2</sub> emissions (tons)		416	410	460	367	334
Energy consumption (crude oil equivalent, kL)		151	155	166	134	124
Electric energy consumption (1000 kWh)		—	459	591	482	437

Zeon Polymix Inc. Otsu Plant		FY 2012	FY 2013	FY 2014	FY 2015	FY2016
Substances subject to the PRTR Act	No. of substances (total)	5	5	5	4	6
	Consumption (tons)	146	122	113	125	115
	Emissions (tons)	0.0	0.0	0.0	0.0	0.0
Industrial waste	Amount generated before compacting (tons)	155	148	160	184	197
	Amount sent to landfills (tons)	0	0.0	0.0	0.0	0.0
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m <sup>3</sup> )		50	49	48	48	28
CO <sub>2</sub> emissions (tons)		2,631	2,740	2,860	3,159	3,346
Energy consumption (crude oil equivalent, kL)		1,534	1,416	1,388	1,495	1,603
Electric energy consumption (1000 kWh)		—	5,260	5,321	5,877	6,326

Zeon Medical Inc.		FY 2012	FY 2013	FY 2014	FY 2015	FY2016
Substances subject to the PRTR Act	No. of substances (total)	1	1	1	1	1
	Consumption (tons)	1.6	1.6	1.6	1.6	1.6
	Emissions (tons)	1.6	1.6	1.6	1.6	1.6
Industrial waste	Amount generated before compacting (tons)	10	9	10	8	7
	Amount sent to landfills (tons)	5.0	4.3	4.5	0.4	0.0
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m <sup>3</sup> )		14.3	17.8	21.9	13.5	10.3
CO <sub>2</sub> emissions (tons)		1,143	1,123	1,003	920	945
Energy consumption (crude oil equivalent, kL)		511	539	401	364	380
Electric energy consumption (1000 kWh)		—	※	※	※	※

Zeon North Co., Ltd.		FY 2012	FY 2013	FY 2014	FY 2015	FY2016
Substances subject to the PRTR Act	No. of substances (total)	0	0	0	0	0
	Consumption (tons)	0.0	0.0	0.0	0.0	0.0
	Emissions (tons)	0.0	0.0	0.0	0.0	0.0
Industrial waste	Amount generated before compacting (tons)	25	20	17	14	19
	Amount sent to landfills (tons)	5.2	3.1	4.2	2.5	0.5
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m <sup>3</sup> )		—	—	1.6	1.5	1.6
CO <sub>2</sub> emissions (tons)		152	146	161	159	273
Energy consumption (crude oil equivalent, kL)		85	85	92	103	119
Electric energy consumption (1000 kWh)		—	—	384	366	426

RIMTEC Corporation		FY 2012	FY 2013	FY 2014	FY 2015	FY2016
Substances subject to the PRTR Act	No. of substances (total)	0	0	0	0	0
	Consumption (tons)	0.0	0.0	0.0	0.0	0.0
	Emissions (tons)	0.0	0.0	0.0	0.0	0.0
Industrial waste	Amount generated before compacting (tons)	52	49	23	31	39
	Amount sent to landfills (tons)	15.2	2.4	1.3	0.0	0.3
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m <sup>3</sup> )		3.6	2.2	1.5	1.5	1.4
CO <sub>2</sub> emissions (tons)		188	160	110	103	152
Energy consumption (crude oil equivalent, kL)		160	138	90	89	78
Electric energy consumption (1000 kWh)		—	—	—	—	—

Zeon Yamaguchi Co., Ltd.		FY 2012	FY 2013	FY 2014	FY 2015	FY2016
Substances subject to the PRTR Act	No. of substances (total)	40	40	40	40	40
	Consumption (tons)	0.0	0.0	0.0	0.0	0.0
	Emissions (tons)	0.0	0.0	0.0	0.0	0.0
Industrial waste	Amount generated before compacting (tons)	207	225	4,018	171	482
	Amount sent to landfills (tons)	1.4	0.8	0.0	0.0	0.0
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m <sup>3</sup> )		0.3	0.2	0.2	0.2	0.2
CO <sub>2</sub> emissions (tons)		11	12	11	12	11
Energy consumption (crude oil equivalent, kL)		5	5	5	6	5
Electric energy consumption (1000 kWh)		—	53	21	23	21

Zeon Chemicals Yonezawa Co., Ltd.		FY 2012	FY 2013	FY 2014	FY 2015	FY2016
Substances subject to the PRTR Act	No. of substances (total)	4	7	5	3	4
	Consumption (tons)	1,773	1,642	1,759	1,567	1,576
	Emissions (tons)	0.5	0.5	0.5	0.6	0.6
Industrial waste	Amount generated before compacting (tons)	187	202	206	182	180
	Amount sent to landfills (tons)	0.0	0.0	0.0	0.0	0.0
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m <sup>3</sup> )		10	9	14	12	14
CO <sub>2</sub> emissions (tons)		1,017	1,151	1,421	1,815	1,716
Energy consumption (crude oil equivalent, kL)		439	490	591	762	720
Electric energy consumption (1000 kWh)		—	1,202	1,458	2,050	1,820

Optes Inc. Sano Plant		FY 2012	FY 2013	FY 2014	FY 2015	FY2016
Substances subject to the PRTR Act	No. of substances (total)	1	1	1	1	1
	Consumption (tons)	0.0	0.0	0.0	0.0	0.0
	Emissions (tons)	0.0	0.0	0.0	0.0	0.0
Industrial waste	Amount generated before compacting (tons)	7	10	8	6	9
	Amount sent to landfills (tons)	0.0	0.6	0.4	0.0	0.0
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m <sup>3</sup> )		5	6	6	4	3
CO <sub>2</sub> emissions (tons)		919	989	862	673	664
Energy consumption (crude oil equivalent, kL)		625	674	564	439	431
Electric energy consumption (1000 kWh)		—	*	2,274	1,767	1,735

\*Included in Hokuriku Plant

Optes Inc. Hokuriku Plant		FY 2012	FY 2013	FY 2014	FY 2015	FY2016
Substances subject to the PRTR Act	No. of substances (total)	0	1	1	1	1
	Consumption (tons)	0	1	1	1.1	1.3
	Emissions (tons)	0.0	0.0	0.0	0.0	0.0
Industrial waste	Amount generated before compacting (tons)	849	1,377	1,254	1,443	1,973
	Amount sent to landfills (tons)	0.0	0.0	0.3	0.1	0.0
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m <sup>3</sup> )		29	29	52	66	64
CO <sub>2</sub> emissions (tons)		9,622	27,483	34,196	38,498	36,279
Energy consumption (crude oil equivalent, kL)		10,313	12,549	13,612	15,039	14,740
Electric energy consumption (1000 kWh)		—	51,767	53,376	59,314	58,125

TFC Inc.		FY 2012	FY 2013	FY 2014	FY 2015	FY2016
Substances subject to the PRTR Act	No. of substances (total)	—	—	1	1	1
	Consumption (tons)	—	—	1	0.5	0.5
	Emissions (tons)	—	—	1	0.5	0.5
Industrial waste	Amount generated before compacting (tons)	—	—	94	83	66
	Amount sent to landfills (tons)	—	—	3.1	2.9	2.1
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m <sup>3</sup> )		—	—	4	5	31
CO <sub>2</sub> emissions (tons)		—	—	6,761	6,282	6,854
Energy consumption (crude oil equivalent, kL)		—	—	2,660	2,513	2,802
Electric energy consumption (1000 kWh)		—	—	7,449	7,106	8,029

#### Zeon Group companies outside Japan

("0" indicates less than 0.5, and "0.0" indicates less than 0.05)

Zeon Group companies outside Japan		FY 2012	FY 2013	FY 2014	FY 2015	FY2016
Substances subject to the PRTR Act	No. of substances (total)	13	13	15	10	10
	Consumption (tons)	30,380	29,080	51,496	19,674	18,123
	Emissions (tons)	79	74	91	82	67
Industrial waste	Amount generated before compacting (tons)	3,190	3,770	4,601	3,705	3,617
	Amount sent to landfills (tons)	2,580	2,807	2,916	2,429	2,365
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m <sup>3</sup> )		1,791	1,877	2,380	1,780	1,811
CO <sub>2</sub> emissions (tons)		82,834	85,718	125,438	121,819	128,317
Energy consumption (crude oil equivalent, kL)		31,745	32,401	50,388	47,310	50,374

Zeon Chemicals L.P. (ZCLP): Kentucky Plant		FY 2012	FY 2013	FY 2014	FY 2015	FY2016
Substances subject to the PRTR Act	No. of substances (total)	8	8	7	7	7
	Consumption (tons)	16,260	14,927	16,202	15,376	13,757
	Emissions (tons)	28	20	10	21	8
Industrial waste	Amount generated before compacting (tons)	572	505	344	532	551
	Amount sent to landfills (tons)	552	478	332	526	539
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m <sup>3</sup> )		965	957	1,014	685	722
CO <sub>2</sub> emissions (tons)		32,217	31,741	33,570	32,329	31,368
Energy consumption (crude oil equivalent, kL)		10,136	9,820	11,017	10,323	9,755

Zeon Chemicals L.P. (ZCLP): Texas Plant		FY 2012	FY 2013	FY 2014	FY 2015	FY2016
Substances subject to the PRTR Act	No. of substances (total)	0	0	0	0	0
	Consumption (tons)	0	0	0	0	0
	Emissions (tons)	0	0	0	0	0
Industrial waste	Amount generated before compacting (tons)	32	47	36	41	42
	Amount sent to landfills (tons)	1.2	2.2	3.0	2.0	1.0
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m <sup>3</sup> )		234	226	252	188	228
CO <sub>2</sub> emissions (tons)		9,965	10,059	10,712	10,520	9,651
Energy consumption (crude oil equivalent, kL)		2,945	2,940	3,150	3,099	2,837

Zeon Chemicals L.P. (ZCLP): Mississippi Plant		FY 2012	FY 2013	FY 2014	FY 2015	FY2016
Substances subject to the PRTR Act	No. of substances (total)	3	3	3	3	3
	Consumption (tons)	4,444	4,933	5,125	4,298	4,367
	Emissions (tons)	47	48	71	61	58
Industrial waste	Amount generated before compacting (tons)	22	44	42	97	128
	Amount sent to landfills (tons)	22	44	42	97	128
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m <sup>3</sup> )		134	142	132	166	124
CO <sub>2</sub> emissions (tons)		17,925	17,133	16,045	14,777	13,923
Energy consumption (crude oil equivalent, kL)		7,514	7,122	6,452	5,999	5,624

Zeon Chemicals Europe Ltd. (ZCEL)		FY 2012	FY 2013	FY 2014	FY 2015	FY2016
Substances subject to the PRTR Act	No. of substances (total)	2	2	2	—	—
	Consumption (tons)	9,676	9,220	9,272	—	—
	Emissions (tons)	4.4	5.6	7.6	—	—
Industrial waste	Amount generated before compacting (tons)	1,116	1,028	995	—	—
	Amount sent to landfills (tons)	1,069	1,020	991	—	—
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m <sup>3</sup> )		245	268	245	—	—
CO <sub>2</sub> emissions (tons)		11,379	11,412	11,352	—	—
Energy consumption (crude oil equivalent, kL)		6,302	6,018	5,869	—	—

Zeon Advanced Polymix Co., Ltd. (ZAP)		FY 2012	FY 2013	FY 2014	FY 2015	FY2016
Industrial waste	Amount generated before compacting (tons)	254	236	262	212	295
	Amount sent to landfills (tons)	0	0	0	0	0
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m <sup>3</sup> )		31	32	31	35	27
CO <sub>2</sub> emissions (tons)		6,220	7,270	6,090	5,690	6,360
Energy consumption (crude oil equivalent, kL)		2,807	3,277	2,948	2,705	3,023

Zeon Chemicals (Thailand) Co., Ltd. (ZCT)		FY 2012	FY 2013	FY 2014	FY 2015	FY2016
Industrial waste	Amount generated before compacting (tons)	1,194	1,910	2,552	2,823	2,601
	Amount sent to landfills (tons)	936	1,263	1,548	1,804	1,697
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m <sup>3</sup> )		182	252	316	304	293
CO <sub>2</sub> emissions (tons)		5,128	8,103	8,488	14,970	10,616
Energy consumption (crude oil equivalent, kL)		2,041	3,224	3,377	5,957	4,224

Zeon Chemicals Singapore Pte. Ltd. (ZCS)		FY 2012	FY 2013	FY 2014	FY 2015	FY2016
Industrial waste	Amount generated before compacting (tons)	—	—	370	0	0
	Amount sent to landfills (tons)	—	—	0	0	0
Water resources (Industrial water + Ground water + Waterworks) consumption(1,000 m <sup>3</sup> )		—	—	390	402	417
CO <sub>2</sub> emissions (tons)		—	—	39,181	43,533	56,400
Energy consumption (crude oil equivalent, kL)		—	—	17,575	19,227	24,911