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Occupational Health and Safety	Quality Assurance	Community	Corporate Governance	<b>ESG Data</b>	United Nations Global Compact Index

# ESG Data

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## Environment

### Zeon Corporation only

\*The Himi Futagami Plant and the Tsuruga Plant were added in FY 2021.

		FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Toxic substances	Butadiene consumption (tons)	308,069	289,912	284,390	266,518	246,958
	Butadiene emissions (tons)	3.1	3.4	3.0	2.7	2.8
	Acrylonitrile consumption (tons)	29,840	29,205	28,775	24,319	27,629
	Acrylonitrile emissions (tons)	4.0	4.0	3.0	3.1	3.3
Substances subject to the PRTR Act	Consumption (tons)	885,176	878,072	827,134	817,455	782,415
	Emissions (tons)	25.2	23.7	23.3	23.4	23.4
Industrial waste	Amount generated before compacting (tons)	125,018	143,129	130,153	140,226	140,146
	Amount generated after compacting (tons)	14,574	15,932	15,115	16,362	18,849
	Amount sent to landfills (tons)	1.9	0.0	3.2	0.1	3.8
Atmospheric emissions	CO <sub>2</sub> emissions (tons) Standards on the promotion of energy-saving/ global warming countermeasures	575,573	545,024	499,222	453,980	526,727
	CO <sub>2</sub> emissions (tons) Scope 1	685,342	724,122	680,021	713,190	690,544
	CO <sub>2</sub> emissions (tons) Scope 2	56,745	50,954	56,676	56,826	88,452
	CO <sub>2</sub> emissions (tons) Scope 1+2	742,087	775,076	736,697	770,015	778,996
	SO <sub>x</sub> emissions (tons)	796	689	774	579	797
	NO <sub>x</sub> emissions (tons)	324	298	270	258	281
Water resources	Soot emissions (tons)	8	4	7	4	7
	Total water resource consumption (1,000 m <sup>3</sup> )	18,234	18,098	17,741	17,905	17,811
Wastewater	Total wastewater discharge (1,000 m <sup>3</sup> )	15,928	15,399	15,107	15,433	15,258
	COD emissions (tons)	137	124	141	121	141
	Total phosphorus discharge (tons)	2	2	2	2	2
	Total nitrogen discharge (tons)	153	160	157	133	131
Energy	Total consumption (crude oil equivalent, kL)	222,348	211,128	226,122	215,980	244,612
	Per-unit energy consumption (kL/t-PDR)	0.13	0.12	0.14	0.13	0.13
Production equivalent	(tons)	1,671,352	1,723,677	1,602,286	1,655,367	1,876,274

### Zeon Group companies in Japan

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

\*Optes Inc. was merged into Zeon Corporation in FY 2021.

		FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Substances subject to the PRTR Act	No. of substances (total)	4.1	3.5	3.6	4.2	2.2
	Amount generated before compacting (tons)	4,896	2,746	2,323	2,247	859
Industrial waste	Amount sent to landfills (tons)	0.2	1.3	2.8	14.3	7.6
	CO <sub>2</sub> emissions (tons) Standards on the promotion of energy-saving/ global warming countermeasures	56,021	52,343	50,318	53,681	8,370
	CO <sub>2</sub> emissions (tons) Scope 1	-	-	-	-	2,147
	CO <sub>2</sub> emissions (tons) Scope 2	-	-	-	-	6,179
	CO <sub>2</sub> emissions (tons) Scope 1+2	-	-	-	-	8,326
	Energy consumption (crude oil equivalent, kL)	22,771	22,949	23,884	26,074	4,162
	Electricity consumption (1,000 kWh)	81,582	82,861	86,744	95,648	11,479
	Water resources (1,000 m <sup>3</sup> )	319	328	327	334	215

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**Status of Certifications for International Environmental Standards**

Site	ISO 14001
Takaoka Plant	○
Kawasaki Plant	○
Tokuyama Plant	○
Mizushima Plant	○
Himi Futagami Plant	○
Tsuruga Plant	○
Zeon Kasei Co., Ltd. (Head Office divisions including research laboratories)	○
Zeon Polymix Inc.	○
RIMTEC Corporation	○
Zeon Opto Bio Lab Co., Ltd.	○
Tokyo Zairyo Co., Ltd.	○
Zeon Chemicals Yonezawa Co., Ltd.	○
Zeon North Co., Ltd.	○

**Social**

**Status of Certifications for International Quality Standards**

Site	ISO 9001:2015*1	ISO 13485:2016*2	IATF 16949:2016*3	FSSC 22000 v5*4
<b>Japan</b>				
Zeon Corporation	○			
Zeon Kasei Co., Ltd.	○*5			
Zeon Polymix Inc.	○			
Zeon Opto Bio Lab Co., Ltd.	○	○		
Tokyo Zairyo Co., Ltd.	○			
Tohpe Corporation	○			
Zeon Medical Inc.		○		
Zeon North Co., Ltd.	○			
Zeon Chemicals Yonezawa Co., Ltd.	○			○
<b>Outside Japan</b>				
Zeon Chemicals L.P.	○			
Zeon Chemicals (Thailand) Co., Ltd.	○			
Zeon Advanced Polymix Co., Ltd.	○			
Zeon Chemicals Singapore Pte. Ltd.	○			
Zeon Europe GmbH	○			
Zeon Chemicals Asia Co., Ltd.	*6			
Zeon Kasei (Changshu) Co., Ltd.			○	
Zeon Kasei Mexico S.A. de C.V.	○			

\*1 ISO 9001 is the international standard for achieving ongoing improvements in enhancing customer satisfaction and quality management systems through product and services quality assurance.  
 \*2 ISO 13485 is the global standard for quality management systems in the field of medical devices for the purpose of continued manufacture and provision of safe and useful medical devices. The standard has added requirements specific to medical devices while omitting some of the ISO 9001 requirements.  
 \*3 IATF 16949 is a standard issued by the International Automotive Task Force (IATF) for the automobile industry sector, and which is intended as a supplement to the requirements of ISO 9001 for automobile manufacturers.  
 \*4 FSSC 22000 (Food Safety System Certification 22000) is a standard developed by the Foundation of Food Safety Certification to certify management systems for the production of safe food.  
 \*5 The logistical materials division has acquired certification limited to STEC®.  
 \*6 Preparations to obtain certification currently underway (as of November 2022).

**Safety**

Rate of conducting plant safety evaluations (%)	100
No. of RC audits conducted (times/year)	1
No. of safety incidents	7
No. of lost worktime accidents	7
No. of serious accidents without lost work time	0
Lost work time accident rate	0.47
No. of accidents in logistics	0

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**Basic Information on Zeon Corporation Employees (non-consolidated; does not include non-permanent employees)**

	Men	Women	Total	
No. of employees	1,836	271	2,107	
No. of new hires	New graduates* <sup>1</sup>	78	20	98
	Mid-year* <sup>2</sup>	79	16	95
Average years of employment (yrs.)	15.6	12.6	15.2	
No. of non-Japanese employees	13	15	28	
Average age (years)	39.8	36.9	39.5	
Number of employees leaving jobs* <sup>3</sup>	23	10	33	

As of March 31, 2022 (excluding those who resigned as of the end of March)

\*1 Employees that joined the company in April 2021

\*2 Employees that joined the company between April 2021 and March 2022

\*3 Number of employees requesting voluntary retirement

**Results of Initiatives**

	FY 2021
Paternity leave acquisition ratio (%)	14
Ratio of employees with disabilities (%)* <sup>1</sup> (Legally required ratio of 2.3%)	2.41
Ratio of absences due to injury or illness (absenteeism) (%)	0.56
Ratio of those taking stress checks (%)	96
Number of employees taking annual leave/acquisition ratio (%)	54
Ratio of employees undergoing routine medical checkups (%)	100
Average designated overtime worked (hours)	24.2
Overtime exceeding statutory monthly amount of 45 hours (total number: persons)	449
Participation ratio in e-learning relating to women's health issues (%)	73
Usage ratio for health support app (%)	36
Participation ratio for practical health routines events (Challenge 60) (%)	100
Participation status for measures targeting high-risk persons (completion ratio for health care guidance) (%)	44
Ratio of participation by eligible for mental health seminars (Line Care Training) (%)	76

As of March 31, 2022

\*1 As of June 2022

**Basic Information on Zeon Group Employees**

No. of employees	3,981
No. of new graduate hires*	123

As of March 31, 2022 (excluding those who resigned as of the end of March)

\*Employees that joined the company in April 2022

## Governance

**Management Organization**

No. of members of the Board of Directors	9
Of which, are outside directors	3
Of which, are women directors	1
No. of members of the Audit & Supervisory Board	5
Of which, are outside auditors	3

\*As of July 2022

**Risk Management**

No. of reports received via the Internal Reporting System	4
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\*FY 2021

**Internal Audits**

No. of departments/companies audited	32
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\*Zeon Corporation: 13 departments, 7 Zeon Group companies inside Japan, 12 Zeon Group companies outside Japan

For more detailed information, see the Corporate Governance Report

**Corporate Governance Report (Japanese version only)**

<https://www.zeon.co.jp/news/assets/pdf/220705.pdf>