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# SUSTAINABILITY DATA BOOK

# 2023

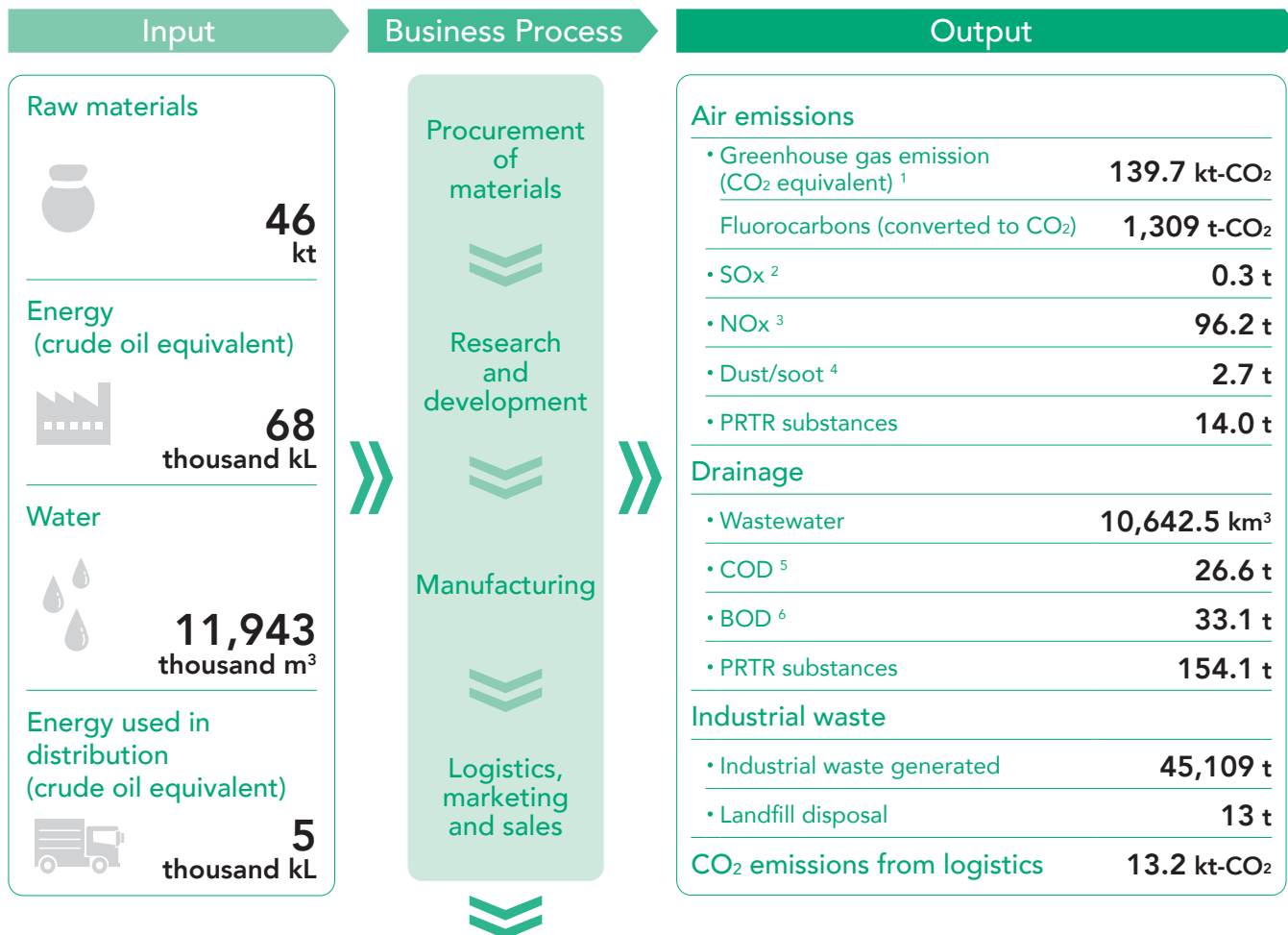


# Environment

## Material Flow

Material Flow in Business Activities

Scope: ADEKA



## Products

320 kt

- Total emissions arising from energy sources, non-energy sources and processes  
We are introducing virtually renewable energy-derived electricity through the purchase of renewable energy power certificates.
- Sulfur oxides generated during the use of fuels that contain sulfur
- Nitrogen oxide generated during combustion in plant boilers and incinerators
- Fine particles generated during the combustion of fuels and other materials
- Amount of oxygen consumed during the oxidation of organic substances
- Amount of oxygen required during the mineralization and gasification of contaminants in river water and industrial wastewater by microorganisms

### Notes on environmental data:

- Scope 1 and Scope 2 emissions for FY2017 through FY2019 are under review at some business locations.
- Environmental data covers companies covered by our consolidated financial results, and the figures for FY2019 and beyond have been revised due to the inclusion of Nihon Nohyaku and its group companies in the scope of data.
  - Nihon Nohyaku and its domestic group companies are included in the scope of data for greenhouse gas emissions from FY2019 onward.
  - Nihon Nohyaku and its domestic group companies are included in the scope of data for SO<sub>x</sub> emissions, NO<sub>x</sub> emissions and soot/dust emissions from FY2020 onward.
  - Nihon Nohyaku and its group companies are not included in the scope of data for usage of water, wastewater discharge, discharge and transfer of PRTR substances, zero emissions rate, and recycling rate.

## Environmental Data

### ◆ Initiatives for Reducing CO<sub>2</sub> Emissions

#### Greenhouse Gas Emissions

Unit: kt-CO<sub>2</sub>

	FY2018	FY2019	FY2020	FY2021	FY2022
ADEKA	155.9	151.0	147.6	150.9	139.7
Group companies in Japan	5.8	14.3	14.0	15.5	14.1
Overseas companies	66.8	68.7	91.6	90.8	85.3

#### Greenhouse Gas Emission Intensity Index (from energy consumption)

Unit: t-CO<sub>2</sub>/t

	FY2018	FY2019	FY2020	FY2021	FY2022
ADEKA (the manufacturing division)	0.426	0.427	0.428	0.428	0.435
Group companies in Japan (the manufacturing divisions)	0.348	0.371	0.364	0.348	0.343

#### Breakdown of Greenhouse-Gas Emission Volumes in FY2022 (CO<sub>2</sub> equivalents)

Total				139.7 kt-CO <sub>2</sub>
Percentage breakdown	Electric power	40.0%	Non-energy sources	3.7%
	Steam	17.0%	Arising from production processes	4.4%
	Gas	18.8%	Fluorocarbons	0.6%
	Heavy oil and other fossil fuels	15.5%		

#### CO<sub>2</sub> Emissions and Scope 3 Breakdown

Scope: ADEKA

Unit: kt-CO<sub>2</sub>

Scope and category			Emissions
Scope 1			66.0
Scope 2			73.7
Scope 3			592.4
Category	Category1	Purchased goods and services	389.5
	Category2	Capital goods	28.9
	Category3	Fuel- and energy-related activities not included in Scope 1 and 2	36.5
	Category4	Transportation and distribution	41.4
	Category5	Waste generated by operations	40.0
	Category6	Business trips	0.2
	Category7	Employee commuting	0.6
	Category12	End-of-Life Treatment of Sold Products	55.2
Total			732.1

Scope: Consolidated figures for ADEKA

Unit: kt-CO<sub>2</sub>

Scope and category		Emissions
Scope 1		103.0
Scope 2		136.1
Scope 3		1,042.6



# Environment

## ◆ Resource Utilization

### Raw Materials/Manufacturing Volume

Unit: t

	FY2018	FY2019	FY2020	FY2021	FY2022
Raw material input	221,742	203,727	192,519	198,710	181,423
Manufacturing volume	507,676	488,003	469,989	483,711	444,539

## ◆ Energy-Saving Activities

### Energy Consumption

Unit: thousand kL

	FY2018	FY2019	FY2020	FY2021	FY2022
ADEKA (the manufacturing division)	69.1	67.3	67.0	70.0	67.6
Group companies in Japan (the manufacturing divisions)	2.5	7.8	7.9	8.6	9.8
Overseas companies	29.5	28.3	27.9	30.0	27.8

### Energy Consumption Intensity

Unit: thousand kL/t

	FY2018	FY2019	FY2020	FY2021	FY2022
The manufacturing division	0.1873	0.1886	0.1927	0.1970	0.2024

### Breakdown of Energy Consumption in FY2022

Total		105.2 thousand kL			
Percentage breakdown	Electric power	49.7%	Gas	23.8%	
	Steam	18.1%	Heavy oil and other fossil fuels	8.4%	



# Environment

## ◆ Preventing Water Pollution

### Usage of Water

Unit: thousand m<sup>3</sup>

	FY2018	FY2019	FY2020	FY2021	FY2022
ADEKA	12,521	12,356	11,657	12,280	11,943
Group companies in Japan	507	491	531	615	370
Overseas companies	514	442	455	470	461

### Usage of Water (by source)

Unit: thousand m<sup>3</sup>

	FY2018	FY2019	FY2020	FY2021	FY2022
Tap water	624	593	640	616	594
Groundwater	6,643	6,443	6,048	6,897	6,197
Brackish surface water/Seawater	3,200	3,388	2,745	2,952	3,384
Surface water (rivers, lakes, etc.)	0	0	0	0	0
Industrial use water	2,850	2,631	2,953	2,672	2,368
Other (pure water)	224	234	256	229	231

### Water Discharge

Unit: thousand m<sup>3</sup>

	FY2018	FY2019	FY2020	FY2021	FY2022
ADEKA	10,129	10,119	9,388	10,130	10,643
Group companies in Japan	503	536	518	518	336
Overseas companies	296	300	295	338	270

### By Drainage Destination

Unit: thousand m<sup>3</sup>

	FY2018	FY2019	FY2020	FY2021	FY2022
Rivers, lakes, etc.	6,316	6,102	6,152	6,441	6,391
Seawater	3,452	3,658	3,010	3,223	3,631
Discharge to a third party	1,161	1,194	1,039	1,322	1,227

### Chemical Oxygen Demand Emissions

Unit: t

	FY2018	FY2019	FY2020	FY2021	FY2022
ADEKA	26.0	27.5	23.9	24.9	26.6
Group companies in Japan	0.9	1.0	3.4	16.4	1.1
Overseas companies	284.9	316.6	339.6	321.6	219.6

### Biological Oxygen Demand Emissions

Unit: t

	FY2018	FY2019	FY2020	FY2021	FY2022
ADEKA	28.1	39.0	29.4	33.6	33.1
Group companies in Japan	0.8	2.2	1.3	10.5	1.3
Overseas companies	6.0	5.6	4.1	4.9	6.8

# Environment

## ◆ Preventing Air Pollution

### SOx Emissions

Unit: t

	FY2018	FY2019	FY2020	FY2021	FY2022
ADEKA	0.5	0.3	0.5	0.5	0.3
Group companies in Japan	0.3	0.2	1.3	0.6	0.5
Overseas companies	1.7	0.1	0.1	0.0	0.4

### NOx Emissions

Unit: t

	FY2018	FY2019	FY2020	FY2021	FY2022
ADEKA	60.2	47.4	53.6	69.7	96.2
Group companies in Japan	0.2	0.3	10.2	4.7	1.1
Overseas companies	7.8	1.9	1.6	1.1	2.3

### Soot/Dust Emissions

Unit: t

	FY2018	FY2019	FY2020	FY2021	FY2022
ADEKA	7.0	6.2	4.2	3.6	2.7
Group companies in Japan	0.0	0.0	0.0	6.1	0.0
Overseas companies	0.0	0.1	0.2	0.1	0.1

# Environment

## ◆ Appropriate Management of Chemical Substances

### Discharge of PRTR Substances

Unit: t

	FY2018	FY2019	FY2020	FY2021	FY2022
ADEKA (Air)	14.3	11.4	14.2	20.4	11.1
ADEKA (Water)	3.0	3.1	3.0	3.0	3.0
Group companies in Japan (Air)	4.9	5.9	3.8	4.1	4.8

### Transfer of PRTR Substances

Unit: t

	FY2018	FY2019	FY2020	FY2021	FY2022
ADEKA	184.2	167.5	164.8	244.4	154.1
Group companies in Japan	11.3	13.7	9.0	9.8	11.2

### Discharge and Transfer of Chemical Substances

Scope: ADEKA (production and research divisions) and Oxirane Chemical CORP.

Unit: t

Ordinance Designation Number	Substance	Discharge				Transfer	
		Air	Public Waters	Soil	Landfill Waste	Sewage	External Transfer
53	Ethylbenzene	0.0	0.0	0.0	0.0	0.0	1.0
65	Epichlorohydrin	0.1	0.0	0.0	0.0	0.0	0.0
80	Xylene	0.0	0.0	0.0	0.0	0.0	20.0
125	Chlorobenzene	0.3	0.0	0.0	0.0	0.0	17.0
128	Chloromethane	0.2	0.0	0.0	0.0	0.0	0.0
157	1,2-Dichloroethane	1.2	0.0	0.0	0.0	0.0	24.0
186	Dichloromethane	1.1	0.0	0.0	0.0	0.0	38.0
207	Dibutylhydroxytoluene	0.0	0.0	0.0	0.0	0.0	1.1
232	N,N-dimethylformamide	0.0	0.0	0.0	0.0	0.0	0.4
257	Decyl Alcohol	0.1	0.0	0.0	0.0	0.0	0.0
277	Triethylamine	0.0	0.2	0.0	0.0	0.0	13.0
300	Toluene	5.5	0.0	0.0	0.0	0.0	34.6
302	Naphthalene	0.0	0.0	0.0	0.0	0.0	0.1
318	Carbon disulfide	4.6	0.0	0.0	0.0	0.0	0.0
392	N-hexane	2.4	0.0	0.0	0.0	0.0	9.6
395	Water-soluble salts of peroxodisulfuric acid	0.0	2.8	0.0	0.0	0.0	1.2
453	Molybdenum and its compounds	0.0	0.0	0.0	0.0	0.0	2.0
458	Tris (2-ethylhexyl) phosphate	0.1	0.0	0.0	0.0	0.0	4.1
Sub-total		15.6	3.0	0.0	0.0	0.0	166.1
Other substances (47 types)		0.3	0.0	0.0	0.0	0.0	0.1
<b>Total</b>		<b>15.9</b>	<b>3.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>166.3</b>



# Environment

## ◆ Appropriate Management of the Disposal of Industrial Waste

### Industrial Waste Generated

Unit: kt

	FY2018	FY2019	FY2020	FY2021	FY2022
ADEKA	47.1	47.4	46.4	49.0	45.1
Group companies in Japan	5.5	13.2	9.4	9.4	11.5
Overseas companies	12.3	12.1	12.2	13.0	12.7
<b>Total</b>	<b>65.0</b>	<b>72.6</b>	<b>68.0</b>	<b>71.4</b>	<b>69.3</b>

### Breakdown of Industrial Waste

Scope: ADEKA and Group companies in Japan

<b>Total</b>		<b>62.1 kt</b>			
Percentage breakdown	Waste oil	36%	Various waste plastics	2%	
	Waste acid	9%	Animal and plant wastes	1%	
	Sludge	13%	Other	3%	
	Waste alkali	37%			

### Outsourced Disposal of Industrial Waste

Unit: kt

	FY2018	FY2019	FY2020	FY2021	FY2022
ADEKA	15.5	17.8	18.5	17.8	15.5
Group companies in Japan	2.0	9.9	7.8	7.2	2.8
Overseas companies	12.5	11.8	11.9	12.7	12.7
<b>Total</b>	<b>30.0</b>	<b>39.4</b>	<b>38.2</b>	<b>37.8</b>	<b>31.0</b>

### Breakdown of the Total Volume of Waste Treated by External Contractors

Scope: ADEKA and Group companies in Japan

<b>Total</b>		<b>30.6 kt</b>			
Percentage breakdown	Waste oil	23%	Various waste plastics	5%	
	Waste acid	9%	Animal and plant wastes	3%	
	Sludge	25%	Other	8%	
	Waste alkali	27%			

# Environment

## Zero Emissions Rate for Landfill Disposal of Industrial Waste

Scope: ADEKA and Group companies in Japan

	FY2018	FY2019	FY2020	FY2021	FY2022
Final landfill volume (Unit: t)	35.3	50.2	44.0	42.5	127.0
Zero emissions rate (Unit: %)	0.07	0.10	0.09	0.08	0.26

Note: The Nihon Nohyaku Group, which uses a different formula for calculating final landfill volume, is not included in this data.

## Recycling Rate

Scope: ADEKA and Group companies in Japan

	FY2018	FY2019	FY2020	FY2021	FY2022
Recycling rate (Unit: %)	49.6	43.7	36.7	41.9	45.2

## Environmental Accounting

### Environmental Conservation Costs

Unit: Millions of yen (rounded to the nearest unit)

Scope: ADEKA (research and production divisions), ADEKA FINE FOODS CORP., Oxirane Chemical CORP., UEHARA FOODS INDUSTRY CO., LTD., Nihon Nohyaku Co., Ltd.

Category	Description of Main Initiatives	Environmental Conservation Cost	Amount of Environmental Investment
(1) Business area cost			
1) Pollution prevention costs	Prevention of air, water and soil pollution and of noise, vibration, stench and land subsidence	1,035	225
2) Global environmental conservation costs	Preventing global warming (conserving energy), preventing damage to the ozone layer	442	281
3) Resource recycling costs	Reducing and recycling resources and minimizing the generation of waste material	472	124
(2) Upstream/downstream cost	Green procurement, reducing the environmental burden imposed by containers and packaging, collecting and re-commercializing products	5	1
(3) Administration cost	Environmental ISO, disclosure of environmental information, environmental impact monitoring, greening	78	1
(4) R&D cost	R&D expenses for environmental conservation	618	124
(5) Social activity cost	Greening and beautification of areas outside the offices and plants, donating and supporting environmental conservation organizations	3	0
(6) Environmental remediation cost	Purification efforts to improve water quality and remove soil pollution, restoration of nature	3	0
<b>Total</b>		<b>2,657</b>	<b>755</b>

### Environmental Conservation Effect

Scope: ADEKA (research and production divisions), ADEKA FINE FOODS CORP., Oxirane Chemical CORP., UEHARA FOODS INDUSTRY CO., LTD.

Classification	Environmental Performance Indicators	Unit	FY2021	FY2022	Year-on-year
Resources for business activities	Quantity of specific managed substances input	t	23,786	20,542	86.4%
Goods and services produced by business activities	Quantity of used products, containers and packaging circulated and used	t	949	1,070	112.7%
	Quantity of containers and packaging used	t	5,541	5,431	98.0%
Other	Emissions of environmentally hazardous substances from logistics	t	86,183	88,189	102.3%
	Volume of materials and products transported	million t-km	130	127	97.7%



# Environment

## Economic Effects with Environmental Conservation Measures

Unit: Millions of yen (rounded to the nearest unit)

Scope: ADEKA (research and production divisions), ADEKA FINE FOODS CORP., Oxirane Chemical CORP., UEHARA FOODS INDUSTRY CO., LTD., Nihon Nohyaku Co., Ltd.

Details of Effects	Amount
Income earned by recycling, profits from the sale of valuable resources, etc.	219
Reduction in costs through introducing resources from the environment into business activities	246
Reduction in the burden imposed by business activities on the environment and costs related to the generation of waste material	28
Reduction in other costs	7
<b>Total</b>	<b>500</b>
Degree of effects (Calculated by dividing the economic effects resulting from environmental conservation activities by the costs of these activities)	14.6%

## Cost of Environmental Initiatives and Amount Invested

Unit: Millions of yen (rounded to the nearest unit)

Scope: ADEKA (research and production divisions), ADEKA FINE FOODS CORP., Oxirane Chemical CORP., UEHARA FOODS INDUSTRY CO., LTD., Nihon Nohyaku Co., Ltd.

	FY2018	FY2019	FY2020	FY2021	FY2022
Environmental conservation cost	2,279	2,347	2,413	3,776	2,657
Amount of environmental investment	718	1,652	1,100	964	755

## Human Rights and Human Resources

### ◆ Expanding Opportunities for Utilizing Human Resources

#### Human Resources Data

Scope: ADEKA

Item		FY2019	FY2020	FY2021	FY2022
Non-prescribed work time (per month)		14.6hours	12.8hours	14.6hours	13.7hours
Number of employees working shortened hours	Male	0	1	1	1
	Female	29	34	34	32
Percentage taking annual paid leave		72.6%	64.0%	69.6%	70.7%
Percentage taking refreshment leave*		82%	18%*	13%*	79%
Childcare leave utilization rate	Male	17.6%	27.4%	37.5%	49.1%
	Female	100%	100%	100%	100%
Number of employees taking childcare leave	Male	9	17	27	26
	Female	12	9	12	15
Number of employees taking nursing care leave of absence		1	0	2	2
Number of employees taking nursing care leave		2	5	14	16
Percentage returning to workplace after childcare leave	Male	100%	100%	100%	100%
	Female	95.2%	100%	100%	100%
Job retention rate after childcare leave	Male	100%	100%	100%	100%
	Female	95.2%	100%	100%	100%
Percentage receiving health check-up		100%	100%	100%	100%
Repeat health check-up rate		73.0%	91.0%	97.0%	99.9%
Stress Checks: Rate of uptake Company-wide		99.5%	99.5%	99.9%	100%
Training Costs per Employee (thousand yen)		70	51	55	57
Average hours of annual training/education per employee		143.6min	51.0min	262.1min	179.8min

\* Due to the impact of the worldwide COVID-19 pandemic, the rate of uptake of refreshment leave has declined significantly.

# Society

## Human Resources Data

Scope: ADEKA (Excluding consolidated employees)

Item		FY2019	FY2020	FY2021	FY2022
Number of consolidated employees		5,189	5,378	5,466	5,494
Number of non-consolidated employees	Overall	1,771	1,812	1,808	1,796
	Male	1,509	1,533	1,522	1,507
	Female	262	279	286	289
Employee average age	Overall	38.3	38.5	38.9	39.6
	Male	38.5	38.7	39.2	39.8
	Female	37.0	37.2	37.6	38.1
Average length of employment	Overall	15.2 years	15.6 years	16.0 years	16.5 years
	Male	15.5 years	15.9 years	16.3 years	16.9 years
	Female	13.6 years	13.7 years	14.1 years	14.6 years
Women as percentage of employees		14.8%	15.4%	15.8%	16.1%
Women as percentage of managers		2.8%	3.3%	3.5%	4.6%
Number of new graduates hired	Overall	100	70	45	34
	Male	77	54	32	24
	Female	23	16	13	10
Employee turnover rate	Overall	2.5%	2.1%	3.4%	3.4%
	Male	2.4%	2.2%	3.5%	3.3%
	Female	3.3%	1.4%	2.7%	4.0%
Voluntary retirement rate	Overall	1.2%	1.2%	2.5%	2.5%
	Male	1.1%	1.2%	2.4%	2.4%
	Female	1.8%	1.1%	3.0%	3.0%
Average monthly wage		376,577 yen	378,253 yen	379,260 yen	382,399 yen
New graduate starting salary (university graduates, includes housing allowance)		238,290 yen	238,290 yen	238,290 yen	241,290 yen
Number of foreign employees		10	9	9	11
Percentage of foreign employees		0.6%	0.5%	0.5%	0.6%
Number of employees with disabilities		33	35	34	35
People with disabilities as percentage of employees		2.13%	2.12%	2.13%	2.11%
Number of retirees rehired		27	29	32	36
Percentage of retirees rehired*		100%	63.6%	100%	93.3%

\* Including transfers of employees to posts at affiliated companies



# Society

## ◆ Occupational Health and Safety

### Number of Accidents by Year

Scope: ADEKA and subcontractors and the ADEKA Group's 18 production sites

	FY2018	FY2019	FY2020	FY2021	FY2022
Accidents with lost workdays	12	8	4	5	8
Accidents without lost workdays	6	10	8	3	8
Accidents with fatalities	0	0	0	0	0

## ◆ Promoting Upgrading of Work Environments

### Key Labor-Management Meetings

Scope: ADEKA

Labor-management councils	Management councils	ADEKA Group labor-management conference	Management conference
12 times a year	Twice a year	Once a year	Once a year

## Corporate Governance Overview

### ◆ Organizational design/Frequency of committee meetings

	Board of Directors	Nomination and Remuneration Committee	Audit and Supervisory Committee
Chairperson/Committee Chair	President and Chief Executive Officer	External director	Internal director
Structure	5 Internal directors, 5 External directors	1 Internal director, 2 External directors	1 Internal director, 2 External directors
Number of times held (FY2022)	Regular: 12, Extraordinary: 5, Total 17	3	Audit and Supervisory Committee: 6

### ◆ Board of directors

	As of June 30, 2020	As of June 30, 2021	As of June 30, 2022	As of June 30, 2023
Number of directors	11	17	16	10
Number of independent external directors	2	6	6	5
Number of female directors	1	1	1	1
Ratio of female directors on the Board of Directors	9%	6%	6%	10%
Ratio of women among Operating Officers	0%	0%	0%	0%

### ◆ Number of meetings

	FY2019	FY2020	FY2021	FY2022
Board of Directors	17	19	17	17
Nomination and Remuneration Committee	-	-	4	3
Audit and Supervisory Committee	6	7	Audit & Supervisory Board: 2 Audit and Supervisory Committee: 4	6

### ◆ Violation of the law

	FY2019	FY2020	FY2021	FY2022
Serious legal and reporting violations	0	0	0	0

# Governance

## ◆ Compliance violations, etc.

	FY2019	FY2020	FY2021	FY2022
Number of internal reports	6	9	9	4
Number of Labor Standards Act violations	0	0	0	0
Number of serious environmental accidents	0	0	0	0
Number of serious environmental laws and regulations violations	0	0	0	0
Fines and penalties related to violations of environmental laws and regulations	0 yen	0 yen	0 yen	0 yen

## ◆ Prevention of corruption

	FY2019	FY2020	FY2021	FY2022
Number of disciplinary dismissals due to bribery and anti-corruption violations	0	0	0	0
Fines, penalties, and settlements attributable to bribery and anti-corruption violations	0 yen	0 yen	0 yen	0 yen



# Acquisition of Management System Certification

## ISO 22301(Business Continuity Management Systems (BCMS))

Head Office relevant departments, Soma Plant and ADEKA LOGISTICS CORP. (Nov. 2013)

## BS25999 (Business Continuity Management Systems (BCMS))

ADEKA FINE CHEMICAL TAIWAN CORP. (Aug. 2008)

## ISO 9001 (Quality Management Systems)

Mie Plant (Jun. 1993)

Kashima Plant, Kashima Plant-West (Apr. 1996)

Fuji Plant (Jan. 1997)

Chiba Plant (Jul. 1997)

ADEKA POLYMER ADDITIVES EUROPE SAS (Jul. 1997)

OXIRANE CHEMICAL CORP. (Oct. 1997)

Soma Plant (Aug. 1998)

ADEKA CLEAN AID CORP. (Oct. 1999)

ADEKA KOREA CORP. (Jan. 2000)

AMFINE CHEMICAL CORP. (Oct. 2001)

ADEKA ENGINEERING & CONSTRUCTION CORP. (Mar. 2002)

KUKDO CHEMICAL (KUNSHAN) CO., LTD. (Mar. 2004)

ADEKA FINE CHEMICAL (SHANGHAI) CO., LTD. (May 2005)

ADEKA FINE CHEMICAL (CHANGSHU) CO., LTD. (May 2005)

TOKYO ENVIRONMENTAL MEASUREMENT CENTER CO., LTD. (Aug. 2005)

UEHARA FOODS INDUSTRY CO., LTD. (Nov. 2005)

ADEKA (SINGAPORE) PTE.LTD. (Apr. 2006)

ADEKA FINE CHEMICAL TAIWAN CORP. (Jul. 2006)

ADEKA FINE CHEMICAL (THAILAND) CO., LTD. (Dec. 2006)

AM STABILIZERS CORP. (Mar. 2013)

ADEKA AL OTAIBA MIDDLE EAST LLC (Sep. 2018)

ADEKA FINE CHEMICAL (ZHEJIANG) CO., LTD. (Oct. 2020)

# Acquisition of Management System Certification

## ISO 14001 (Environmental Management Systems)

Mie Plant (Dec. 1996)  
 Kashima Plant, Kashima Plant-West (Mar. 1998)  
 Fuji Plant (Apr. 2000)  
 Chiba Plant (May 2000)  
 Soma Plant (Aug. 2000)  
 Akashi Plant (Mar. 2001)  
 OXIRANE CHEMICAL CORP. (Mar. 2001)  
 TOKYO ENVIRONMENTAL MEASUREMENT CENTER CO., LTD.  
 (Feb. 2003)  
 ADEKA KOREA CORP. (Jan. 2006)  
 ADEKA FINE CHEMICAL (CHANGSHU) CO., LTD. (Jul. 2006)  
 ADEKA FINE CHEMICAL TAIWAN CORP. (Feb. 2007)  
 AMFINE CHEMICAL CORP. (Sep. 2007)  
 ADEKA FINE CHEMICAL (SHANGHAI) CO., LTD. (Jan. 2009)  
 ADEKA FOODS (CHANGSHU) CO., LTD. (Aug. 2009)  
 ADEKA FINE CHEMICAL (THAILAND) CO., LTD. (Jan. 2010)  
 ADEKA POLYMER ADDITIVES EUROPE SAS (Aug. 2010)  
 ADEKA AL OTAIBA MIDDLE EAST LLC (Dec. 2019)  
 ADEKA FINE CHEMICAL (ZHEJIANG) CO., LTD. (Oct. 2020)

### Coverage rate of obtaining ISO 14001 certification

**ADEKA** **100%**  
(7/7)

**Japanese and overseas  
Group companies** **23%**  
(12/53)

## FSSC 22000 (Food Safety System Certification)

Kashima Plant-West (Dec. 2011)  
 Kashima Plant (Dec. 2014)  
 Akashi Plant (Mar. 2015)  
 ADEKA FINE FOODS CORP. (Apr. 2016)  
 ADEKA (SINGAPORE) PTE.LTD. (May 2016)  
 ADEKA FOODS (CHANGSHU) CO., LTD. (Sep. 2016)  
 ADEKA FOODS (ASIA) SDN.BHD. (Oct. 2017)

## TPM Award (Total Productive Maintenance)

Chiba Plant: 1994 Excellence Award  
 Mie Plant: 1995 Excellence Award  
 OXIRANE CHEMICAL CORP.: 1995 Excellence Award  
 Akashi Plant: 2000 Excellence Award  
 Kashima Plant, Kashima Plant-West: 2007 Excellence Award-Special Award for TPM Achievement  
 Fuji Plant: Award for TPM Excellence, Category A (2010)

# Acquisition of Management System Certification

## ISO 45001/OHSAS 18001 (Occupational Health and Safety Management Systems)

Mie Plant (Sep. 2000)  
 Kashima Plant, Kashima Plant–West (Nov. 2002)  
 Soma Plant (Dec. 2002)  
 Akashi Plant (Mar. 2003)  
 Chiba Plant (Oct. 2003)  
 Fuji Plant (Dec. 2003)  
 ADEKA FINE CHEMICAL TAIWAN CORP. (Jun. 2007)  
 ADEKA FINE CHEMICAL (CHANGSHU) CO., LTD. (Jul. 2009)  
 ADEKA FOODS (CHANGSHU) CO., LTD. (Aug. 2009)  
 ADEKA KOREA CORP. (Apr. 2010)  
 ADEKA POLYMER ADDITIVES EUROPE SAS (Dec. 2013)  
 ADEKA AL OTAIBA MIDDLE EAST LLC (Sep. 2018)  
 ADEKA FINE CHEMICAL (ZHEJIANG) CO., LTD. (Oct. 2020)

### Ratio of business sites with OHSAS 18001 certification

**ADEKA** **100%**  
 (7/7)

**Japanese and overseas Group companies** **15%**  
 (8/53)

## ISO 50001 (Energy Management Systems)

ADEKA POLYMER ADDITIVES EUROPE SAS (Nov. 2020)