

# TOKUYAMA Sustainability Data Book 2021

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*Sustainability Data Book 2021* reports key data on Tokuyama's CSR activities in fiscal 2020.

Details of Tokuyama's basic philosophy and initiatives for CSR are introduced at the website below.

| **WEB** | Tokuyama's CSR

<https://www.tokuyama.co.jp/eng/csr/>



- Responsible Care Initiatives
- Quality Management System

## Responsible Care

Tokuyama has put in place a corporate framework for promoting Responsible Care,\* and is incorporating this initiative in each of its management systems as it strives to continuously improve its environmental, safety, and quality systems.



### Responsible Care Initiatives

Tokuyama actively practices Responsible Care as one of the original members of the Japan Responsible Care Committee established in 1995 under the Japan Chemical Industry Association (JCIA).

\* Responsible Care is a voluntary management initiative undertaken by chemical manufacturers to implement measures that conserve the environment and secure safety and health in all processes from the development of chemical substances to their manufacturing, distribution, use, final consumption, and disposal. Companies publish their outcomes and engage in public dialogue.

| [WEB](https://www.tokuyama.co.jp/eng/csr/responsible_care.html) | Basic Philosophy of Responsible Care

[https://www.tokuyama.co.jp/eng/csr/responsible\\_care.html](https://www.tokuyama.co.jp/eng/csr/responsible_care.html)



### Priority Tasks and Results of Responsible Care Activities in Fiscal 2020

Degree of target achievement:  
Achieved (A) Not achieved (B)

Category	Priority tasks	Results	Degree of target achievement
Environmental Conservation	<ul style="list-style-type: none"> <li>● Comply with legal requirements and other regulations</li> <li>● Achieve zero environmental accidents</li> <li>● Achieve targets for reducing environmental impact</li> </ul>	<ul style="list-style-type: none"> <li>● Strictly complied with legal requirements</li> <li>1 incident exceeding regulatory limits set by Air Pollution Control Act</li> </ul>	B
		<ul style="list-style-type: none"> <li>● No environmental accidents</li> </ul>	A
		<ul style="list-style-type: none"> <li>● Reduced or maintained levels of emissions of substances of concern</li> </ul>	A
		<ul style="list-style-type: none"> <li>● Reduced per-unit energy consumption (KPI: 3% improvement compared with FY2005 levels)</li> <li>8.9% improvement compared with FY2005 levels</li> <li>● Zero emissions to landfills (KPI: Maintain 99.9% reuse/recycling rate)</li> <li>Zero emissions of industrial waste to landfills: 99.7% reuse/recycling rate</li> </ul>	B
Safety and Accident Prevention Occupational Health and Safety	<ul style="list-style-type: none"> <li>● Achieve zero legal violations</li> <li>● No accidents or accidents requiring work absence</li> <li>● Reduce rate of work absences</li> </ul>	<ul style="list-style-type: none"> <li>● 1 recommendation for rectification measures under Japan's Industrial Safety and Health Act</li> <li>● 2 fire accidents</li> <li>● Employees: 2 accidents requiring work absence</li> <li>● Improved safety management level</li> <li>● Identified and reduced/eliminated hazards and reduced risks of accidents</li> <li>● Promoted risk and hazard management</li> <li>● Promoted physical and mental health</li> </ul>	B B B A A A A
		<ul style="list-style-type: none"> <li>● Conducted inspections of products and labeling</li> <li>● Upgraded safety data sheet (SDS) management</li> <li>● Addressed regulations on chemicals in and outside of Japan</li> </ul>	A A A
Chemical Product Safety	<ul style="list-style-type: none"> <li>● Ensure product safety</li> </ul>	<ul style="list-style-type: none"> <li>● Participated in community volunteer activities</li> <li>● Held dialogues with the community on Responsible Care</li> <li>● Factory tours*</li> </ul>	A A — *
Build Relations of Trust with Local Communities and Society	<ul style="list-style-type: none"> <li>● Participate in community events</li> <li>● Establish a good reputation in society</li> </ul>	<ul style="list-style-type: none"> <li>● Conducted safety, environment, and quality audits</li> <li>● Shared Responsible Care information via an online newsletter, etc.</li> <li>● Appropriately addressed regulations on chemicals in countries outside Japan</li> </ul>	A A A

\* Unable to evaluate because the tour was not held due to COVID-19.

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Responsible Care

## Quality Management System

As an internationally competitive company, Tokuyama implements three-year quality management plans based on its Quality Policy in order to provide products and services that accurately meet the needs and expectations of its customers.

It has been 19 years since a quality management system was introduced company-wide, including in sales and development departments, in fiscal 2002. The system is now well-established in all departments and is generating continuous improvement. An external audit by a third party in fiscal 2020 pointed out no major or minor nonconformances.

Internal audits check the progress of action plans and the status of the system based on the JISQ 9001:2015 standard, requiring corrective actions for any defects. In addition to compliance with the requirements of the standard, audits also verify the effectiveness of the quality management system and whether or not it is helping to improve customer satisfaction.

### Tokuyama Quality Policy

As an internationally competitive company, Tokuyama Corporation always puts its customers first and to ensure their satisfaction, provides products and services that accurately meet their needs and expectations. To achieve these goals, the Company complies with laws and regulations and continuously improves the effectiveness of its quality management system.

Environmental Initiatives

## Environmental Initiatives

For Tokuyama, the pursuit of proactive initiatives to protect the earth's environment is an important part of its corporate social responsibilities. Accordingly, the Company practices environmental management that takes into account the natural environment in all business activities.

### Environmental Management

Tokuyama works to accurately determine the input and output of materials in its operations and regularly sets new targets for reducing environmental impact.

### Tokuyama Environmental Management Policy

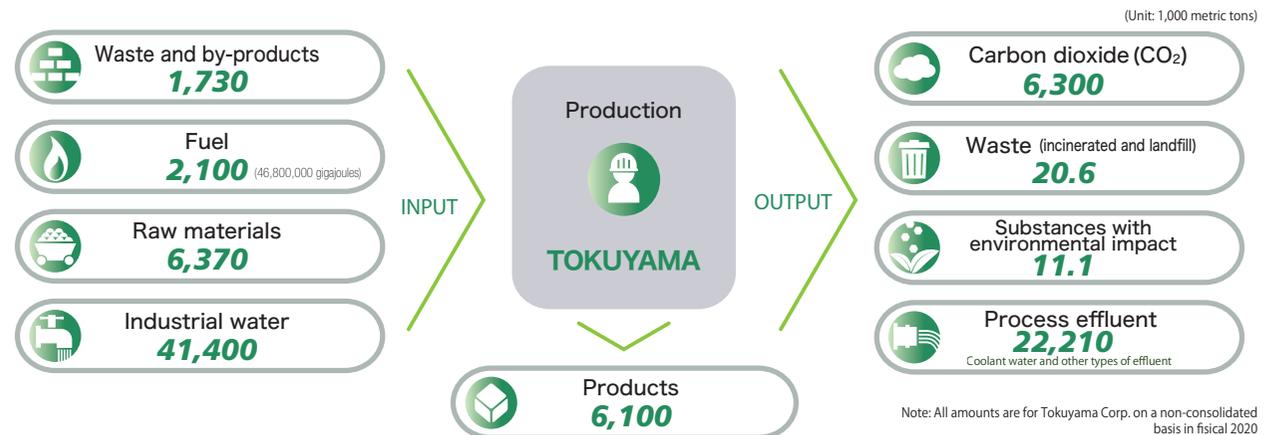
#### Three-Year Policy (FY2021–2023)

Tokuyama actively undertakes global environmental conservation and strives to help build a sustainable society based on its Basic Philosophy of Responsible Care and the following policies.

#### Focus Items in Fiscal 2021

- Strictly comply with legal requirements, etc.
- Continue zero environmental accidents
- Reduce environmental impact
  - Maintain or reduce emission levels of environmentally hazardous substances
  - Promote zero waste emissions
- Combat climate change
  - Take action to achieve FY2030 greenhouse gas (GHG) target
  - Promote energy-saving and conservation of electricity
- Expand communication with stakeholders and improve information disclosure
- Help conserve biodiversity

### Flow of Materials in Business Activities



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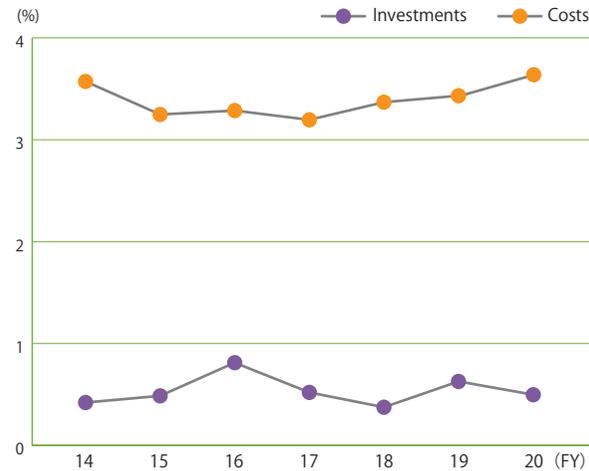
## ■ Environmental Accounting

Tokuyama has been carrying out environmental accounting since fiscal 2000 in order to accurately determine and analyze the investment amounts and costs associated with its environmental conservation activities, thereby providing a sound basis for making environmental investments.

### Fiscal 2020 Environmental Conservation Costs

Category		Major Activities	Amount Invested (million yen)	Costs (million yen)
Costs in Business Areas	Pollution Control	Installation of electrostatic precipitators for reducing smoke and dust, upgrade of related equipment, etc.	179	4,321
	Global Environmental Conservation	Remodeling and upgrade of equipment for reducing CO <sub>2</sub> , upgrade of freon removal equipment, etc.	16	474
	Resource Recycling	Installation of waste disposal facilities, upgrade of equipment in waste disposal facilities, PCB waste disposal costs, etc.	688	1,335
Upstream and Downstream Costs			0	1
Management Activity Costs		Installation and upgrade of equipment for environmental monitoring and analysis	17	257
Research and Development Costs			0	0
Social Activity Costs		Greenification and beautification measures Production of CSR report	0	82
Costs for Environmental Damage		Imposition, management of a former mining site	0	100
Total			899	6,568

## Change in Environmental Accounting (Ratio to Sales)



## ■ Biodiversity

Tokuyama endorses Nippon Keidanren's (Japan Business Federation) Declaration on Biodiversity and is a member of the Japan Business and Biodiversity Partnership. The Company studies the impact of its business activities on ecosystems, with the aim of conducting its business sustainably while conserving biodiversity.

[| WEB | Business Activities and Biodiversity](https://www.tokuyama.co.jp/eng/csr/pdf/2020csrpdf_4_e.pdf)

[https://www.tokuyama.co.jp/eng/csr/pdf/2020csrpdf\\_4\\_e.pdf](https://www.tokuyama.co.jp/eng/csr/pdf/2020csrpdf_4_e.pdf)



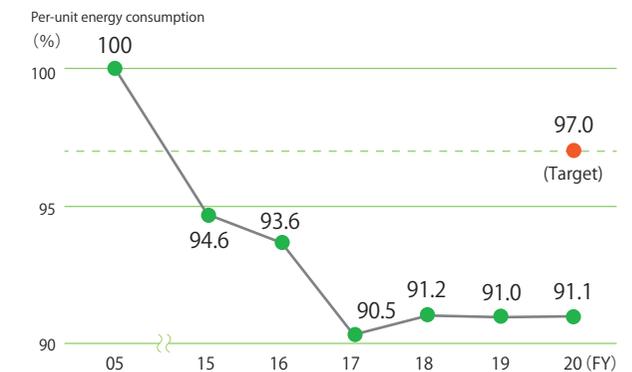
## Helping to Fight Global Warming

Tokuyama is helping to mitigate global warming by conserving energy used in its business activities, developing and manufacturing products that help to reduce GHG emissions and managing Scope 3 emissions.

### ■ Promoting Energy Conservation

In fiscal 2020, per-unit energy consumption remained level with the previous fiscal year despite lower operating rates caused by the COVID-19 pandemic, thanks to the steady implementation of energy conservation measures and use of non-coal energy sources. As a result, the Company has achieved the annual target of reducing its per-unit energy consumption by 3% from fiscal 2005 levels.

### Unit Energy Consumption Index\*

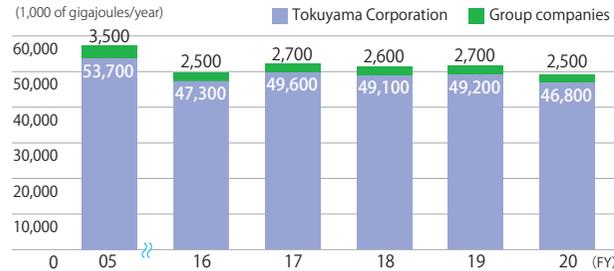


\* The unit energy consumption index is calculated using a method recommended by the Japan Chemical Industry Association (JCIA).

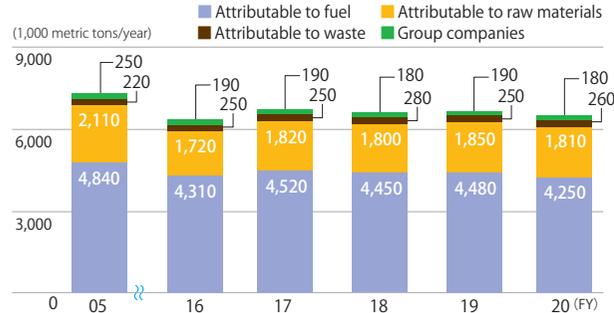
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Environmental Initiatives

### Energy Consumption



### GHG Emissions



\* Amounts have been revised to reflect the change from CO<sub>2</sub> emissions to GHG emissions.

### Calculating and Managing Supply Chain Emissions

Based on the Scope 3 Standard of the GHG Protocol,\* Tokuyama accounts for supply chain emissions for Category 1 through 7 and Category 9 emissions under Scope 3. The emissions from these categories were calculated at 1.72 million metric tons, a decrease of 70,000 metric tons from fiscal 2019. The decrease was mainly due to reducing 30,000 metric tons of Category 1 emissions and 10,000 metric tons each of Category 2 and Category 4 emissions.

\* The Greenhouse Gas Protocol (GHG Protocol) was jointly formulated by the World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD), and the Scope 3 Standard was issued in November 2011 as a standard for calculating GHG emissions throughout supply chains.

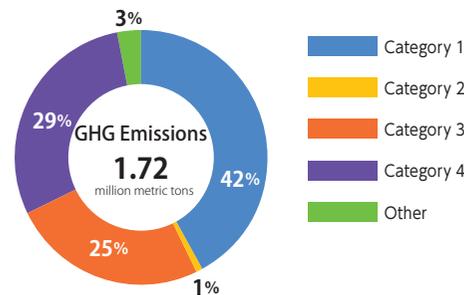
### GHG Emissions by Scope

(10,000 metric tons)

	FY2019	FY2020
Scope 1 (Direct GHG emissions)	655	629
Scope 2 (Energy indirect GHG emissions)	3	4
Scope 3	179	172

Third-party verification of fiscal 2019 Scope 1 and Scope 2 data was conducted in fiscal 2020.

### Scope 3 GHG Emissions by Category



Guidelines: *Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain* (Ver. 2.3), December 2017, Ministry of the Environment and Ministry of Economy, Trade and Industry, Government of Japan

GHG Emissions Unit Database: Emissions Unit Value Database for Calculating Greenhouse Gas Emissions, etc., by Organizations Throughout the Supply Chain (Ver. 3.1), March 2021; LCI Database IDEA v2.3 (for calculating supply chain GHG emissions; for general use), Sustainable Management Promotion Organization, December 2019

Note: Emissions were calculated for the top 10 raw materials by purchase amount.

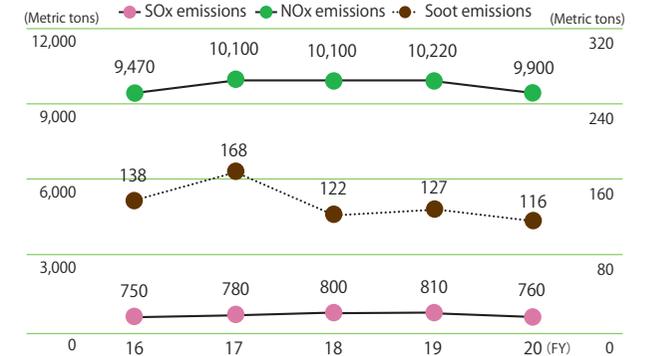
### Reducing Substances with Environmental Impact and Waste

Tokuyama is continually working to reduce its emissions of air and water pollutants and implementing environmental conservation initiatives such as waste recycling.

#### Amounts of Atmospheric Emissions

In order to reduce atmospheric pollution from sulfur oxides (SO<sub>x</sub>) and nitrogen oxides (NO<sub>x</sub>), Tokuyama equips boilers, cement kilns, and other pollutant-generating facilities with flue gas desulfurizers, denitration equipment, low-NO<sub>x</sub> burners, and high-performance dust collectors.

### Emissions of SO<sub>x</sub>, NO<sub>x</sub>, and Soot



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## Environmental Initiatives

### ■ Emissions of Pollutant Release and Transfer Register (PRTR)\* Substances

The substances handled in fiscal 2020 included 30 substances that must be registered under Japan's PRTR law.

\* The PRTR system collects and publishes data on the sources of designated harmful chemical substances and the amounts of these substances discharged in the environment or transported from production sites as part of waste matter.

### ■ Amounts of Hazardous Air Pollutant Emissions

Tokuyama generates chloroethylene and three other substances that are subject to voluntary controls under Japan's Air Pollution Control Act. The Company has formulated a voluntary action plan and is working to reduce emissions of these substances.

### ■ PCB Waste Disposal

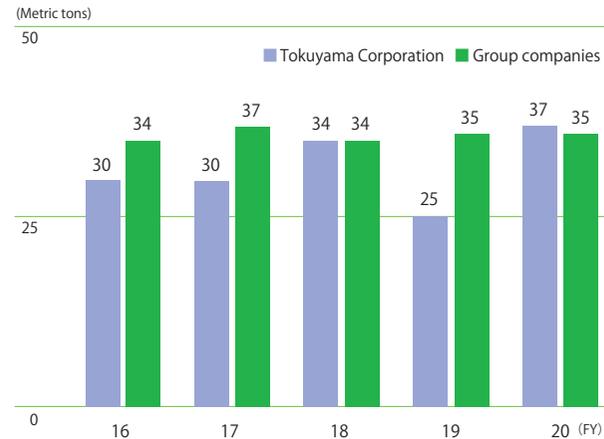
The Company finished disposing of all high-concentration PCB waste from transformers and condensers. High-concentration PCB waste from ballasts will be fully disposed of by the end of fiscal 2021. Tokuyama will systematically dispose of low-concentration PCB waste, while Group companies fully disposed of their low-concentration PCB waste.

### ■ Amounts of Industrial Effluent and Wastewater

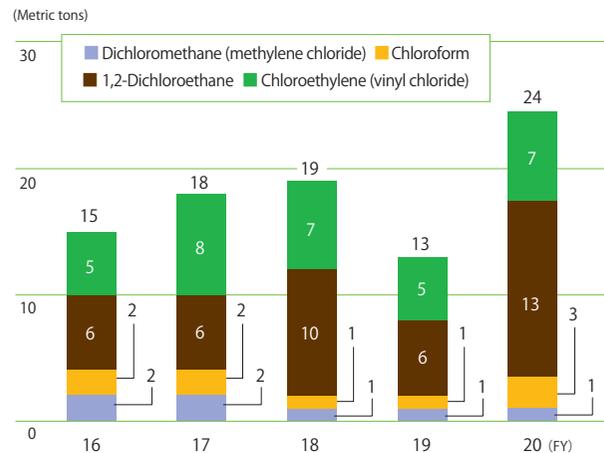
The Tokuyama Factory follows a stringent system for monitoring industrial effluent and purifying wastewater using treatment equipment in order to comply with regulatory standards and limits set by the local government, as well as the Company's own standards, which are even stricter. The factory also employs activated sludge treatment facilities for reducing the discharge of nitrogen and phosphorous and meeting chemical oxygen demand (COD)\* regulations for overall water quality.

\* Chemical oxygen demand is an indicator used to measure water quality, and refers to the amount of oxygen required to oxidize organic compounds in water.

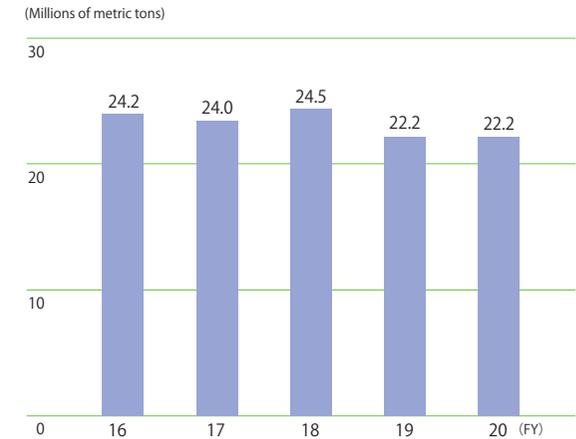
### Emissions of PRTR Substances



### Emissions of Hazardous Air Pollutants



### Discharge of Industrial Effluent



### Water Intake

(1,000 of m<sup>3</sup>)

	FY2016	FY2017	FY2018	FY2019	FY2020
Tap Water Supply	37	40	64	41	41
Groundwater	0	0	0	0	0
Industrial Water	44,110	45,500	44,710	43,530	41,430

### Water Pollutant Emissions

(Metric tons)

	FY2016	FY2017	FY2018	FY2019	FY2020
COD	116	121	129	103	124
Nitrogen	145	173	159	170	177
Phosphorus	2.1	2.1	2.3	1.5	2.1

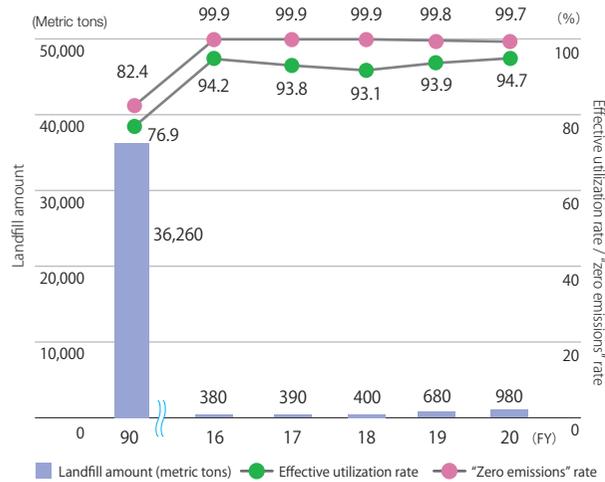
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Environmental Initiatives

## Reducing Waste and Managing Waste Recycling

The effective utilization rate for waste and the “zero emissions” rate remained high in fiscal 2020, due to efforts to reduce the volume of waste and comprehensive recycling efforts.

### Landfilled and Recycled Waste

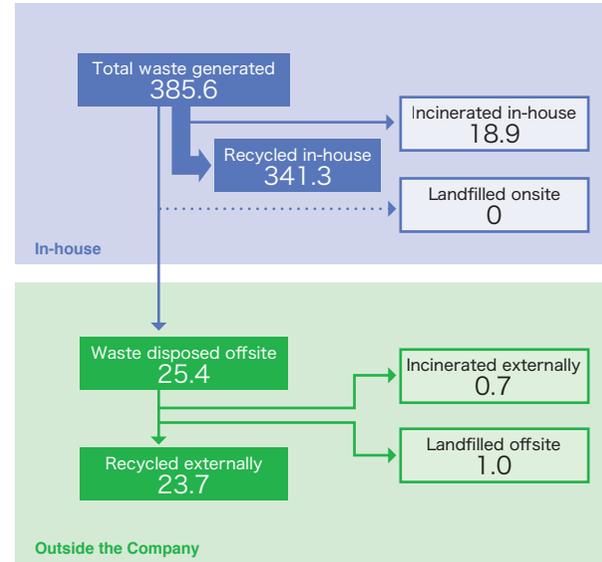


$$\text{Effective utilization rate (\%)} = \frac{\text{Amount of waste recycled (in-house and externally)}}{\text{Total waste generated}} \times 100$$

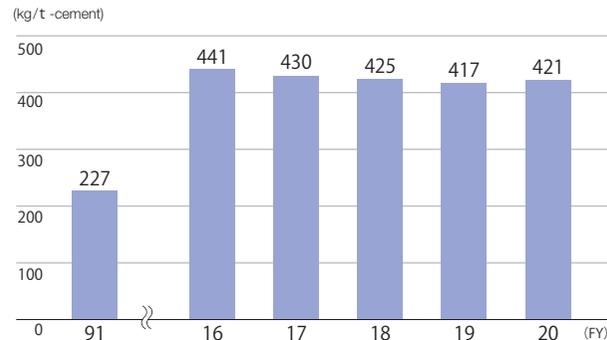
$$\text{“Zero emissions” rate (\%)} = \left[ 1 - \frac{\text{Amount of landfilled waste (onsite and offsite)}}{\text{Total waste generated}} \right] \times 100$$

### Flow of Industrial Waste Treatment

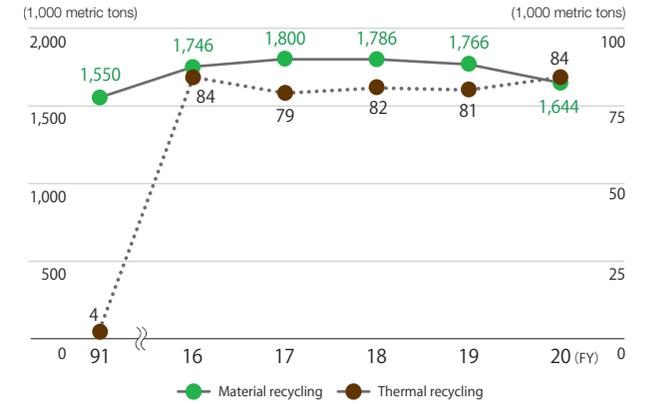
Unit: 1,000 metric tons



### Shifts in Units of Waste Matter/ By-Products Used Per Metric Ton of Cement



### Utilization of Waste Matter at Cement Plants (Material Recycling/Thermal Recycling)



### The Nanyo Plant's Cement Production Recycling System

[| WEB | The Nanyo Plant's Cement Production Recycling System](https://www.tokuyama.co.jp/eng/csr/pdf/2020csrpdf_6_e.pdf)

[https://www.tokuyama.co.jp/eng/csr/pdf/2020csrpdf\\_6\\_e.pdf](https://www.tokuyama.co.jp/eng/csr/pdf/2020csrpdf_6_e.pdf)



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## Environmental Initiatives

## Detailed Data

## Flow of Materials in Business Activities

Input (Unit: 1,000 metric tons)	FY2016	FY2017	FY2018	FY2019	FY2020	Comparison with previous fiscal year (%)
Waste and by-products	1,830	1,880	1,870	1,850	1,730	-6.5%
Fuel	2,050	2,250	2,150	2,150	2,100	-2.3%
Raw materials	6,020	6,760	6,670	6,720	6,370	-5.2%
Industrial water	44,100	45,500	44,700	43,500	41,400	-4.8%
Output (Unit: 1,000 metric tons)	FY2016	FY2017	FY2018	FY2019	FY2020	Comparison with previous fiscal year (%)
Carbon dioxide	6,000	6,300	6,500	6,600	63,00	-4.5%
Waste (incinerated and landfill)	22	21	23	20	21	5.0%
Substances with environmental impact	9.9	10.6	11.4	11.4	11.1	-2.6%
Process effluent	24,200	24,200	24,500	22,200	22,210	0.0%

## Energy Consumed on a Per-Unit Basis at the Tokuyama Factory

Unit: %	Base year (FY2005)	FY2017	FY2018	FY2019	FY2020	Target (FY2020)
Per-unit energy consumption	100.0	90.5	91.2	91.0	91.1	97.0

## Energy Consumption

Unit: 1,000 gj/gajoules	Base year (FY2005)	FY2016	FY2017	FY2018	FY2019	FY2020
Tokuyama Corporation	53,700	47,300	49,600	49,100	49,200	46,800
Group companies	3,500	2,500	2,700	2,600	2,700	2,500

## Emissions of GHG

Unit: 1,000 metric tons	Base year (FY2005)	FY2016	FY2017	FY2018	FY2019	FY2020
Originating from fuel	4,840	4,310	4,520	4,450	4,480	4,250
Originating from raw materials	2,110	1,720	1,820	1,800	1,850	1,810
Originating from waste matter	220	250	250	280	250	260
Group companies	250	190	190	180	190	180

## Emissions of SOx, NOx, and Soot

Unit: Metric tons	FY2016	FY2017	FY2018	FY2019	FY2020	Comparison with previous fiscal year
SOx	750	780	800	810	760	-6.2%
NOx	9,470	10,100	10,100	10,220	9,900	-3.1%
Soot	138	168	122	127	116	-8.7%

## Emissions of PRTR Substances

Unit: Metric tons	FY2016	FY2017	FY2018	FY2019	FY2020	Comparison with previous fiscal year
Tokuyama Corporation	30	30	34	25	37	48%
Group companies	34	37	34	35	35	0.0%

## Emissions of Hazardous Air Pollutants

Unit: Metric tons	FY2016	FY2017	FY2018	FY2019	FY2020	Comparison with previous fiscal year (%)
Dichloromethane (methylene chloride)	2.3	1.8	1.4	1.4	0.9	-35.7%
Chloroform	1.7	1.6	1.2	1.2	2.5	108.3%
1,2-Dichloroethane	6.4	6.3	10.0	6.2	13.0	109.7%
Chloroethylene (vinyl chloride)	5.4	7.6	6.8	5.2	6.9	32.7%

## Discharge of Industrial Effluent

Unit: million metric tons	FY2016	FY2017	FY2018	FY2019	FY2020	Comparison with previous fiscal year (%)
Industrial effluent	24.2	24.0	24.5	22.2	22.2	0.0

## Water Pollutant Emissions

Unit: Metric tons	FY2016	FY2017	FY2018	FY2019	FY2020	Comparison with previous fiscal year (%)
COD	116	121	129	103	124	20.4
Nitrogen	145	173	159	170	177	4.1
Phosphorous	2.1	2.1	2.3	1.5	2.1	40.0

## Landfilled and Recycled Waste

	Base year (FY1990)	FY2016	FY2017	FY2018	FY2019	FY2020
Landfilled waste (metric tons)	36,260	380	390	400	680	980
Effective utilization rate (%)	76.9	94.2	93.8	93.1	93.9	94.7
*Zero emissions* rate (%)	82.4	99.9	99.9	99.9	99.8	99.7

## Breakdown of Waste Treatment Methods

Unit: 1,000 metric tons	FY2016	FY2017	FY2018	FY2019	FY2020	Comparison with previous fiscal year (%)
Waste recycled in-house	332	317	286	288	341	18.4
Waste recycled externally	23.1	26.7	30.2	26.6	23.7	-10.9
Incinerated waste	21.5	22.5	23.0	19.7	19.6	-0.5
Waste sent to landfills	0.4	0.4	0.4	0.7	1.0	42.9
Total waste generated	377	367	339	335	386	15.2

## Amount of Waste Matter and By-Products Used to Produce Cement

Unit: Kg per metric ton of cement	Base year (FY1991)	FY2016	FY2017	FY2018	FY2019	FY2020
Amount used	227	441	430	425	417	421

## Material and Thermal Recycling Amounts in Cement Production

Unit: 1,000 metric tons	Base year (FY1991)	FY2016	FY2017	FY2018	FY2019	FY2020
Material recycling	1,550	1,746	1,800	1,786	1,766	1,644
Thermal recycling	4	84	79	82	81	84

Accident Prevention and Occupational Health and Safety

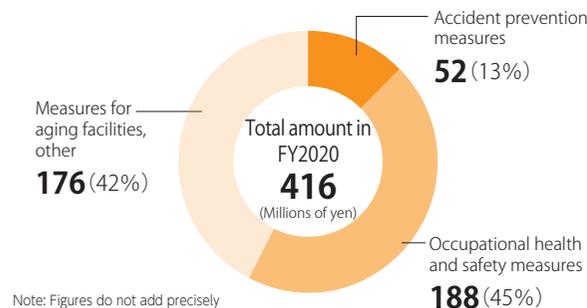
# Accident Prevention and Occupational Health and Safety

Recognizing that safety is the basis for its business activities, Tokuyama practices safety as the first step to maintaining good relations with the communities in which it operates. Based on this approach, the Company carries out stringent accident prevention measures and occupational health and safety initiatives in its efforts to create a positive and safe work environment that is free of accidents.

## Comprehensive Safety and Accident-Prevention Measures

Tokuyama conducts safety and accident-prevention initiatives under its three principles for ensuring safety. Based on the safety management system of the Tokuyama Factory, the Company works to identify and eliminate hazards by assessing risks in work, facilities and processes.

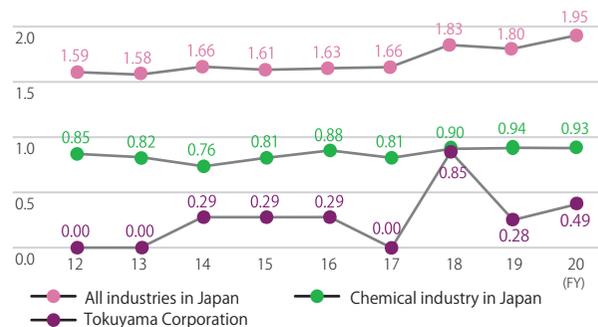
### Expenditures for Accident Prevention and Occupational Health and Safety



Note: Figures do not add precisely to total due to rounding.

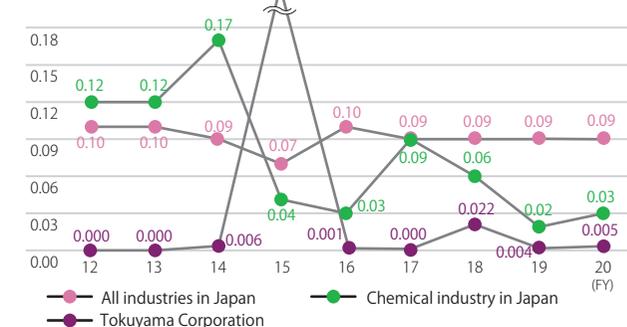
Fiscal 2021 Tokuyama Safety Management Policy	Fiscal 2021 Tokuyama Safety Management Objectives and Key Action Items																
<p>Tokuyama operates a safety management policy and actively implements safety initiatives as a good corporate citizen.</p> <ul style="list-style-type: none"> <li>• Implement safety initiatives involving all employees, under the leadership of upper management.</li> <li>• Comply with laws, regulations, and internal rules.</li> <li>• Foster and enhance a culture of safety, for the safety of people, facilities, and the public.</li> <li>• Create comfortable workplaces to ensure the mental and physical health of the people who work there.</li> </ul>	<p>In order to achieve the policy objectives, each worksite will reflect the key action items listed below to its safety management activities and actively conduct them.</p> <p><b>Policy Objectives</b></p> <ul style="list-style-type: none"> <li>■ No compliance violations</li> <li>■ No accidents or accidents requiring work absence</li> <li>■ Reduce the rate of work absences</li> </ul> <p><b>Key Action Items</b></p> <table border="1"> <tr> <td>Improve process safety management</td> <td>• Improve hazard awareness</td> </tr> <tr> <td></td> <td>• Adopt smart industrial safety systems</td> </tr> <tr> <td>Identify sources of risks and resolve</td> <td>• Improve risk assessment</td> </tr> <tr> <td></td> <td>• Respond to risk assessments for chemical substances</td> </tr> <tr> <td>Make progress in risk management and hazard management</td> <td>• Conduct business activities while minimizing COVID-19 infection</td> </tr> <tr> <td></td> <td>• Prepare and respond to natural disasters</td> </tr> <tr> <td>Promote facilities management</td> <td>• Enhance management of older facilities</td> </tr> <tr> <td>Promote physical and mental health</td> <td></td> </tr> </table>	Improve process safety management	• Improve hazard awareness		• Adopt smart industrial safety systems	Identify sources of risks and resolve	• Improve risk assessment		• Respond to risk assessments for chemical substances	Make progress in risk management and hazard management	• Conduct business activities while minimizing COVID-19 infection		• Prepare and respond to natural disasters	Promote facilities management	• Enhance management of older facilities	Promote physical and mental health	
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### Comparison of Accident Frequency Rates\*1



\*1. As an indicator of the frequency of industrial accidents, the accident frequency rate is calculated as the number of workers forced to miss work due to an industrial accident per one million cumulative working hours.

### Comparison of Accident Severity Rates\*2



\*2. As an indicator of the magnitude of industrial accidents that have occurred, the accident severity rate is calculated as the number of lost work days due to industrial accidents per 1,000 cumulative working hours.

## In Harmony with Society

To continue earning trust as an essential member of society, Tokuyama will work in harmony with society to build a better future.

### Communication with Stakeholders

Tokuyama emphasizes communication with diverse stakeholders, working in harmony with society to build a sustainable future.

### Community Initiatives

As a company with an essential social role, Tokuyama also carries out various activities to maintain good relations with its neighbors. Interaction with local communities is being promoted not just by the Company, but also by employees on their own initiative.

Despite the limitations imposed by the COVID-19 pandemic, Tokuyama conducted the following initiatives in fiscal 2020.

- Conducted workshops at local elementary schools (two sessions)
- Held science class for local elementary school students (one session)
- Donated bookstore gift certificates under the Mikage Bunko book program to 40 elementary and junior high schools
- Received visitors as part of local industry promotion
- Signed agreement with Shunan City government on emergency shelters in case of disaster
- Exhibited at a chemistry fair (event was canceled due to COVID-19)
- Tokuyama Factory Responsible Care Community Dialogue Program (written exchange)

Stakeholders	Main Avenues for Communication
Customers	<ul style="list-style-type: none"> <li>● ISO9001</li> <li>● TV commercials</li> <li>● Factory tours</li> </ul>
Global Environment	<ul style="list-style-type: none"> <li>● Responsible Care</li> <li>● Environmental management</li> <li>● ISO14001</li> <li>● Reduction of CO<sub>2</sub> emissions, energy conservation</li> <li>● Waste disposal</li> <li>● Biodiversity initiatives</li> <li>● Development and provision of environmentally friendly products</li> </ul>
Local Communities and Society	<ul style="list-style-type: none"> <li>● Accident prevention</li> <li>● Responsible Care Community Dialogue program</li> <li>● Community volunteers</li> <li>● Sponsorship of and participation in summer festivals</li> <li>● Grants to promote science and technology</li> <li>● Grants for raising the next generation, and safety and disaster prevention activities</li> </ul>
Shareholders and Investors	<ul style="list-style-type: none"> <li>● Briefing session for individual investors</li> <li>● Briefing session on financial results</li> <li>● Brief statement of accounts, Annual Securities Report</li> <li>● General Meeting of Shareholders</li> </ul>
Business Partners	<ul style="list-style-type: none"> <li>● Purchasing management</li> <li>● CSR purchasing</li> <li>● Joint Occupational Health and Safety Conference</li> </ul>
Employees	<ul style="list-style-type: none"> <li>● Workplace patrols</li> <li>● In-house newsletters</li> <li>● Education and training</li> <li>● Health and Safety Committee</li> </ul>

promote science and technology for the next generation.

	FY2017	FY2018	FY2019	FY2020
The Tokuyama Science Foundation Grant (thousand yen)	29,550	30,045	36,865	36,350

[| WEB | CSR Procurement Guidelines](https://www.tokuyama.co.jp/eng/company/purchase_policy.html)  
https://www.tokuyama.co.jp/eng/company/purchase\_policy.html



[| WEB | Society](https://www.tokuyama.co.jp/eng/csr/society.html)  
https://www.tokuyama.co.jp/eng/csr/society.html



## ● Developing Talent and Promoting Diversity

## ● Health Management Initiatives

## Growing Together with Employees

## Growing Together with Employees

Tokuyama endeavors to help each employee reach their utmost potential and fully leverage these capabilities as an organization, in building a corporate culture that facilitates personal growth alongside corporate growth.

### Developing Talent and Promoting Diversity

While pursuing the four values stated in the Tokuyama Vision, the Company is working hard to develop talent and promote diversity. Tokuyama wants all employees to make the most of their unique gifts and abilities.

#### Tokuyama Employees

(Tokuyama Corporation)

		FY2018	FY2019	FY2020
Number of employees	Men	1,750	1,849	1,982
	Women	174	214	274
	Total	1,924	2,063	2,256
Number of new hires	Men	48	60	61
	Women	7	9	16
	Total	55	69	77
Number of mid-career hires	Men	10	60	57
	Women	1	7	8
	Total	11	67	65
Number of rehired individuals*1	Single year	26	24	35
	Total	172	142	132
Average age	Men	42.6	42.0	41.8
	Women	41.0	41.3	39.8
	Average	42.5	42.0	41.5
Average wage of 30 year-old employees in management track position*2 (yen)		325,495	328,656	327,471

\* 1. Includes workers assigned to group/affiliate companies.

\* 2. Monthly wage (including base salary, pay for job grade, and allowances)

		FY2018	FY2019	FY2020
Average years of service	Men	20.9	19.6	18.7
	Women	17.6	15.3	12.4
	Average	20.6	19.1	17.9
3-year retention rate (%)		82.1	97.6	90.9
Turnover rate*1(%)	Men	0.77	0.66	0.91
	Women	1.84	1.21	1.03
	Average	0.87	0.72	0.92
Employment rate of people with disabilities (%)		2.00	1.87	2.02
Number of non-Japanese employees		7	14	15
Average annual training cost per employee (yen)		32,000	22,000	9,000
Number of labor union members (Labor union membership rate, %)		1,415 (73.5)	1,512 (73.3)	1,734 (76.9)

#### ■ Promoting Diversity

Tokuyama is promoting diversity to ensure that all employees can work with energy and succeed. Tokuyama values diversity of

knowledge and intelligence and seeks to create workplaces that are pleasant and motivating, while aiming to improve productivity, by reforming the workplace culture.

The Company creates action plans based on the Female Participation and Career Advancement Act, and works to achieve goals such as opening up more positions to women. The Company is also working to improve workplace environments in order to comply with the legal requirement for persons with disabilities to make up at least 2.2% of the entire workforce.

For end-of-career workers, the Company offers re-employment contracts up to the age of 65. Currently, 140 employees (approximately 6% of the workforce) are on these contracts.

[WEB | Developing Talent and Promoting Diversity](https://www.tokuyama.co.jp/eng/csr/employee.html)

<https://www.tokuyama.co.jp/eng/csr/employee.html>



#### Tokuyama Targets to Promote Opportunities for Women

Duration: April 1, 2020–March 31, 2022

Target	Target Value	Performance (April 2018)	Performance (April 2019)	Performance (April 2020)	Performance (April 2021)
Percentage of women among university graduates who are hired	No less than 20% (3-year moving average)	23%	20%	19%	21%
Percentage of women among all assistant managers	No less than 6%	6.0%	6.1%	6.1%	6.8%
Percentage of women among all managers*1	No less than 2%	1.5%	1.6%	1.8%	2.0%
Expand women's areas of responsibility	Sales positions:*2 10 employees All production divisions:*3 20 employees	Sales positions: 7 employees All production divisions:14 employees	Sales positions: 9 employees All production divisions:15 employees	Sales positions: 12 employees All production divisions:19 employees	Sales positions: 13 employees All production divisions:28 employees
Average usage rate of annual paid leave (since 2020)	No less than 75%	—	—	72.4%	75.2%

\* 1. Including positions equivalent to managerial positions

\* 2. Sales positions include persons externally engaged in direct client services, such as technical sales, quality assurance, etc.

\* 3. Excluding supervisors

## ■ Promoting Work-Life Balance

At Tokuyama, employees in workplaces eligible for flextime can choose their workday schedules with no core work-period requirement. The Company is also striving to optimize working hours by tracking and presenting aggregate data based on the computer log details of employees, enabling actual working conditions to be managed.

Under a program to help employees balance work and childcare responsibilities, eligible employees can use shortened working hours from 10 weeks before childbirth until the child starts elementary school,\*1 and can also use flextime from the time that pregnancy is determined until the child reaches sixth grade. Paid parental leave is available from birth until the infant reaches age one. Tokuyama provides eligible employees and their managers with paid parental leave information to facilitate the use of leave. Childcare leave is also available until the infant reaches age two,\*2 and 23 employees took the leave in fiscal 2020, including one male employee.

Employees can also take family care leave for up to two years (legal requirement: 93 days in total) for each family member requiring care. With family care time off (unpaid), regardless of the number of care recipients, it is possible to take off two days a week (legal requirement: five days a year).

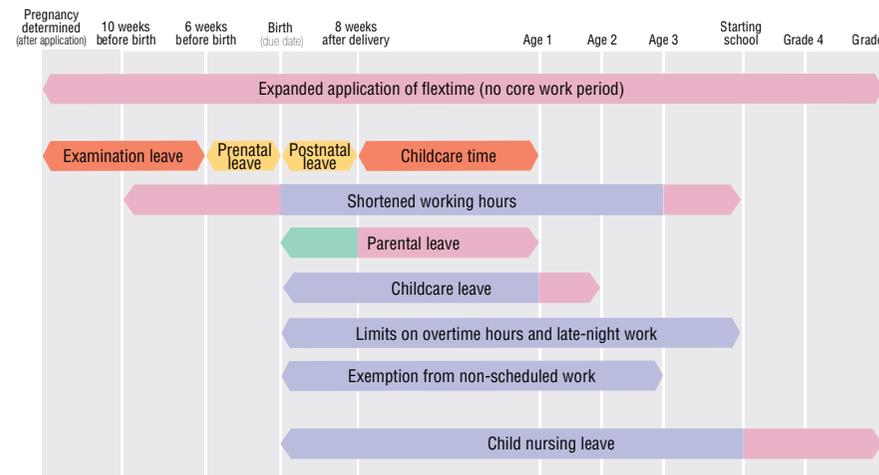
To support those on childcare and family care leave and help them eventually make a smooth transition back to work, internal information is shared with them on the intranet. In addition, an employee reinstatement system has been established to allow employees who resigned for childcare or family care reasons to be rehired.

\*1. Legal requirement is the age of three.

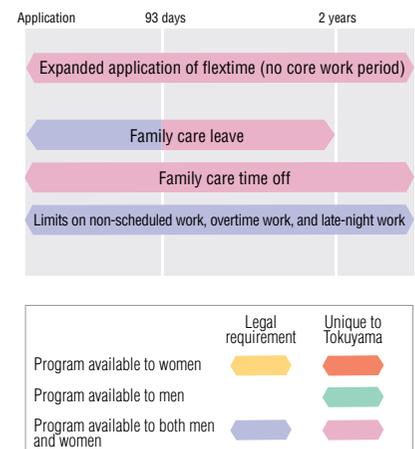
\*2. Legal requirement is the age of one. In certain cases, leave can be taken until the child reaches age two.

## Support Programs for Childbirth, Childcare and Family Care

### Childbirth and Childcare Programs



### Family Care Programs



### Annual Paid Leave Usage and Non-scheduled Working Hours

	FY2017	FY2018	FY2019	FY2020
Annual paid leave, average days used	15.2 days	15.7 days	15.0 days	15.3 days
Annual paid leave, average usage rate	73.2%	75.6%	72.4%	75.2%
Total working hours per year	1,880.4 hours	1,884.4 hours	1,858.7 hours	1,879.0 hours
Non-scheduled working hours, average per month	8.3 hours	9.8 hours	10.3 hours	10.3 hours

### Usage of Childcare and Family Care Leave, Etc.

	FY2017	FY2018	FY2019	FY2020
Number of employees taking childcare leave	11	12	12	23
Return to work rate	100.0%	100.0%	100.0%	100.0%
Number of employees taking parental leave	25	33	65	100
Number of employees taking family care leave	2	2	1	1
Number of employees taking family care time off	0	1	1	1
Number of flextime users	54	50	52	48



## Health Management Initiatives

On October 1, 2020, Tokuyama issued a Health Management Declaration which outlines the corporate commitment to create a workplace environment where employees find it comfortable to work and to endeavor to support and foster the mental and physical health of employees and their families. These are of utmost importance in realizing the Tokuyama's Mission and goals.

Accordingly, Tokuyama has a company-wide health management plan designed to develop employees' mental and physical health and promote measures against lifestyle diseases. The plan has the goals of raising individual health awareness, keeping the rate of findings on health checkups at 44% or less, and reducing the rate of leave taken due to health problems. The Company is taking various actions including those described below.

### ■ Implementing the Smart Life Program

The Smart Life Program is tackling lifestyle diseases by encouraging employees to keep records of their weight, number of steps walked, and blood pressure on the personal health portal site My Health Web. It also offers anti-smoking help such as raising awareness of the harmfulness of smoking, reducing indoor smoking areas, and encouraging "no smoking day" during working hours on the 22nd of every month.

### ■ Offering Health Guidance and Fighting Lifestyle Diseases

Working with the Health Insurance Association, Tokuyama conducts regular and specific health checkups and ensures that proper health guidance is provided by industrial health staff. The Company also holds workplace health education meetings.

### ■ Promoting Mental Health Care

Tokuyama aims for early detection and response to mental health issues by giving occupational stress tests to all employees, interviewing people with high levels of stress, and offering enhanced consultation services.

Category	FY2017	FY2018	FY2019	FY2020
Percentage of employees receiving regular health checkup	100	100	100	100
Percentage of abnormal medical exam results	45.2	44.1	47.9	45.3
Percentage of employees who were retested or received a detailed examination	84.6	85.3	88.1	69.0
Percentage of employees given specific health guidance	78.4	80.2	79.0	84.3
No. of employees given specific health guidance	268	253	252	210
Percentage of employees at ideal weight *1	74.0	73.8	72.5	72.6
Percentage of smokers	24.9	23.5	22.6	20.3
Percentage of employees receiving stress checkup	94.1	95.1	96.1	96.9
Percentage of employees receiving specific health checkup	100	100	100	100
Percentage of employees who regularly exercise	28.8	28.3	29.4	30.5
Sickness/injury absence rate *2 (Absence rate due to mental health issue)	0.47 (0.25)	0.48 (0.27)	0.58 (0.34)	0.64 (0.35)
No. of Family Health Counseling sessions conducted	79	51	118	101
No. of mental health workshops conducted (No. of participants)	11 (463)	12 (239)	19 (508)	8 (633)
Investment per employee in mental and physical wellbeing initiatives (yen)	29,000	30,000	28,000	25,000

\* 1. Employees with BMI between 18.5 and 24.9.

\* 2. Absence rate = No. of extended absence days / (Prescribed working days × No. of employees) × 100  
Number of extended absence days refers to the total number of days an employee has been absent from work due to illness/injury for four or more consecutive days.

### ■ Recognized for Health and Productivity Management

In March 2021, Tokuyama was recognized under the large enterprise category in the 2021 Certified Health and Productivity Management Organization Recognition Program for the second consecutive year.

| WEB | Creating a Health-Conscious Workplace  
[https://www.tokuyama.co.jp/eng/csr/health\\_management.html](https://www.tokuyama.co.jp/eng/csr/health_management.html)



# Corporate Governance

Tokuyama sees internal control as the basis for CSR and works to strengthen corporate governance in order to further increase the confidence of stakeholders and enhance corporate value. In addition, the Company is thoroughly implementing risk management and compliance group-wide, as the core elements of internal control.

[WEB](#) | Corporate Governance

[https://www.tokuyama.co.jp/eng/csr/risk\\_management.html](https://www.tokuyama.co.jp/eng/csr/risk_management.html)



<https://www.tokuyama.co.jp/eng/company/governance/index.html>



# Risk Management

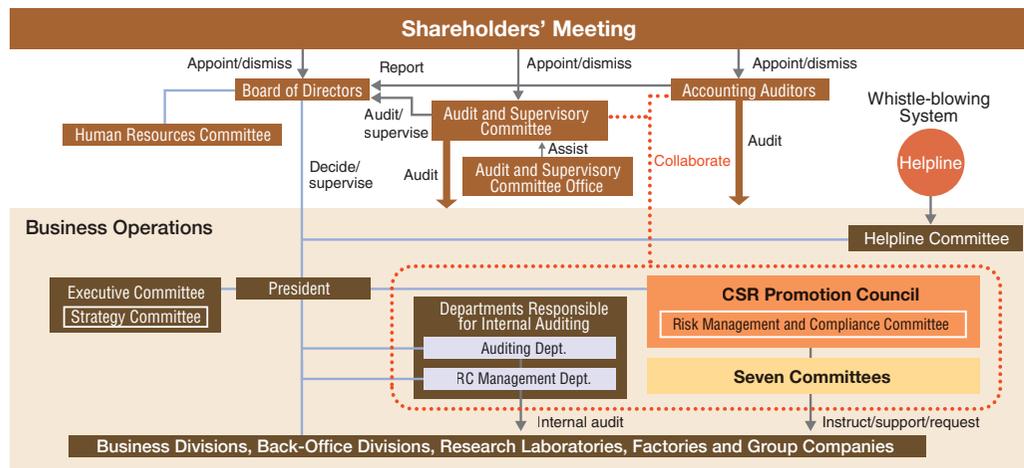
In order to deliver on its social responsibilities and ensure its business is sound and sustainable, Tokuyama carries out various initiatives to strengthen risk management and ensure thorough compliance.

Tokuyama manages risk through the Risk Management and Compliance Committee, which operates under the CSR Promotion Council. It also has expert committees focused on risk management and compliance in seven critical and specialized areas to ensure management through the deliberation of key issues. The Company has designated a unit responsible for regulations concerning management of the risk of loss and conducts activities based on the management regulations.

# Risk Management Framework



# Corporate Governance Structure



# Seven Committees

Financial Reporting Committee	This committee controls the process of preparing financial reports through accounting to ensure the reliability of financial disclosures. Members are appointed from the business management group engaged in accounting as well as from relevant departments.	Eight sessions
Fair Trade and Competition Committee	This committee has established a company-wide system to reduce compliance risks related to fair trade, with a focus on compliance with the Antimonopoly Act. It is working to improve and raise the level of the system while monitoring its operational status.	One session
Security Trade Committee	This committee properly implements security export controls to help maintain international peace and security. It also prevents violations of laws and regulations related to exports and other transactions.	One session
Information Security Committee	This committee decides basic policies on, and raises awareness about, information security in general in order to promote active use and safeguarding of the Group's information assets. It also promotes the protection of personal information.	Two sessions
Environmental Committee	This committee deliberates and decides on environmental policies as well as plans and measures for environmental management.	One session
Safety Committee	This committee deliberates and determines safety policies as well as safety management plans and their performance.	One session
Product Safety and Quality Assurance Committee	This committee deliberates and determines product safety and quality policies as well as product safety and quality management action plans and their performance.	One session

## Business Continuity Management (BCM)

In order to keep important businesses and operations going even in unforeseen circumstances, Tokuyama practices business continuity management in normal times. This includes formulating and revising the BCP, securing budgets and resources for business continuity, and taking proactive steps to improve business continuity capabilities.

In February 2020, Tokuyama established a Crisis Response Headquarters to address the novel coronavirus and has taken measures to ensure the safety of employees worldwide and business continuity.

To prevent the further spread of COVID-19 in Japan, Tokuyama supported telecommuting by providing temporary work-from-home provisions in addition to the conventional telecommuting program, setting a goal of reducing workplace attendance by 70% or more.

Conditions of temporary work-from-home provisions	Region declared under state of emergency	Work from home if it is feasible in their position or workplace
	Region not declared under state of emergency	Recommend work from home if it is feasible in their position or workplace
No. of employees using temporary work-from-home provisions		1,026 (FY2020)

## Compliance

Tokuyama Group understands “compliance” to have a broad meaning, including not only compliance with laws and internal rules but also behaving sensibly in a manner that conforms with corporate ethics and meets social expectations.

To communicate and spread awareness of compliance throughout the Group, Tokuyama provides training on legal obligations for new directors and auditors of Group companies and a variety of compliance training programs for employees. In 2020, these training programs were held on 45 occasions.

The Company also implemented a variety of e-learning programs focused on anti-harassment, information security, credit management, and prohibiting any relationship with anti-social forces.

### ■ Whistle-Blowing System

An internal helpline has been established to enable safe, anonymous reporting and consultation regarding compliance violations involving the Tokuyama Group (including potential violations) without fear of unfavorable treatment. Reporting and consultation can be carried out by post, email, or phone.

The helpline is operated with due consideration for the protection of whistleblowers. Employees can use the helpline without disclosing their name or department to the Company, and a female attorney is also available for consultation.

	FY2018	FY2019	FY2020
Number of reports*	36	29	24

\*Includes reports on workplace harassment and reports from Group companies in Japan.

- Tokuyama Factory
- Kashima Factory
- Sun Arrow Kasei Co., Ltd. /  
Tokuyama Polypropylene Co., Ltd.

# Tokuyama Factory

Location: 1-1, Mikage-cho, Shunan-shi, Yamaguchi, Japan  
 Number of employees: 1,822 (As of March 31, 2021)  
 Total site area: 1.91 million m<sup>2</sup>  
 Main products: Cement, inorganic chemical products, organic chemical products, High-purity polycrystalline silicon, fumed silica, High-purity Aluminum Nitride (AlN), polyvinyl chloride, and other products

Tokuyama Factory General Manager :  
Hiroshi Nomura



## Performance Data

	Unit	FY2016	FY2017	FY2018	FY2019	FY2020
SOx emissions	Metric tons	750	780	800	810	760
NOx emissions	Metric tons	9,500	10,100	10,100	10,220	9,900
Soot emissions	Metric tons	138	168	122	127	116
Industrial water consumption	Million metric tons	44.1	44.5	44.7	43.5	41.4
Effluent discharged	Million metric tons	24	24	24	22	22
COD level	Metric tons	114	119	127	101	122
Total nitrogen discharged	Metric tons	145	173	159	170	177
Total phosphorous discharged	Metric tons	2.1	2.1	2.3	1.5	2.1
PRTR-designated substance emissions	Metric tons	29	29	33	24	35
Waste generated	Thousand metric tons	376	366	339	335	385
Waste sent to landfills	Metric tons	368	382	397	631	922
Energy consumption	Thousand gigajoules	47,100	49,500	49,000	49,000	46,600
CO <sub>2</sub> emissions (originating from fossil fuel)*	Thousand metric tons	4,290	4,500	4,430	4,460	4,230
Complaints	Cases	0	0	3	0	1

\*Caloric values were recalculated for 1990 and forward, in accordance with the revision of Japan's Act on Rationalizing Energy Use.

Substances are listed in descending order of emission levels; substances with no emissions are listed in order of the regulatory number.

Water refers to public waters.

Amount transferred indicates the sum of the quantity transferred to sewage systems and the quantity subject to intermediate treatment

Total figures have been rounded to the first decimal place.

## Emissions and Transfer of Specific PRTR-Designated Substances in Fiscal 2020

Unit: metric tons (mg-TEQ equivalency for dioxins)

Substance name	Regulatory number	Amount of emissions				Amount transferred
		Atmospheric	Water	Soil	Subtotal	
1,2-Dichloroethane	157	13.0	0.0	0.0	13.0	0.7
Chloroethylene (vinyl chloride)	94	6.9	0.0	0.0	6.9	0.0
Chloromethane (methyl chloride)	128	4.1	0.0	0.0	4.1	0.0
Chlorodifluoromethane	104	2.7	0.0	0.0	2.7	0.0
Cresol	86	0.0	2.3	0.0	2.3	0.0
Toluene	300	1.7	0.0	0.0	1.7	0.2
Dichloromethane (methylene chloride)	186	0.9	0.0	0.0	0.9	0.0
Chloroform	127	0.9	0.0	0.0	0.9	0.0
Water-soluble compounds of zinc	1	0.0	0.8	0.0	0.8	0.0
1,2-Epoxypropane (propylene oxide)	68	0.6	0.0	0.0	0.6	1.8
1,2-Dichloropropane	178	0.4	0.0	0.0	0.4	143.2
Hydrazine	333	0.0	0.0	0.0	0.0	0.0
1,2,4-trimethylbenzene	296	0.2	0.0	0.0	0.2	0.0
Xylene	80	0.2	0.0	0.0	0.2	0.0
Carbon tetrachloride	149	0.2	0.0	0.0	0.2	0.0
1-Bromopropane	384	0.2	0.0	0.0	0.2	0.6
2,2-Azobisisobutyronitrile	16	0.0	0.0	0.0	0.0	0.0
Water-soluble copper salt	272	0.0	0.0	0.0	0.0	0.0
Hydrogen fluoride and its water-soluble form	374	0.0	0.0	0.0	0.0	0.0
Benzene	400	0.0	0.0	0.0	0.0	0.0
Boron compounds	405	0.0	0.0	0.0	0.0	0.9
Methylnaphthalene	438	0.0	0.0	0.0	0.0	0.0
Dioxins	243	2.5	3.2	0.0	5.7	0.0
Total (excluding dioxins)		31.9	3.1	0.0	35.0	147.3

- Tokuyama Factory
- **Kashima Factory**
- Sun Arrow Kasei Co., Ltd. / Tokuyama Polypropylene Co., Ltd.

# Kashima Factory

Location: 26 Sunayama, Kamisu-shi, Ibaraki, Japan  
 Number of employees: 124 (As of March 31, 2021)  
 Total site area: 101,000m<sup>2</sup>  
 Main products:

### Produced by Tokuyama Corporation

Bulk pharmaceuticals for diabetes drugs, anti-hypertensive agents, eye drops, allergy medicines, treatments to improve digestive functions, antipsychotics; optical materials (hard coating solutions for plastic lenses, photochromic dye materials)

### Produced by Tokuyama Dental Corporation

Dental materials (composite resins, cement and adhesives, rebasing and relining materials, impression materials, and investment materials)

Kashima Factory General Manager:  
Kazumasa Itonaga



## Performance Data

	Unit	FY2016	FY2017	FY2018	FY2019	FY2020
Industrial water consumption	Thousand metric tons	36	39	25	27	26
Effluent discharged	Thousand metric tons	50	54	39	42	43
COD level	Metric tons	2	2	2	2	2
PRTR-designated substance emissions	Metric tons	2	2	1	1	2
Waste generated	Metric tons	775	761	831	896	1,101
Waste sent to landfills	Metric tons	9	9	8	11	6
Energy consumption*	Thousand gigajoules	37	39	36	36	34
CO <sub>2</sub> emissions (originating from fossil fuel)*	Metric tons	2,670	2,697	2,594	2,659	2,767
Complaints	Cases	0	0	0	0	0

\*Calorific values were recalculated for 1990 and forward, in accordance with the revision of Japan's Act on Rationalizing Energy Use.

## Emissions and Transfer of Specific PRTR-Designated Substances in Fiscal 2020

Unit: metric tons

Substance name	Regulatory number	Amount of emissions				Subtotal	Amount transferred
		Atmospheric	Water	Soil			
Chloroform	127	1.5	0.0	0.0	1.5	74.8	
Dichloromethane	186	0.5	0.0	0.0	0.5	1.8	
Acetonitrile	13	0.2	0.0	0.0	0.2	2.6	
Toluene	300	0.2	0.0	0.0	0.2	24.8	
1,4-dioxane	150	0.0	0.0	0.0	0.0	0.0	
N,N-Dimethylacetamide	213	0.0	0.0	0.0	0.0	1.2	
N,N-Dimethylformamide	232	0.0	0.0	0.0	0.0	3.5	
Water-soluble salts of bromic acid	235	0.0	0.0	0.0	0.0	0.0	
2-Vinylpyridine	338	0.0	0.0	0.0	0.0	0.8	
Boron compounds	405	0.0	0.0	0.0	0.0	0.1	
Methyl methacrylate	420	0.0	0.0	0.0	0.0	0.0	
<b>Total</b>		<b>2.4</b>	<b>0.0</b>	<b>0.0</b>	<b>2.4</b>	<b>109.6</b>	

All figures are numerical sums for Tokuyama Corporation and Tokuyama Dental Corporation.

Substances are listed in descending order of emission levels; substances with no emissions are listed in order of the regulatory number.

Water refers to public waters.

Amount transferred indicates the sum of the quantity transferred to sewage systems and the quantity subject to intermediate treatment.

Total figures have been rounded to the first decimal place.

- Tokuyama Factory
- Kashima Factory
- Sun Arrow Kasei Co., Ltd. / Tokuyama Polypropylene Co., Ltd.

Tokuyama recognizes that its group companies must be fully engaged with the issues addressed by its Responsible Care activities. The Company has concluded a CSR Management Agreement with its manufacturing subsidiaries in and outside of Japan and is providing them with assistance to carry out these activities. The Company collects data from group companies on their environmental impact, safety management, and other indicators, and conducts safety, environmental, and quality audits at several subsidiaries each year. In this way, Tokuyama is closely following the Responsible Care activities at each company and ensuring that they are complete. Tokuyama also shares news on regulatory trends and other relevant information with its group companies, and helps them acquire ISO 9001 and ISO 14001 certification.

### 8 Group Companies with ISO 9001 and/or ISO 14001 Certification

Group Company	ISO9001	ISO14001
Excel Shanon Corporation	●	—
Tohoku Shanon Corporation	●	—*1
A&T Corporation	—*2	●
Tokuyama Dental Corporation	—*2	●

Group Company	ISO9001	ISO14001
Sun Arrow Kasei Co., Ltd.	●	●
ASTOM Corporation	●	●
Shin Dai-ichi Vinyl Corporation	—	●
Tokuyama Polypropylene Co., Ltd.	●	●

●=Acquired certification

●=Certification acquired by a worksite of the group company

\*1=Acquired EcoAction21 certification

\*2=Acquired ISO 13485 certification

## Sun Arrow Kasei Co., Ltd.

Established: February 1st, 1999  
 Shareholders: Tokuyama Corporation 100%  
 Head office: 1-1 Harumi-cho, Shunan-shi, Yamaguchi, Japan  
 Business activities: Manufacture and sale of polypropylene resin and flexible polypropylene resin



Plant Manager : Yasuto Yasuzawa  
 Location: 1-2 Harumi-cho, Shunan-shi, Yamaguchi, Japan  
 Number of employees: 28  
 Total site area: 3,280m<sup>2</sup>

### Performance Data

	Unit	FY2016	FY2017	FY2018	FY2019	FY2020
Power consumption	Thousand kilowatt hours	2,490	2,533	2,631	2,633	2,512
Waste plastic produced	Metric tons	135	128	171	152	142
Waste plastic effectively used	Metric tons	135	128	171	152	142
Waste sent to landfills offsite for disposal	Metric tons	0	0	0	0	0
Steam usage	Metric tons	240	240	240	240	240
Industrial water consumption	Thousand metric tons	65	65	65	65	65

## Tokuyama Polypropylene Co., Ltd.

Established: April 2, 2001  
 Shareholders: Tokuyama Corporation (50%), Prime Polymer Co., Ltd. (50%)  
 Head office: 1-1 Harumi-cho, Shunan-shi, Yamaguchi, Japan  
 Business activities: Manufacture and sale of polypropylene resin and flexible polypropylene resin



Plant Manager : Shuichi Masuda  
 Location: 1-1 Harumi-cho, Shunan-shi, Yamaguchi, Japan  
 Number of employees: 63  
 Total site area: 70,997m<sup>2</sup>

### Performance Data

	Unit	FY2016	FY2017	FY2018	FY2019	FY2020
Industrial water consumption	Thousand metric tons	333	378	343	352	302
Waste generated	Metric tons	77	35	66	40	43
Waste sent to landfills	Metric tons	1.8*	0	1.6*	0	2.0*
Unit energy consumption index (fiscal 2002=100)	%	73	69	70	78	73

\* Year with periodic maintenance