

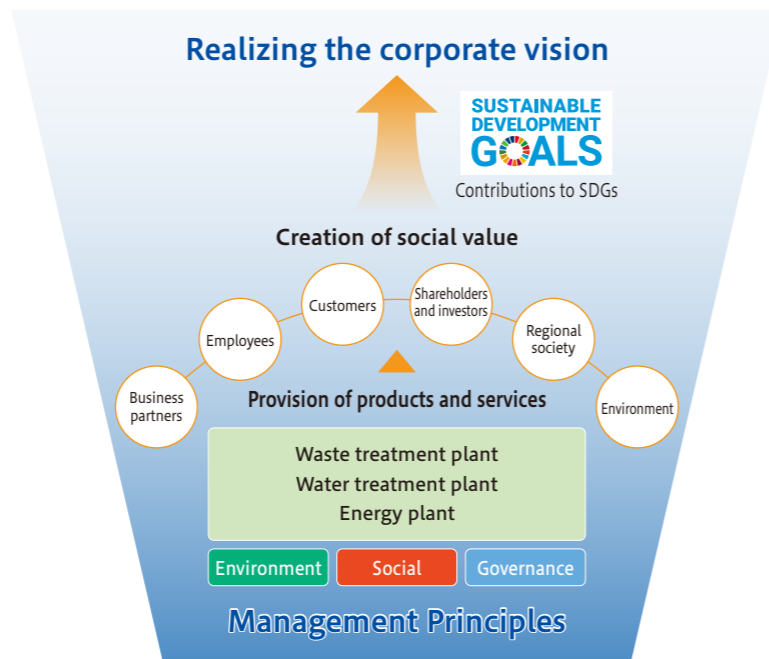
# CSR Activities for the Future

## The Takuma Group's relationship with society

### Basic approach

Takuma provides products and services centered on environmental and energy plants on the basis of its environmental, social, and governance initiatives. We believe that the entire range of business activities pursued by Takuma with regard to social requirements, expectations, and responsibility in this way collectively constitute CSR.

The sustainability of society has been called into question in recent years in a trend that is illustrated by the very phrase Sustainability Development Goals (SDGs). Going forward, Takuma will continue to strive to realize a sustainable society along with the Group's Management Principles and corporate vision by adding new social value to its products and services and by contributing to the resolution of social issues.



## Environmental, social, and governance initiatives

As Takuma looks toward the future and strives to become a sustainable company, we choose key issues involving the environment, society, and governance based on the GRI Standards (a set of international guidelines on corporate sustainability reporting) and ISO 26000 and then work to resolve them. Each department discussed CSR issues in line with those key issues and developed its own action program. At the end of the year, these departments then conducted self-evaluations to assess how well they had implemented their programs.

The table below outlines some of the results of that process.

	ISO 26000 core subjects	Key issue	CSR issue	Department	FY2019 action program	
					Action plan	Self-evaluation of results
<b>ENVIRONMENT</b> Environmental Initiatives Page 33	Environment	Contributions to resolving environmental problems	Initiatives to save energy and reduce CO <sub>2</sub> emissions	Engineering Division	Enable the optimization of power sales volume without regard to individual skills and abilities by building an operational plan optimization system.	We were able to increase power sales volume by using system-generated operational plans and comparing them to power sales volume for operational plans proposed by human workers.
				Engineering Division	Actively contribute to the resolution of environmental problems by pursuing measures to save energy and reduce CO <sub>2</sub> emissions at plants during the planning stage.	We actively proposed improvements incorporating measures to save energy and reduce CO <sub>2</sub> emissions.
<b>SOCIAL</b> Social Initiatives Page 37	Consumer issues	Safety and quality of products and services	Design of facilities that satisfy customers through safe, stable operation	Engineering Division	Carry out safety-focused design and design review processes so as to eliminate accidents at facilities after they have been transferred to customers. Additionally, utilize review lists and checklists, and carry out performance verifications during plant commissioning in order to achieve stable operation of facilities after handover.	There were no instances of additional work related to safety measures being carried out at facilities that have been transferred to customers or of problems related to stable operation as of the time of transfer.
	Labour practices and human rights	Appropriate employment relationships and labor conditions (including safety and health, social dialog, etc.)	Initiatives to establish appropriate working conditions and healthy work-life balance Occupational health and safety initiatives in areas such as testing	General Affairs / Human Resources Division	Reduce overtime work, for example by streamlining operations and leveling employee workloads after having all personnel take an operational inventory and put in place an environment in which employees can actively take time off.	We completed an operational inventory, developed an associated manual, and worked to level employees' workloads. As a result, we were able to achieve the goal.
				Engineering Division	With regard to testing and related operations, in addition to verifying safety measures at progress management meetings that are held on a regular basis, prevent occupational accidents by thoroughly carrying out advance reviews and reporting of safety and hygiene, for example by using work journals and checklists.	In addition to verifying safety measures, for example at meetings, we prevented occupational accidents by developing checklists related to safe work and by thoroughly carrying out advance reviews and reporting.
Community involvement and development	Contribution to society	Contribution to the communities around our worksites	Marketing Division	Carry out community service activities that align with issues in the areas around worksites.	Employees participated in volunteer clean-up activities in June in areas around worksites.	
<b>GOVERNANCE</b> Governance Initiatives Page 47	Organizational governance	Compliance	Cultivation of a robust corporate culture	CSR Division	Share formulations of Takuma's basic approach, for example Management Principles, the Takuma Group Ethics Charter, and the Takuma Group Code of Conduct, and work to ensure that they permeate the organization and take hold.	We highlighted the Management Principles, the Takuma Group Ethics Charter, and the Takuma Group Code of Conduct in the CSR Report and in internal education and worked to ensure that they permeate the organization and take hold.
				Marketing Division	Formulate risk reduction measures by working with related departments at Takuma to identify and visualize risks before and after orders are received.	We conducted negotiations with customers to avoid and mitigate identified risks during the pre-order stage and continued to put in place structures for managing various risks during the post-order stage.
				Planning Division	Conduct a questionnaire targeting directors in order to increase the effectiveness of the Board of Directors. Evaluate, analyze, and report on the results to facilitate useful discussions at Board of Directors meetings.	We conducted a questionnaire targeting directors and held interviews, evaluated and analyzed the results, and reported them to the Board of Directors.
Fair operating practices	Compliance with the Antimonopoly Act	Assurance of understanding of, and compliance with, the Antimonopoly Act	Marketing Division	Offer training on the Antimonopoly Act and continue to implement the Regulations Concerning Management of the Pledge of Antimonopoly Act Compliance.	We offered training on the provisions of the Antimonopoly Act and worked to ensure that employees understand the "Regulations Concerning Management of the Pledge of Antimonopoly Act Compliance" and the "Regulations on Managing Contact with Competitors' Sales Departments" and that they will comply with those and other regulations.	

## Creating social value through corporate activities and businesses

Along with trusting relationships with customers and other stakeholders, our technical capabilities and expertise in the areas of the environment and energy that we have accumulated over many years based on our Management Principles lie at the heart of our business activities and comprise a core strength that allows us to make a broad contribution to society. Takuma creates value for, and contributes to, society through corporate activities and businesses that draw on these strengths. This section introduces some examples.

### • Helping reduce CO<sub>2</sub> emissions

We help reduce CO<sub>2</sub> emissions by burning waste and biomass fuels, recovering the heat that is produced, and using it to generate electricity. (See page 34 for details.)

### • Clean centers as regional facilities

Imabari City Waste Management Center (informally known as "Bari-Clean"), which was delivered by Takuma, is a facility that contributes to its region in many ways, for example by hosting environmental events attended by local residents and by serving as a shelter in times of disaster.



Bari-Clean Beautification Project (Planting flower beds)



Shelter training exercise

### • Revitalizing the region through local generation and consumption of power

The Takuma Group's Takuma Energy strives to increase the added value of power plants while revitalizing the regions in which those plants operate by supplying power generated by waste power plants and biomass power plants delivered by Takuma to local communities.

**Communities served** Kizugawa, Kyoto Prefecture Hokutan region, Hyogo Prefecture  
Fujisawa, Kanagawa Prefecture Kasaoka, Okayama Prefecture

### • Constructing a new building (Training Center) at Takuma's head office

Takuma's new building which is scheduled to be completed in October 2020, will help realize a sustainable society by augmenting ordinary office functionality with a variety of features, including use of Cross-Laminated Timber (CLT) and plant remote monitoring and operational support.

#### Facility features

- Enhanced plant remote monitoring and operational support
- Effective use of Japanese lumber, including CLT and fire-resistant laminated lumber, as building materials
- Disaster prevention functionality for the region, including a high level of fire and seismic resistance
- Employee training and skill development



# The Environment

## Basic Environmental Policy

Our company has established the “Basic Environmental Policy” as follows, aiming to ensure employees contribute to global environmental conservation. This basic policy applies to the activities of all company departments.

### Environmental Philosophy

Takuma is committed to preserving the environment and realizing an affluent society through business activities under the Company Motto: “Value Technology, Value People, Value the Earth.”

### Operational Guidelines

1. All Takuma Group companies will recognize the importance of maintaining a balance between preservation of the environment and business activities.
2. Continuously develop activities to preserve the environment that comply with applicable environmental laws and ordinances, and ensure environmental control and assessment systems conform to international environmental standards.
3. Promote development of better technologies and products for society that preserve the environment.
4. Address resource conservation, energy efficiency, recycling, and minimization of waste generated by all business activities.
5. Enhance employees' awareness and understanding about the importance of preserving the environment through environmental education and internal promotional activities.
6. Provide the community with information on the activities of Takuma to preserve the environment.

## Environmental Management

### • The situation concerning the acquisition of ISO 14001

Our Harima Factory has acquired ISO 14001 certification and has been implementing environmental management activities based on an environmental management system established to comply with international standards.

Our group companies Nippon Thermoener Co., Ltd., Takuma Technos Co., Ltd., Hokkaido Sanitary Maintenance Co., Ltd., and Dan-Takuma Technologies Inc. have also acquired ISO 14001 certification.



Harima Factory

## Takuma's CO<sub>2</sub> Emission Reduction Technologies

We convert waste/biomass into energy and reduce CO<sub>2</sub> emissions!

In 1 year, Takuma products



cut about **5 million tons!**

Equivalent to the annual CO<sub>2</sub> emissions from the population of Osaka

Assuming per-capita CO<sub>2</sub> emissions of 1.92 tons (household emissions for FY2018)

Source: Greenhouse Gas Inventory Office of Japan



### Reducing CO<sub>2</sub> emission with biomass power plants

The sugar industry is an example of an industry that generates power using biomass. Factories that make sugar produce large quantities of residue from sugarcane, the raw material used to make sugar. Sugarcane is crushed into a pulp, and sugar is extracted in a mill. The remaining fiber is called bagasse and can be used as plant fuel. The steam and electricity generated by the plant are used as sources of heat for the milling process and of power for plant operations, while surplus power is sold to a power company. The amount of power generated at sugar factories has grown greatly, with examples of single plant that generate 50,000 kW.

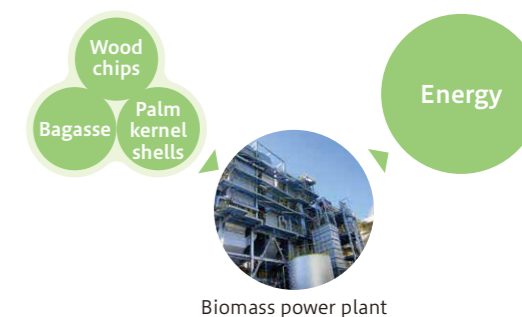
In 1 year, cut approx. **4 million tons!**

CO<sub>2</sub> emission reduction achieved by Takuma's biomass power plants

(as of end of FY2019)

### • How does biomass power generation help reduce CO<sub>2</sub> emissions?

Biomass is any recyclable organic material derived from a living organism, but does not include fossil fuels, such as oil and coal. For example, even though CO<sub>2</sub> is emitted when wood chips are incinerated, this CO<sub>2</sub> is offset as it is absorbed through photosynthesis in the growth process of trees, thus there is no increase in CO<sub>2</sub> in the atmosphere. Biomass power generation helps reduce the amount of electricity generated from fossil resources, helping lower CO<sub>2</sub> emissions.



### CO<sub>2</sub> emission reduction from waste incineration plants

Waste, is an important source of energy. Approx. 500 kW\*\* of power can be generated from one ton of waste. In Europe and the Americas, waste incineration plants are often called Energy from Waste (EfW) plants, and recovering energy from waste has become the norm. Waste means “resource.” Takuma is seeking to be the best in the world with our technologies to convert waste into energy and reduce CO<sub>2</sub> emissions.

\*\* Presumes waste with a calorific value of 8,800 kJ per kg and a plant with electrical efficiency of 20%



In 1 year, cut approx. **1 million tons!**

CO<sub>2</sub> emission reduction achieved by Takuma's municipal solid waste incineration plants

(as of end of FY2019)

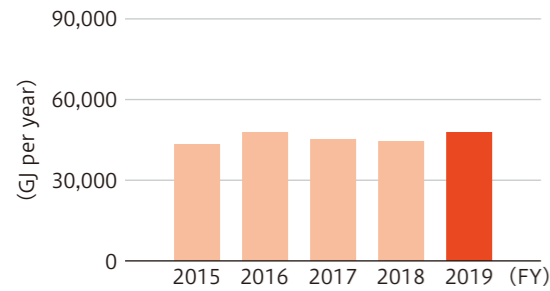
# The Environment

## Environmental Reporting

Takuma reports the environmental impact of its business activities as well as the manner in which it takes environmental considerations into account in accordance with the Environmental Reporting Guidelines (issued by the Ministry of the Environment). This environmental reporting program includes not only environmental information extracted from our overall business activities from an environmental standpoint, but also information about related economic and social aspects of those activities.

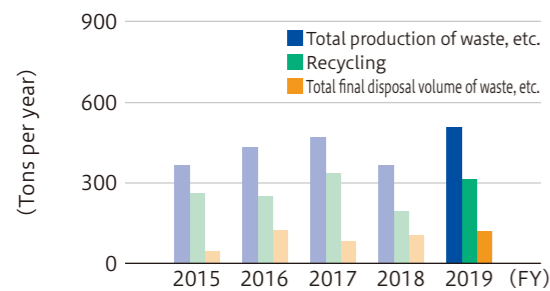
### Environmental data (non-consolidated)

#### ● Total energy usage



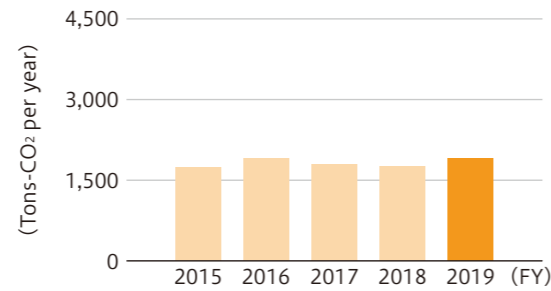
The total energy usage of the fuel and the electricity consumed at Takuma during FY2019 rose slightly compared to FY2018 levels. We will continue to promote energy savings from here on out.

#### ● Total production of waste, etc.



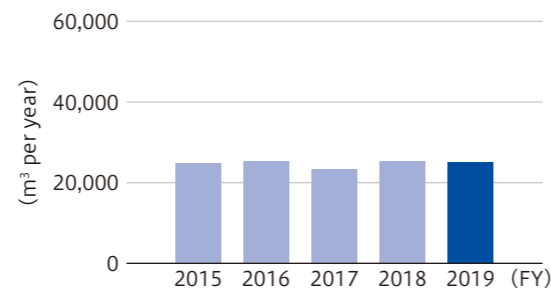
Although total production of waste, etc., grew during FY2019 compared to FY2018, total final disposal volume of waste, etc., grew only slightly thanks to appropriate treatment such as recycling. Going forward, we will work to reduce the amount of waste we generate. Although we work to recycle and reuse waste, waste that cannot be reused is disposed of in accordance with the Industrial Waste Control Manifest System.

#### ● Greenhouse gas emissions



The greenhouse gas emitted by Takuma is limited to carbon dioxide (CO<sub>2</sub>). The amount of CO<sub>2</sub> emissions in FY2019 rose slightly compared to FY2018 levels. We will continue striving to reduce CO<sub>2</sub> emissions.

#### ● Water resource inputs



Water consumption during FY2019 fell slightly compared to FY2018. We will continue to work to lower our water use.

### PRTR target substance emissions (non-consolidated)

Although our business activities do not involve a wide variety of chemical substances on a massive scale, we use a few designated chemical substances. Consequently, we report and register such chemical substances designated under the Pollutant Release and Transfer Register (PRTR) Law, in accordance with relevant laws and ordinances, with the local government.

#### ● Dichloromethane (CAS No. 75-09-2)

FY	2015	2016	2017	2018	2019
Emissions (tons per year)	0.42	0.43	0.45	0.27	0.08

#### ● Toluene (CAS No. 108-88-3)

FY	2015	2016	2017	2018	2019
Emissions (tons per year)	0.26	0.09	0.07	0.06	0.09

#### ● Ethylbenzene (CAS No. 100-41-4)

FY	2015	2016	2017	2018	2019
Emissions (tons per year)	0.34	0.14	0.96	0.98	1.34

#### ● Xylene (CAS No. 1330-20-7)

FY	2015	2016	2017	2018	2019
Emissions (tons per year)	2.22	2.85	1.18	1.12	1.47

These materials are used for antirust painting of boiler structures and so on.

## Environmental accounting

Environmental accounting is the process by which companies and other entities recognize the cost of environmental conservation in their business activities as well as the effects of those activities and measure and communicate them in as quantitative a manner as possible (either in terms of monetary amounts or amounts of materials) with the goal of pursuing environmental conservation initiatives in an efficient and effective manner while maintaining a good relationship with society so as to facilitate sustainable development.

#### ● Environmental conservation cost

Investments and expense related to the prevention, reduction, and/or avoidance of environmental impact, removal of such impact, restoration following the occurrence of a disaster, and other activities are measured in monetary value. ("Environmental Accounting Guidelines")

Item	Investment (thousand JPY)	Costs (thousand JPY)
<b>Business area costs</b>		
Pollution prevention costs	3,764	22,307
Global environmental conservation costs	3,125	19,318
Resource circulation costs	—	14,277
Administration costs	—	36,120
R&D costs	14,301	1,637,750
Social activity costs	—	12,863
<b>Total</b>	<b>21,190</b>	<b>1,742,635</b>

#### ● Environmental conservation effect

Environmental conservation benefit is measured in physical units and is the benefit obtained from the prevention, reduction, and/or avoidance of environmental impact, removal of such impact, restoration following the occurrence of a disaster, and other activities. ("Environmental Accounting Guidelines")

Item	FY2018	FY2019
<b>(1) Environmental conservation benefit related to resources input into business activities</b>		
Total energy input volume (Gj)	95,047	100,973
Input volume of water (m <sup>3</sup> )	48,034	47,340
<b>(2) Environmental conservation benefit related to waste or environmental impact originating from business activities</b>		
Volume of greenhouse gas emissions (tons-CO <sub>2</sub> )	3,977	4,273
Total waste emissions volume (tons)	934	1,047
Final waste disposal volume (tons)	150	155
Wastewater volume (m <sup>3</sup> )	48,034	47,340
BOD emissions (kg)	2,565	2,567
COD emissions (kg)	2,747	2,760
T-N emissions (kg)	693	706
T-P emissions (kg)	121	125

## Eco-efficiency

Even as total environmental impacts must be reduced, it is necessary from a business management standpoint to pursue environmental initiatives that are characterized by a high degree of economic efficiency. We report eco-efficiency using an index calculated in accordance with examples provided by the Ministry of the Environment in its Environmental Performance Indicators Guidelines for Organizations.

At the Takuma Group, we calculate eco-efficiency as the ratio of consolidated net sales to greenhouse gas emissions. In FY2019, this value improved slightly compared to FY2018.

We have disclosed our own environmental accounting system since FY2006 when we introduced it based on the "Environmental Accounting Guidelines 2005" issued by the Ministry of the Environment. As our business activities mainly involve environmental conservation plants and their equipment, Takuma Group employees have a significant awareness of the need for environmental conservation, and we have been implementing approaches toward such issues within the Takuma Group.

#### Scope of data collected

● Period covered: April 1, 2019, to March 31, 2020

● Companies targeted:

#### 12 domestic companies

- Takuma Co., Ltd. (Head Office, other offices including overseas sites and the Harima Factory)
- Nippon Thermoener Co., Ltd.
- Takuma Technos Co., Ltd.
- Hokkaido Sanitary Maintenance Co., Ltd.
- Takuma Technos Hokkaido Co., Ltd.
- Sunplant Co., Ltd.
- Takuma Engineering Co., Ltd.
- Takuma System Control Co., Ltd.
- Dan-Takuma Technologies Inc.
- Kyoritsu Setsubi Co., Ltd.
- Kankyo Sol-Tech Co., Ltd.
- Takuma Plant Service Co., Ltd.

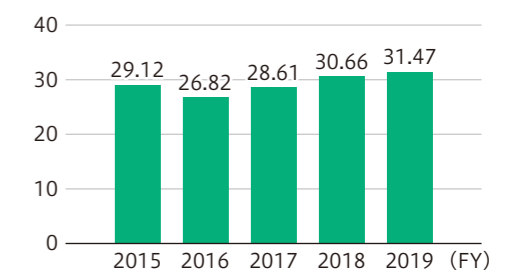
#### 2 overseas companies

- Taiden Environtech Co., Ltd.
- Siam Takuma Co., Ltd.

#### ● The Takuma Group's definition of eco-efficiency

Consolidated net sales (million JPY)  
Greenhouse gas emissions (tons-CO<sub>2</sub>)

#### ● Eco-efficiency



# Respect for Human Rights and the Abolition of Discrimination

Our company sets out its respect for basic human rights and prohibition of discriminatory acts in the Takuma Group Ethics Charter, Takuma Group Code of Conduct, and labor regulations. In addition, we also support respect for human rights, without contributing to human rights violations, elimination of forced labor/child labor, and the abolition of discrimination through participation in the UN Global Compact. We are also working to promote employment of disabled and elderly individuals.

- **Takuma Group Ethics Charter (excerpt)**  
4. We shall respect fundamental human rights and never practice discrimination.
- **Takuma Group Code of Conduct (excerpt)**  
【Respect for basic human rights】  
9. Prohibition of discriminatory actions  
10. Respect for personality, individuality, and privacy of employees  
11. Safe work environment

## Working with Our Employees

Making the most of each and every employees' skills and creating workplaces where employees can feel engaged and motivated while working over the long term are top priorities for Takuma.

We reorganized our Human Resources Department in April 2020 to better address manpower shortages, develop employees' skills, and realize workstyle reform, work-life balance, and diversity. As part of those changes, new Human Resources Development and Office Support sections were created to develop workplace environments that value people so that employees can feel more motivated and better take advantage of their skills.

### Employee data \*As of March 31, 2020

Number of employees	875 (Including 805 men and 70 women)
Average age	43.2
Average years of service	15.5
Attrition rate	1.6% (past 3 years)

### Employee retention programs

#### 1. Workstyle reform initiatives

##### 1 Initiatives related to improving productivity and streamlining operations

- Reassessing workflows
- Streamlining and improving operations
- Utilizing chat tools
- Utilizing videoconferencing systems
- Automating work using RPA\* \*RPA: Robotic process automation



##### 2 Putting in place an environment that encourages employees to take annual paid leave

Reflecting our respect for employees' individuality, we treat simultaneous leave as special leave in line with our employment rules, which means it does not count against employees' annual paid leave. In addition, we've put in place an environment that encourages mutual understanding and cooperation among employees while making it easy for all employees to take annual paid leave by having team members announce in advance their plans to take five days of allotted annual paid leave each year.

【Average number of days of annual paid leave, number of annual public holidays and leave days, and number of special leave days (unit: days)】

	FY2015	FY2016	FY2017	FY2018	FY2019
Average days of annual paid leave taken	7.9	6.5	6.7	8.7	8.9
Annual public holidays and leave days (except annual paid leave)	129	129	128	129	132
Of which, special simultaneous leave days	11	11	12	13	9

#### 2. Initiatives related to work-life balance

We have introduced the following programs to facilitate healthy work-life balance and to help employees make the most of their skills and abilities while balancing their work with child-raising and nursing-care responsibilities.

- Half-day annual paid leave program
- Childcare leave
- Nursing-care leave
- Flex time program
- Telework program
- Leave program for husbands whose wives are giving birth

### Impressions from an employee who has taken advantage of Takuma's telework program

We have children ages 2, 6, and 10, and we both work. Until now, when one of our kids gets sick, we've used the childcare program for kids recovering from sickness, and when that's not available, we've adjusted our schedules or used annual paid leave or half-day paid leave. The availability of a work-from-home option has been extremely helpful for our family. (Main career track male employee in his 40s)

### 3. Initiatives that promote diversity

#### 1 Initiatives to increase female participation

In addition to putting in place a workplace environment that provides flexible workstyles and continuous employment, we have continued to pursue initiatives that encourage employees to understand Takuma. Our goal is to increase the number of female employees in management positions and the number of female employees on the main career track (including individuals who have been tentatively offered positions) as of March 31, 2021, to 20, which would be double the corresponding number as of March 31, 2016.

【Number of newly hired employees over the last 5 years by gender (Figures in parentheses: number of newly hired graduates for main career track positions)】

	FY2015	FY2016	FY2017	FY2018	FY2019
Men	26(19)	27(18)	28(19)	34(17)	38(16)
Women	2(1)	2(1)	2(2)	3(2)	3(2)
Total	28(20)	29(19)	30(21)	37(19)	41(18)



#### 2 Initiatives to increased participation by disabled individuals

We added the Office Support Section to the Human Resources Department to provide work assistance and management for disabled individuals and to aid in the "outsourcing" of various internal tasks to these workers as a way to boost employment of disabled individuals. Individuals with disabilities, including serious or mental disabilities, do cleaning and other light work to assist Takuma employees.

#### 4. Employee health initiatives

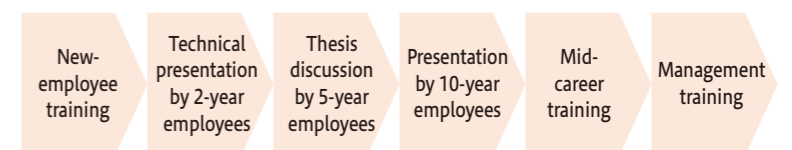
- Stress checks
- Lifestyle disease checkups (added to regular checkups)
- Cancer screening and stomach tests (for interested employees)
- Health consultations by industrial physicians (once a month)
- Counseling by clinical psychologists (twice a month)
- Interviews and follow-up conversations with employees who are working unusually long hours

### Initiatives to help develop employee skills and boost motivation

#### 1. Educational and training programs

##### <Grade-specific educational programs>

We're working to enhance employee ability, technological skills, and management capability by offering grade-specific educational programs, from new hires to management candidates.



##### <Technical training sessions>

We hold several technical training sessions a year in order to increase employees' technical knowledge, including lectures by university professors and outside researchers and presentations by Takuma engineering employees about their work responsibilities and research themes.

##### <Support for skill development>

We reimburse employees for the cost of acquiring various licenses and offer incentives for earning professional certifications.

##### <Help for building language skills>

To improve employees' language skills, we host the TOEIC test twice a year and offer incentives to employees who earn a high score.



## Working with Our Employees

### 2. Career development programs

- Supervisors schedule two interviews with each subordinate every year to review progress toward operational goals and listen to their wishes and advice directly.
- A self-reporting program session is held every three years to facilitate long-term career development.
- A work group transfer program facilitates movement from clerical and labor positions to the main career track.

### 3. In-house commendation system

We hold an award ceremony commemorating the founding of the company every year on June 10, the date on which Takuma was founded, to recognize employees who have given exceptional service.

- Takuma Prize: Employees who have helped improve operations or who have exceptional achievements in community service
- Takuma Technical Review Outstanding Paper Award
- Invention and idea commendations: Employees who have earned patents or other intellectual property rights
- Qualifications acquisition commendations, patent commendations
- Safety and Health Award in Construction Division: Foremen at sites without accidents or damage
- Length-of-Service Award (Every 5 years of service after 20 years)



### Social welfare programs

We have introduced a number of social welfare programs, including a cafeteria plan and employee shareholder association, designed to meet a diverse array of employee needs.

### Employee feedback (from Takuma's website)



#### Question: Why did you decide to join Takuma?

- I felt it would be appealing to work for a business that plays a supporting role in many people's lives behind the scenes.
- When I participated in an internship at Takuma as a student, I saw how older colleagues were engaged in their jobs, and I realized I'd like to work here, too.
- I liked the way Takuma gives young people lots of responsibility.
- I'm able to put what I learned as a student to use.

#### Question: What do you find motivating about your job?

- The scale of the facilities we build, for example power plants I've been involved with that provide enough power for tens of thousands of people's homes
- An environment that lets you embrace whatever challenges you're willing to set for yourself
- Expressions of joy from customers when a plant I helped build starts operating... they're enough to make me forget all the hard work that went into the facility!
- The ability to gain practical experience from a young age

#### Question: What are your future goals?

- To become an engineer who earns the trust of others, both inside and outside the company
- To leave concrete expressions of my own experience and skill that can be passed down to younger colleagues
- To strive daily to become a manufacturing professional
- To consistently present optimal proposals to customers despite frequent changes in applicable laws and regulations

## Efforts for Occupational Safety and Health

### Occupational safety and health initiatives

Since FY2006, we have introduced TK-COHSMS based on an occupational safety and health management system for the construction industry and worked actively and independently to improve our safety and health activities. We believe that among these efforts, the manner in which (1) safety inspections, (2) mandatory safety and health education (education for construction site representatives), and (3) creation of pre-work safety procedure checklists known as SSAs have been steadily adopted by all departments and used to consistently improve the level of knowledge about Takuma's safety and health is particularly noteworthy.

We have adopted the following safety and health objectives for FY2020: for construction sites, eliminating accidents that result in

work stoppages (of four or more days); for branches, pursuing a thorough program of safety and health education, ensuring adherence to safety inspection guidelines, and implementing the branch safety patrol plan; and for the Safety and Health Cooperative Association, strengthening collaboration with partner companies. We will work to revitalize safety and health activities throughout the company by carrying out that role.

Rather than contenting ourselves with the status quo, we will pursue new safety and health initiatives to foster a strong awareness of the concept that underlies our safety and health policy - "understanding the need for respecting people and giving top priority to safety and health" - on the part of everyone who's involved in our operations.

### Safety and health activities and their results

#### 1. Safety inspection system

We maintain a system where any construction or installation work starts only after the safety and health manager or other responsible official in each department conducts a successful safety inspection based on safety and health plans for the construction or installation work as prepared by our primary partner companies.

We strive to ensure a safe work environment at all construction sites by eliminating potential hazards and risk factors identified by those inspections before work begins.

#### • FY2019

Number of safety inspections done: 212



A safety inspection meeting

#### 2. Safety patrols and safety lectures

Based on an annual plan, safety patrols are carried out at worksites by the Safety and Health Committee (comprised of committee members and advisors), Safety Control Department, and construction division along with safety lectures in a precisely targeted and efficient manner.

Safety patrols focus on identifying and eliminating risks as early as possible, while safety lectures are conceived to prevent occupational accidents and raise employees' safety awareness by offering an opportunity to hand out and explain materials such as examples of accidents. Both programs help ensure safety at worksites in the field.

#### • Number of safety patrols implemented in FY2019

By Safety and Health Committee (members, advisors)	: 95
By Safety Control Department	: 236
By construction division	: 362



Safety patrols



Safety lectures

#### 3. Safety and health education (education for construction site representatives)

We continuously provide specialized safety and health education at branches and worksites to increase the levels of safety awareness and knowledge of our employees and partner companies.

As indicated at right, more than 19,000 trainees have passed the completion exam. We are involved in a variety of initiatives to put in place mechanisms for preventing accidents, including by assigning workers with extensive knowledge in areas such as safety-related laws and ordinances to individual construction sites.

#### • April 2004 to March 2020

Cumulative number of trainees	: 35,682
Number of trainees passing the completion exam	: 19,099



Head Office venue



Tokyo Branch venue

## Efforts for Occupational Safety and Health

### Safety and Health Promotion Meeting

Takuma holds a Safety and Health Promotion Meeting to bring workers with safety- and health-related responsibilities together to improve and share their safety and health awareness with the goal of ensuring worker safety and health and promoting the development of a pleasant work environment. During FY2019, we presented awards to businesses that helped achieve a zero-accident record at our worksites and hosted a guest lecture entitled,



Presentation of a zero-accident record award

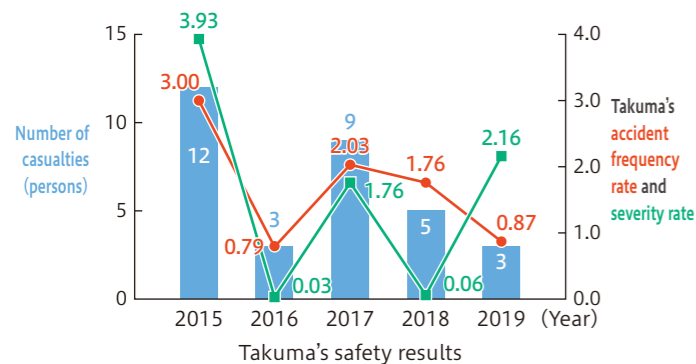
“Creating True Safety in the Context of Japanese Honne and Tatamae.” In addition, safety and health partner companies gave presentations on their safety and health policies and goals, and all participants closed the meeting by chanting the FY2019 slogan and pledging to continue to work toward thorough safety and health management by utilizing TK-COHSMS.



Pointing and chanting of the slogan by all participants

### Takuma's safety results in recent years (Number of casualties, accident frequency rate, and accident severity rate)

Although the total number of worked hours in 2019 rose about 22% from the previous year, the total number of occupational accidents and accidents leading to missed workdays fell compared to 2018. However, the accident severity rate significantly exceeded the national average,



posing a serious problem that needs to be addressed. We will work to eliminate occupational accidents through a unified and redoubled effort by all involved to halt this trend while strengthening risk management and enhancing our safety and health management structures.

Year	Accident frequency rate	Accident severity rate
2015	0.92	0.21
2016	0.64	0.11
2017	0.81	0.18
2018	1.09	0.30
2019	1.69	0.29

Reference: Nationwide average accident frequency and severity rates for the construction industry (general construction)

### TOPICS President Sakaguchi of SEIKO Co., Ltd., honored at Construction Station Ginosya Kensyo (Engineer Awards)

In October 2019, President Michiko Sakaguchi of SEIKO Co., Ltd., a partner company in the Sludge Incinerator Redevelopment Project at the Takuma-built Tamagawa Joryu Water Reclamation Center, received the Engineering Excellence Award at the 27th CCI Tokyo Construction Station Ginosya Kensyo (Engineer Awards).

The accolade is conferred by the Tokyo Metropolitan Government in recognition of exceptional engineers who utilize advanced skills and specialized knowledge, exhibit leadership at construction stations, and work to improve safety and quality through better communication.

The honor is especially meaningful for construction sites where a variety of partner companies lend assistance on a daily basis. Going forward, Takuma will continue to build plants in close partnership with all stakeholders, including partner companies, in order to improve safety and quality.



Ms. Michiko Sakaguchi (center)

### Message from a partner company



Mr. Tetsuyuki Okabayashi  
Safety Quality Training  
Department General Manager  
Executive Officer  
Asahi Synchrotech Co., Ltd.

We do a lot of work for Takuma as a construction management company that focuses primarily on pipe equipment in plants. Last fiscal year, we were proud to work closely with Takuma on the building of a number of plants, including the CEPO Handa Biomass Power Plant, the Ako Plant of Nihonkaisui, the Aoki Environmental Enterprise Energy from Waste Plant, and the Hikarigaoka Incineration Plant.

With regard to safety management, we've put in place construction structures based on what we learned at site manager training offered by Takuma, and we work to identify potential hazards when compiling SSAs (safe work procedures that are created by subcontractors before starting each day's work). We develop construction methods that are designed to reduce potential hazards through risk assessment based on a careful consideration of how to transport materials at the site and how to set up temporary staging, before work begins.

Then we strive to perform work safely at the site using those predetermined construction methods while exercising care with regard to the progress of other companies' work and mixed-company work, all under the umbrella of Takuma's safety management.

Additionally, our sales managers and Safety Management Group conduct safety patrols at least once a month. Those patrols assess conditions at the site, check for problems in terms of safety management and construction management, and meet with the employees responsible for supervising work to take corrective action to address any issues that were identified.

We look forward in the future to improving our employees' construction management skills with the goal of eliminating accidents by offering supervisor training and to working alongside Takuma to implement safety management and construction management at worksites.

### From the Takuma department responsible for the project



Jyunichi Hashimoto  
General Manager  
Construction Dept. (Tokyo)  
Construction Center  
Takuma Co., Ltd.

We turn to Asahi Synchrotech Co., Ltd., to carry out pipe equipment installation work at numerous construction projects, including Takuma waste incineration facilities and biomass power plants. In the area of safety and health activities, Asahi Synchrotech is an associate safety and health partner company, and we're deeply grateful for the enormous cooperation and hard work that they bring to our projects.

About seven years ago, I worked as the site manager at the Joso Environmental Center Third Waste Treatment Facility Construction Project. The site, which uses three pyrolytic gasification melting furnaces to treat waste, was characterized by not only a large number of pieces of equipment, but also an extensive amount of work associated with pipe equipment installation. It was an extremely long project, but we were able to complete it without a single accident. Out of the many construction projects we've worked with Asahi Synchrotech on, there have been only two non-lost-time incidents, and overall the company has an extremely successful track record.

Safety management is generally considered to consist of risk management, and the risk of an accident occurring rises as projects involve more time and people, increasing the factors and opportunities that could trigger an accident. In theory, accidents can be prevented by identifying these risk factors and eliminating them in advance through safety and health management at the site. Although it's easy to formulate this approach on paper, in fact its successful implementation requires having everyone involved with the construction, including all contractors, at a site where conditions change daily carefully examine the site and develop effective measures accordingly as they painstakingly and methodically utilize their knowledge to eliminate risk one day at a time.

We look forward to having Asahi Synchrotech continue its basic stance toward safety and health management in the future as the company cooperates with Takuma on safety management so that we can achieve our goal of eliminating accidents in all projects.

# Initiatives for Product Quality

The amount of attention paid by consumers (stakeholders) to quality in a wide range of fields, including manufacturing and services, has been growing in recent years. This section introduces Takuma initiatives that are designed to provide safe, confidence-inspiring products and plants.

Takuma's Head Office, branch companies, and other business offices have earned certification under the ISO 9001 international standard on quality management systems, and the Harima Factory has earned certification under the ISO 9001 and ISO 14001 international standards on quality management systems and environmental management systems, respectively. Operations comply with the latest

version of both standards (the 2015 versions).

In addition to working to improve the quality of our products in accordance with our Quality Policy and quality management system, we are pursuing activities that emphasize customer satisfaction.

In order to produce products and plants that customers truly appreciate, it is necessary not only to boost the quality of the product itself, but also to improve the operations and quality as well as each individual's ability to create a good plant in each process from planning up to delivery (sales, planning, design, procurement, manufacture, construction, and management).

## Quality Policy

Takuma Co., Ltd., has adopted the following Quality Policy in order to provide satisfying products that meet customer expectations and earn a high level of trust while continuously improving the effectiveness of its quality management system.

### Quality Policy

**“Manufacturing products that result in customer satisfaction”**

Based on that Quality Policy and the three priority items described below, Takuma is working to improve the quality of its products and services through a variety of initiatives that address every process, including in sales, planning, design, procurement, manufacture, construction, and management.

## Priority items

- Creating value to earn customer satisfaction (ascertaining customer needs and making improvements based on past experience)
- Carrying out risk management (addressing changes in the business environment and human error)
- Implementing human resources management (implementing human resources development and ensuring skills are passed down to younger employees)

## Specific initiatives for improving quality

### • Organizational initiatives for improving quality

As an organizational initiative that's designed to boost product quality, we have each department establish quality targets at the beginning of the year and then provide regular reports (twice a year) on progress towards achieving those goals at QM Committee meetings (quality management reviews).

As part of the transition to ISO 9001:2015, we're working to further improve quality by identifying an effort to clarify and address risks and opportunities as a key quality goal and evaluating the effectiveness of that effort.

### • Internal quality audits

In addition to increasing the precision of operations by standardizing operating procedures in each department's processes, we are improving operations as necessary by carrying out an internal quality audit of each department to verify the status of quality management system operation.

Internal quality audits are carried out regularly by employees who have been certified as internal auditors after completing internal quality auditor training seminars offered by instructors from an outside organization. At the training seminars, employees master content ranging from basic knowledge about ISO 9001 to specific methods for conducting internal audits.

### • Improving the employees' individual operational skills

To improve employees' individual operational skills, we have created an operational skill achievement checklist that identifies the skills required by personnel in each process for use in regular assessments, and we are reviewing the targets we have chosen.

### • Quality control and process reviews

Quality control is an important measure that allows us to provide exceptional products and plants.

We take action (improvement measures) as outlined by a manual (standard) in the event a non-conforming product is discovered, but even if an issue doesn't lead to a non-conforming product, we conduct a review as a preventive measure if there are processes that could have caused the issue.

Furthermore, we actively offer training to new business partners and retraining (instruction) for existing business partners to prevent defects in the products we purchase.

## Customer satisfaction survey

Takuma has conducted an annual customer satisfaction survey since FY2007 to solicit the views of customers concerning products we have delivered as well as the Takuma employees they worked with. We use that information to improve quality and service.

First, we administer questionnaires targeting customers who had construction work done by asking them to assess the overall experience after the work is completed, including the nature of the work performed, suitability of delivered equipment, and the level of service provided by Takuma staff.

Next, the QM Committee calculates a score based on the survey results as well as a report from the responsible department. The committee then analyzes the resulting data.

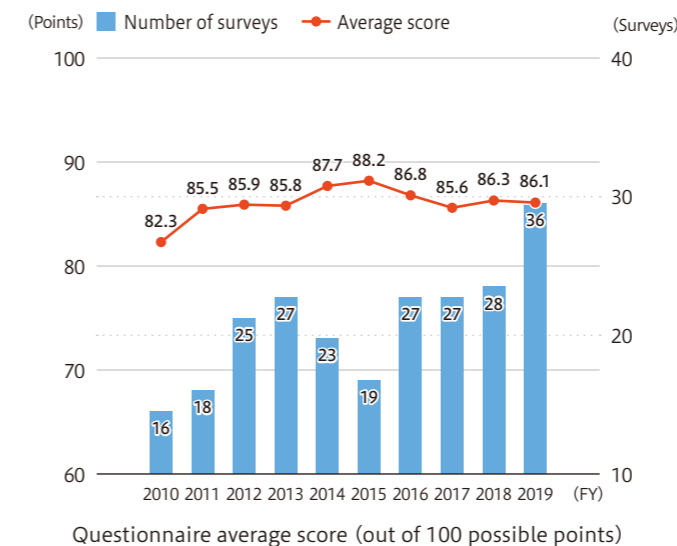
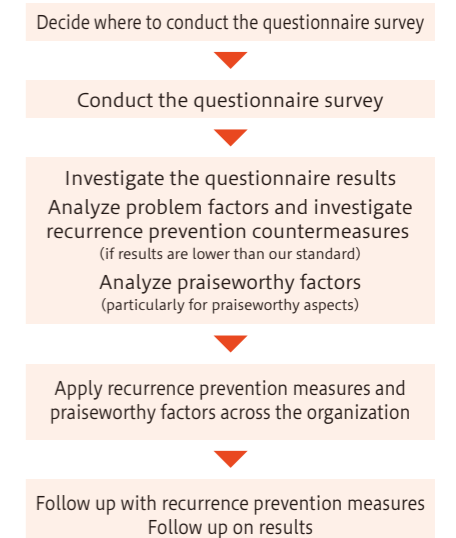
If there are any issues, for example if the score fails to meet our standards or if there are individual areas where the customer was dissatisfied, the QM Committee analyzes the cause of the problems based on interviews with the department in question and considers preventive measures. We also evaluate aspects of our products and services that receive especially high praise from customers and work to further enhance customer satisfaction by combining problem areas and praiseworthy areas and applying them horizontally across involved departments at the company.

For customers targeted for problem analysis and consideration of preventive measures based on the survey results, we also conduct a follow-up survey to discern whether those measures were reliably implemented and whether their level of satisfaction has indeed improved.

With scores averaging higher than 80 points for each of the last 10 years, the questionnaire demonstrates the effectiveness of our initiatives.

In this way, we work to improve product and plant quality so that all customers are satisfied.

### Customer satisfaction survey process



Message



### Mitsuo Ishiguro

Section 2, Quality Control Dept.  
Construction Center  
Takuma Co., Ltd.

Takuma's quality control team works to supply customers with safe, secure plants by means of reliable product testing and a rugged commissioning process.

Commissioning marks the first time a newly built plant will operate, so we strive to check safety and operate the facility with care as we adjust combustion and operation and verify that the plant provides the performance and operational characteristics required by the customer.

To ensure that the customer will be able to enjoy the benefits of plant operation with peace of mind over the long term once it has been transferred, we solicit feedback from the customer, compile operating documentation that uses photographs and explanatory figures to ensure content is easily understood, provide an explanation to the customer, and then operate, or provide guidance on, the plant.

We carry out commissioning work at sites day in and day out with the goal of supplying customers with plants that satisfy them.

## Permits and registrations

### • Head Office, branch offices and other business offices

Construction license (Minister of Land, Infrastructure, Transport and Tourism license, Special 27-6129, Special 29-6129)  
Construction consultant registration (Minister of Land, Infrastructure, Transport and Tourism registration, Construction 01-10202)  
First-class architect office registration (01A02903)  
ISO 9001 quality management system certification

### • Harima Factory

ISO 9001 quality management system certification  
ISO 14001 environmental management systems certification  
Manufacture of thermal equipment for power generation (Ministry of Economy, Trade and Industry)  
Permission to manufacture boilers and pressure vessels, permission to manufacture cranes (Ministry of Health, Labour and Welfare)  
Manufacture of specific high-pressure gas facilities (Ministry of Economy, Trade and Industry)



JQA-1952  
ISO 9001 certification  
Head Office, Osaka Office, Tokyo Branch,  
Chubu Branch, Kyushu Branch, Hokkaido  
Branch and Harima Factory



JQA-EM0313  
ISO 14001 certification  
Harima Factory

## Participation in the Community

Reflecting their dedication to providing safe, reliable facilities that inspire peace of mind on the part of local residents, Takuma and its group companies work actively to disclose information in an appropriate manner, keep the areas around plants clean, participate in regional activities, and engage in exchanges with local residents.

This section introduces some of those efforts.



Children making drink coasters

### Anan High Trust Co., Ltd.

At Ecopark-Anan, which we operate on a contract basis, we use the adjacent environmental learning facility to hold hands-on classes for parents and children and handicraft events on a regular basis.

More than 200 people attended a Summer Vacation Eco Event in July 2019, where they took tours of the plant, made drink coasters, and enjoyed other events.

### Kurume High Trust Co., Ltd.

Kurume Municipal Environmental Interchange Plaza at Miyanojin Clean Center, which we operate on a contract basis, features the Miyanojin “Manabino” Biotope, a study facility designed around the theme of a natural environment that allows the appealing spaces of Kurume to be passed down to the next generation.

The biotope provides an environment inhabited by a variety of living organisms that live and reproduce in the watershed’s rivers and waterways and in the surrounding region. During FY2019, the facility held a learning event about artificial methods for keeping insects entitled “Mission: Keeping Fireflies!” in May with the goal of enabling fireflies of the species *Luciola cruciata* to live at the biotope.

Many parents brought their children to the event, where they enjoyed a talk by an expert about methods for keeping fireflies, viewed artificial firefly habitats, and experienced waterway management at the biotope (by catching spirogyra).



Children viewing artificial firefly habitats



Experiencing waterway management (catching spirogyra)



Report on facility operations

### Suwako High Trust Co., Ltd.

Suwa Lakeside Clean Center (familarly known as “eco Poppo”), which we operate on a contract basis, held eco Poppo Fellowship Festivals in July and November 2019 to communicate to area residents the role and importance of the facility along with information about the status of waste treatment and other aspects of its operation. The events were held in concert with the Neighborhood of the Lake Administrative Affairs Association.

The festivals were a success, drawing numerous visitors who enjoyed reports on facility operations, a prize drawing, fair stalls, and a chance to take a commemorative photograph with the facility’s mascot.

### Iwate-Kenpoku Clean Co., Ltd.

In FY2018, Iwate-Kenpoku Clean entered into an “Agreement on Providing a Shelter and Wide-area Temporary-stay Facility” with the Village of Kunohe, where the company is located. Under the agreement, the company gives something back to the community by providing facilities it owns for use as shelters in the event of a natural disaster or other emergency.

The facility also participates in an annual fall festival—the Kunohe Industry, Art, and Culture Festival—that combines local industry, art, and culture. During FY2019, the event attracted local residents of all ages, who enjoyed a variety of activities, including quizzes on environmental topics, “fishing” for candy, and building models of an incinerator.



Quiz on environmental topics



Incinerator model

## Contribution to Society

This page introduces some examples of Takuma’s community service activities.

### Takuma Group coordinated cleanup activities

The Takuma Group orchestrates coordinated clean-up activities in the areas around its worksites each year as a way for volunteers to beautify the environment and contribute to society. During FY2019, a total of 570 employees participated in two such activities. The activities provided an opportunity for employees to think afresh about waste-related issues and their connection to the community. Going forward, the Takuma Group will continue this initiative.



### Participation in the “Osaka Marathon ‘Cleanup’ Campaign”

In November 2019, volunteers from Operation & Maintenance Services Department 2 participated in the “Osaka Marathon ‘Cleanup’ Campaign,” a cleanup activity that is held every year as part of the Osaka Marathon. The activity brought together organizational, group, and individual volunteers to beautify public spaces throughout the city.



### Blood donation campaign

Takuma supports blood donation activities through the Japanese Red Cross Society. During FY2019, we held a blood drive at the Harima Factory. Many employees participated on an ongoing basis, and some even received an award commemorating their 10th donation. We plan to continue this activity in the future.



### WFP fundraising activities

Takuma serves on the Board of Trustees of the Japan Association for the World Food Programme, the official supporting partner of the World Food Programme in Japan. Each year, we provide information about fundraising activities during a campaign that lasts from June through August, including by displaying WFP posters at the entrances to company buildings and in cafeterias and run articles in our company newsletter. The campaign serves both to increase employee interest in the world’s food problems and to collect donations to address them.

### Contributions to NPOs

#### Purchasing UNICEF Christmas cards

Takuma purchases UNICEF Christmas cards. A portion of the proceeds is used to fund UNICEF in their work to help children around the world.

#### Donating unused calendars

Each year, Takuma donates unused calendars to a non-profit organization. The proceeds from selling the calendars at a charity calendar market sponsored by the NPO Nippon Volunteer Network Active in Disasters are used to provide aid for victims of natural disasters and other crises. We also donate calendars to the NPO Community Support Center Kobe’s Gift on Heart Calendar project for delivery to local residents’ associations and other groups, elderly residents, and individuals with disabilities.

### Publications

#### Publication of the Takuma Technical Review

We publish the Takuma Technical Review twice a year to introduce technologies that Takuma has developed.

During FY2019, topics included explaining transitions in NOx reduction technology for waste incineration, reporting on the operation of plant equipment, reporting on overseas tours, and introducing new products. Abstracts are available on Takuma’s website.

[Takuma top page > Technical Information > Technical Review]

<https://www.takuma.co.jp/english/gijutu/gihou.html>





# Corporate Governance

## Corporate Governance

### Basic policy on corporate governance

In order to safeguard and steadily increase Takuma's corporate value over the long term, it is essential not only to ensure the development of the company's businesses, but also to clearly define governance in corporate operations—that is, to ensure that shareholders' oversight of operations is carried out appropriately and that officers

### Board of Directors

As of June 25, 2020, the Board of Directors was comprised of six directors (excluding directors who are members of the Audit & Supervisory Committee) and five directors (of whom four were outside directors). The Board of Directors meets regularly once a month as a rule and whenever else it is necessary to make decisions about important issues related to business management and issues established by law and ordinances, as well as to oversee the execution of the directors' duties.

Directors	Including the following outside directors:
11 (10 men and 1 woman)	4 (3 men and 1 woman)

### Executive Officers

In order to accelerate management decision-making and clarify where management responsibilities are placed, we have adopted an executive officer system in which we appoint executive officers who are entrusted with the responsibility of executing our business activities. As of June 25, 2020, there were 16 executive officers (including those who also serve as directors). Moreover, we have also established a Committee of Executive Officers, which is chaired by the president/chief executive officer, as an organization that deliberates matters that are brought up at meetings of the Board of Directors and other important issues related to the execution of our business activities. This committee communicates and provides direction about items decided by the Board of Directors and other important items related to the execution of our business activities appropriately to the divisions that are to execute them.

carry out their operational responsibilities by means of a process that is clear, rational, efficient, and legally compliant. For that reason, we believe that understanding the Corporate Governance Code and putting it into practice in an autonomous and systematic manner are top-priority management issues.

### Audit & Supervisory Committee

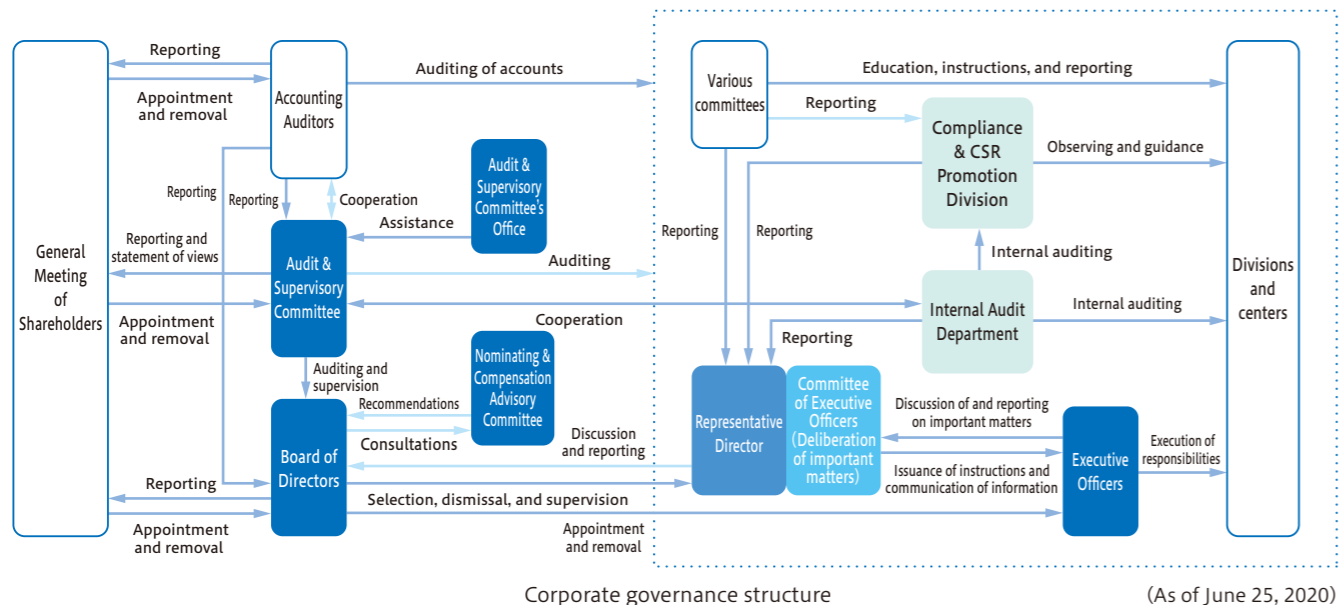
An Audit & Supervisory Committee that consists of five members, of whom four are outside directors, is responsible for accounting and operational audits. Members of the committee attend important meetings, including those of the Board of Directors and the Committee of Executive Officers, and they strive to understand and observe the status of business execution in a timely and appropriate manner. Drawing on their professional background and experience, they express their opinions as necessary from an objective perspective, and they conduct strict auditing of the business execution performed by the directors. To facilitate the effectiveness of audits carried out by the Audit & Supervisory Committee, the representative director holds regular meetings with committee members to ensure good communication.

### Audit & Supervisory Committee's Office

Takuma has established an Audit & Supervisory Committee's Office to help carry out the committee's work.

### Nominating & Compensation Advisory Committee

To augment the above structures, we have established a Nominating & Compensation Advisory Committee comprised of independent officers, representative directors, and the officer in charge of human resources. The purpose of the committee, a majority of whose membership consists of independent outside directors, is to increase transparency and objectivity in the selection of candidates for director and executive officer positions and in the determination of the compensation and other terms so as to enhance the oversight function of the Board of Directors.



Corporate governance structure

(As of June 25, 2020)

## Internal Control

Takuma has adopted a Basic Policy for Establishment of an Internal Control System (the full text is available on our website) in accordance with the Companies Act. We continue to review and improve this policy in response to changing circumstances.

Working towards thorough compliance, Takuma built a compliance promotion organization in FY2006 in order to continuously implement enlightenment and educational activities that make corporate ethics, related laws and ordinances, and internal rules fully understood. To control the danger of loss, we have also prepared a "Risk Management Code" that determines the person in charge of each risk, and we set up our risk management organization according to that Code. When the unexpected occurs,

emergency headquarters are established with the company president as the director in charge of risk management, and an organization is put in place in order to minimize and prevent further damage through prompt action.

Internal control, constructed and evaluated in order to report on and prevent misstatements in our financial reporting, is based on the Financial Instruments and Exchange Act. This internal control on financial reporting for the Group has resulted in reports that indicate this system has been effective.

In this way, we will continue to work in the future to ensure thorough compliance while carrying out business properly and efficiently while also deepening risk management.

## Compliance & CSR Promotion Structure

### Basic approach

Led by the department in charge of compliance and CSR promotion (CSR Department), Takuma aims at encouraging proper activities through the Compliance & CSR Promotion Organization which was installed for the purpose of enabling compliance and CSR to concretely permeate company-wide through an in-house organization.

This organization is composed of a chairman (the Executive Manager of the Compliance & CSR Promotion Division), a secretariat (positioned in the CSR Department), and an executing organization in each division, center, and department. As the person in charge of promoting compliance and CSR in his or her division, each division or center manager is appointed as a Compliance and CSR Promotion Administrator. As persons who implement awareness and education in compliance and CSR in their respective departments, department managers are appointed as Compliance and CSR Promoters. The meetings conducted within this mechanism include regular meetings and departmental meetings.

### Regular meetings

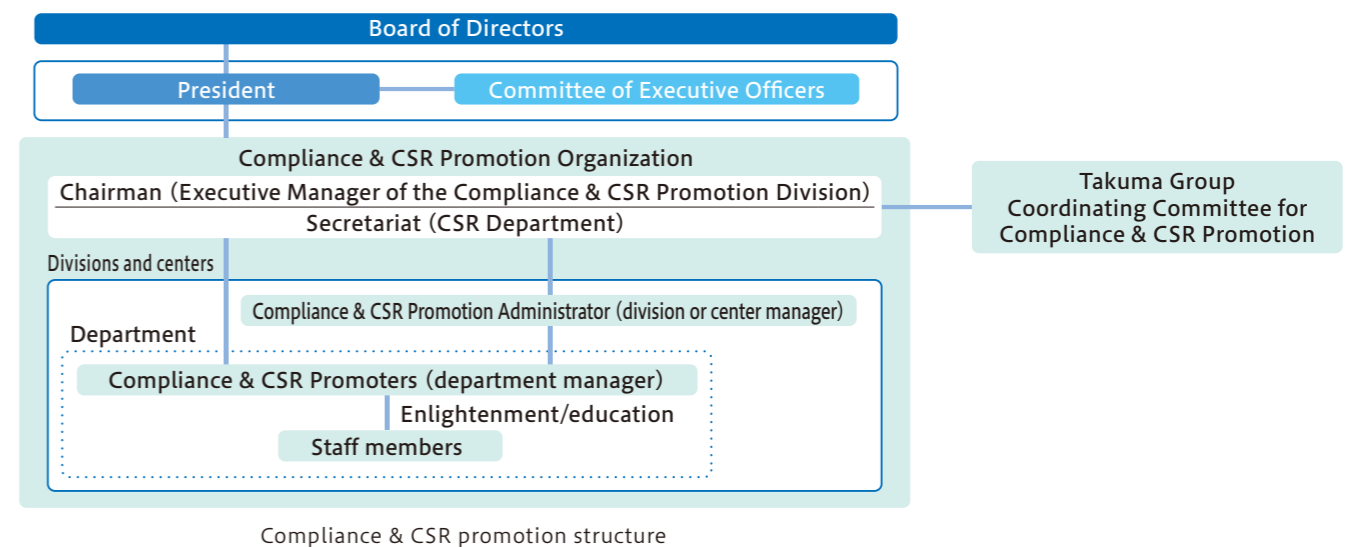
Regular meetings are held once a year. The person in charge of promotion receives reports on the status of compliance and CSR promotion company-wide, as well as on the status of the implementation of compliance and CSR promotion education for the past year, etc., and participants deliberate on a promotion plan for the current fiscal year.

### Departmental meetings

Promotion members convene departmental meetings once a quarter, with educational training aiming at the permeation of compliance and CSR in each department. After departmental meetings, promotion members implement compliance and CSR promotion education in their respective departments using training materials or in-house educational materials and report the results to the Secretariat.

### Takuma Group Coordinating Committee for Compliance & CSR Promotion

We are pursuing awareness-raising and educational activities targeting group companies through our Takuma Group Coordinating Committee for Compliance & CSR Promotion to ensure thorough compliance and risk management throughout the Group. During FY2019, we invited representatives of group companies to participate in two meetings of the committee.



Compliance & CSR promotion structure

### Risk Management Structure

Takuma follows a “Risk Management Policy” that connects company-wide risks and separately classifies them into project risks related to our core business, i.e., plant construction; DBO project risks and DBO project operation, maintenance and management risks related to our DBO business; and potential risks, actualized risks, and financial

reporting risks related to other corporate business activities. Group companies also work to develop and strengthen approaches to risk management through the Takuma Group Coordinating Committee for Compliance and CSR Promotion.

### Risk Management Policy

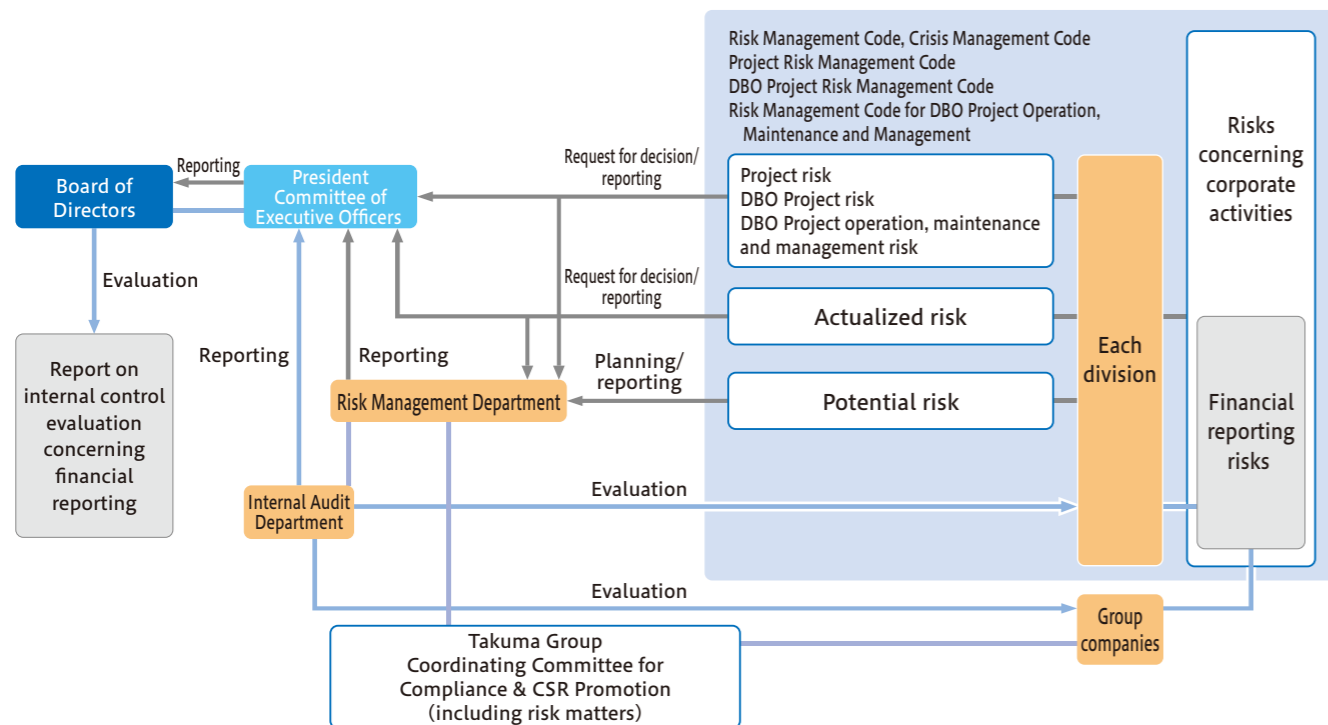
#### [Basic purpose of risk management]

Risk refers to all phenomena that interfere with the Group’s ability to achieve its business objectives or cause losses or harm to the interests of stakeholders.

The Takuma Group practices risk management with the goal of increasing its corporate value by working to maximize returns while minimizing the negative impacts of risk.

#### [Risk management action guidelines]

1. The president and CEO is responsible for risk management at Takuma.
2. All officers and employees participate in risk management activities.
3. Risk management activities are carried out in accordance with applicable guidelines such as the Risk Management Rules.
4. Risk management activities are carried out in line with the Medium-Term Management Plan and annual plan, and we work to make improvements on an ongoing basis.
5. When risk manifests itself, we respond by taking responsible action quickly to minimize any damage and creating provisional organizational entities as necessary.
6. Group companies carry out risk management activities in accordance with their own policies and plans, with support from Takuma.



Risk management structure

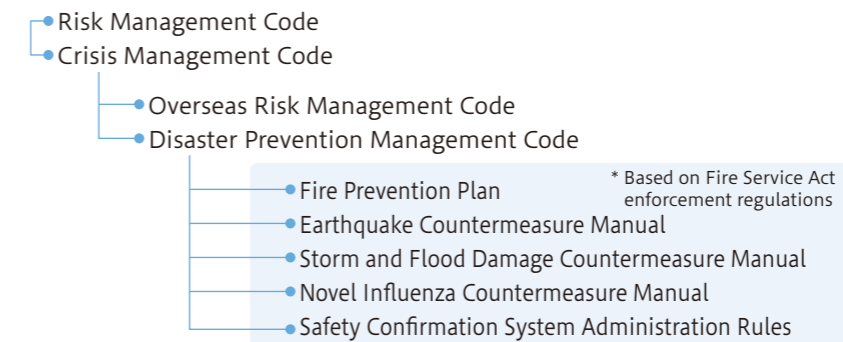
### Business Continuity Plan (BCP)

Takuma has formulated a “Business Continuity Plan” based on the following policies to ensure proper and appropriate continuity of business operations in the event of a large-scale disaster, pandemic, or other emergency:

1. In addition to implementing disaster-related measures to secure the safety of corporate officers and employees, maintain structures so as to enable continuity of business operations while minimizing damage in an emergency.
2. Strive to respond to customer needs and recover from damage quickly by working closely with suppliers and partner companies to continue business operations.
3. Earn the trust of numerous stakeholders, including employees, their families, shareholders, and nearby residents, and fulfill social needs by continuing business operations.

#### [Disaster rule system diagram]

##### Risk Management Policy



### Disaster prevention exercises

On November 19, group and partner companies joined head office personnel in participating in disaster prevention exercises, which included drills to test readiness for a Nankai Trough earthquake and tsunami, firefighting practice, and an evacuation. The head office is equipped to serve as a temporary shelter in the event of a tsunami or other emergency, and the exercises included practice for providing evacuation guidance to residents. On October 9, Takuma’s company fire brigade competed in the indoor fire hydrant category of a firefighting technique competition organized by the Amagasaki City Bouka Kyokai (Fire Protection Association) to maintain and improve firefighting skills. The event offered the brigade an opportunity to improve its ability to respond in the event of a fire. We also held two safety confirmation exercises using a system developed specifically for that purpose.



A disaster prevention exercise

With regard to the maintenance and restoration of information systems, which is the top priority of the Company’s business continuity plan (BCP), we carried out exercises envisioning an earthquake and subsequent power outage.

These exercises and related activities served to verify that participants understand the applicable rules and procedures and that they have the necessary knowledge and skills. We will apply the results to future educational exercises and countermeasures as we work to improve our ability to respond in the event of a crisis.



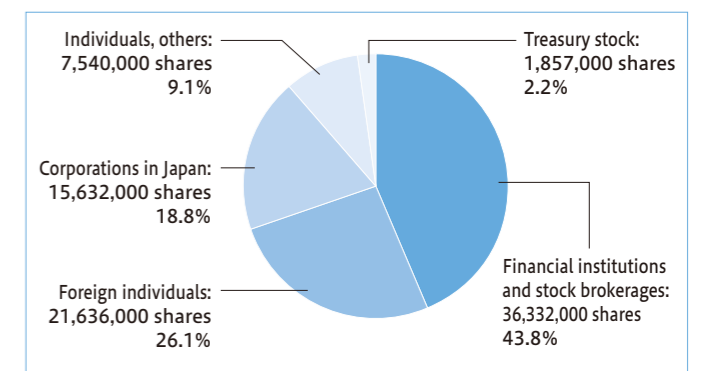
A response exercise

### IR Activities

In keeping with the “Takuma Group Code of Conduct,” we provide our shareholders and investors with accurate corporate information in a timely and fair manner. As a part of this, we provide notifications on the convening of General Meetings of Shareholders, balance sheet information, timely disclosure information, marketable securities reports, shareholders reports, annual reports in English and other business information, all on our website.

#### [Takuma website > IR information]

<https://www.takuma.co.jp/english/investor/index.html>



Distribution by shareholder type (as of March 31, 2020)

Executive Profiles: Directors



- 1 **Hiroaki Nanjo**  
Representative Director  
President and Chief  
Executive Officer
- 2 **Takaaki Kato**  
Director  
Chairman Executive Officer
- 3 **Kengo Numata**  
Director  
Executive Vice President
- 4 **Tsuyohito Nishiyama**  
Director  
Senior Managing  
Executive Officer
- 5 **Hideki Takeguchi**  
Director  
Senior Managing  
Executive Officer
- 6 **Koji Tanaka**  
Director  
Executive Officer
- 7 **Yasushi Enomoto**  
Director  
(Audit & Supervisory  
Committee Member)
- 8 **Osamu Iwahashi**  
Outside Director  
(Audit & Supervisory  
Committee Member)
- 9 **Tomomi Fujita**  
Outside Director  
(Audit & Supervisory  
Committee Member)
- 10 **Yoshiaki Ito**  
Outside Director  
(Audit & Supervisory  
Committee Member)
- 11 **Tetsuya Kaneko**  
Outside Director  
(Audit & Supervisory  
Committee Member)

Messages from New Outside Directors



**Yoshiaki Ito**  
Outside Director  
(Audit & Supervisory Committee Member)

I am truly honored to have been chosen to serve as an outside director (Audit & Supervisory Committee Member) at Takuma. Over some 30 years as a certified public accountant, I was involved with corporate accounting audits at a major auditor. I was responsible for audits of companies in an array of industries, including manufacturers, real-estate companies, and service businesses. At the same time, I also gained experience providing operational support for companies preparing for their IPO. I look forward to taking advantage of the auditing and corporate support experience I have gained to date in order to help Takuma further increase its corporate value.

Takuma has consistently traveled the path of a pioneer in the boiler industry since its founding, and more recently it has advanced into the environmental protection field while accommodating changes in society.

In 2015, the Corporate Governance Code was drawn up to offer publicly listed companies a blueprint for initiatives for securing sustained growth. If you examine Takuma's financial statements and related materials, you will be left with the impression that the company's corporate governance initiatives are extremely robust in terms of their structures and mechanisms compared to those of other companies. You can infer that these structures are being implemented at a high level of sophistication. As an outside director, I am committed to helping maintain a high level of governance, which is the most important priority of management, by fulfilling my position's oversight function with regard to operational execution from the objective perspective of stakeholders, particularly shareholders, after I develop a sufficiently deep understanding of the Company's operations.



**Tetsuya Kaneko**  
Outside Director  
(Audit & Supervisory Committee Member)

During some 30 years as a banker, I gained experience in a number of areas, including domestic and international facility operations and oversight, international monetary exchange, human resources, and consulting on companies looking to enter overseas markets. After that, I began working for a trading company, where I played a management role for eight years as the executive in charge of a department that provided general support in areas such as reviews, legal affairs, distribution, insurance, and IT planning. Today, I serve as the president of a real-estate holding company.

I look forward to taking advantage of the knowledge I gained during my years as a banker and trading company executive to contribute to the growth of Takuma as a leading company in the environmental and energy fields.

Shibusawa Eiichi, whose face is slated to appear on the new ¥10,000 note, started many companies during the Meiji and Taisho periods, and he also wrote *Analects of Confucius and the Abacus* more than 100 years ago to explain the need for both ethics and profit. The spirit of that philosophy lives on in the Sustainable Development Goals (SDGs) that the international community is pursuing today, and I believe it will only become more important—essential, even—as Takuma looks to help achieve the SDGs through its technological capabilities and expertise. It is my fervent hope that Takuma will move to take those capabilities to a new level so that it can meet these rising expectations.

I am truly honored to have been chosen to serve as an outside director (Audit & Supervisory Committee Member) of a company that has developed businesses in response to the needs of its times and in doing so has led its industry. I look forward to taking advantage of the broad knowledge I've gained in Japan and overseas to date to live up to the expectations of my role once I have developed a sufficiently good understanding of the company's businesses.

Executives' Profiles: Executive Officers



# Fair Business Practices

## Compliance Measures

### Initiatives to ensure compliance with the Antimonopoly Act

Towards ensuring permanent compliance with the Antimonopoly Act, Takuma enacted “Regulations Concerning Management of the Pledge of Antimonopoly Act Compliance,” which provides for the submission of a written oath in regard to observing the Antimonopoly Act. “Rules on Controlling Contact with Competitors’ Sales Departments, etc.,” defines the procedure for an employee when interacting with the sales department, etc., of a competitor and specifies that an application should be made to and an approval should be obtained from the affiliated division or center manager in advance to ensure fair business contact.

### Holding training sessions about the Antimonopoly Act

We hold regular training sessions about the Antimonopoly Act to deepen participants’ understanding of the act and to ascertain the latest information about it.

### Introducing a Legislation Information Service

In order to allow its employees to gain a continuous grasp of the latest changes to laws and ordinances, Takuma introduced a Legislation Information Service. In this system, legislation alerts highlighting revisions to, and abolition of, laws and ordinances are sent by e-mail in advance to employees, who can also review detailed information about the corresponding law or ordinance on the system’s website as needed.

In addition to current laws and ordinances, the system lets users search for legal precedents and public comments to facilitate an even greater understanding of relevant laws and ordinances.

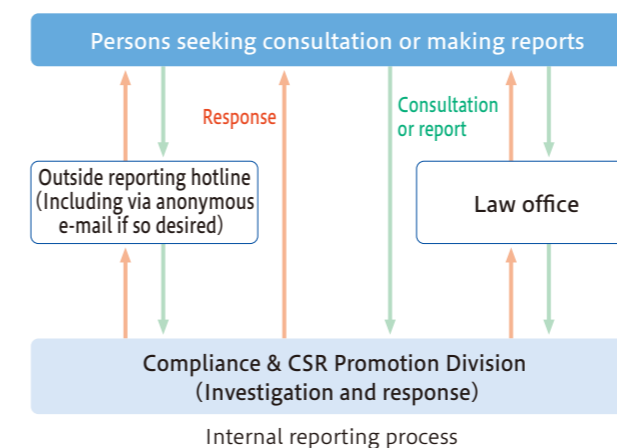
## Internal Reporting System

Takuma has been operating an internal reporting system since FY2006, with the aim of promoting compliance management by uncovering illegal or unfair acts as early as possible and undertaking corrective measures.

Reporting hotlines are set up at our Compliance & CSR Promotion Division and at an outside law office, as well as a dedicated outside report hotline for anonymous e-mail reporting. Our “Internal Reporting Code” and the Takuma Group Code of Conduct further declare that no informant shall be subjected to disadvantageous treatment simply

because he or she filed a report.

Furthermore, in order for this system to be correctly understood and utilized, we distribute a card to all employees with information on the reporting hotlines and regularly publicize the system. Although awareness of this system exceeded 90% according to the results of the FY2019 CSR awareness survey, some respondents indicated that they were unaware of the system or uninterested in utilizing it, suggesting that issues remain for the reporting system.



**Internal reporting system**

Employees who become aware of a legal violation, improper conduct, or other issue that would be problematic from a compliance standpoint must work to help rectify the problem and prevent future recurrences by reporting it to the Company’s hotline, regardless of their own involvement.

Employees reporting information to the hotline will not be subjected to disadvantageous treatment simply because they filed a report. \*Please see the “Internal Reporting Code.”

**Hotlines (help lines)**

Internal reporting hotline Compliance & CSR Promotion Division CSR Department  
...@...  
Outside reporting hotline Law office  
...@...  
Outside reporting hotline Specialized company  
...@...

Compliance Card

## Compliance & CSR Promotion Education

Takuma offers compliance and CSR promotion education through the Compliance & CSR Promotion Organization (see page 48), which was established in order to spread awareness of compliance and CSR issues among employees. During FY2019, we implemented education focusing on compliance and CSR promotion in four separate stages (see below) in keeping with our policy of pursuing a sustained and thorough program of spreading and improving

compliance and CSR awareness and risk management. This effort, through which we sought to live up to society's requirements and expectations, while taking into account internal circumstances and the characteristics of group companies, was based on the Compliance & CSR Promotion Division's medium-term policy of continuing to practice compliance-focused management in accordance with the 12<sup>th</sup> Medium-Term Management Plan.

- 1st term : Insider trading
- 2nd term: Training on compliance with Japan's Antimonopoly Act
- 3rd term : Overview of security export controls  
Takuma's CSR comprehension test
- 4th term : Preventing power harassment  
Forward-looking CSR activities, CSR issues and an action program



Number of sessions per year: 4 (May, August, November, and January)  
Number of participating departments: 45  
Total number of attendees: 4,315

We invited an outside expert to give lectures and training in August 2019 (2nd term) and January 2020 (4th term).

### • 2nd term lecture

“Training on Compliance with Japan's Antimonopoly Act: Avoiding Involvement with Bid-rigging and Cartels”

Mr. Yuki Takei  
Attorney at Law  
Midosuji Legal Profession Corporation



### • 4th term training session

“Preventing Power Harassment: From the Standpoint of Workplace Mental Health”

Ms. Miyuki Matsuoka  
Certified public psychologist/Clinical psychologist/Industrial counselor  
H2 Consultant Co., Ltd.



### • A variety of educational methods

We use a variety of methods to foster a high level of awareness of compliance and CSR, including CSR education and discussions implemented directly by promoters (department managers) as well as computer-based e-learning and the pursuit of CSR goals and action programs throughout the year at each department.

Since 2006, we also have been distributing a Compliance Manual that includes an explanation of the rules and standards of conduct as well as an FAQ to all employees in accordance with the Takuma Group Ethics Charter and the Takuma Group Code of Conduct. This manual is utilized in the course of daily operations and departmental training.



### • Internal CSR lecture for executives

Date: December 25, 2019

Lecture topic: Understanding and Using the Antimonopoly Act in the Future

Lecturer:

Mr. Kentaro Hirayama  
Attorney at Law and Representative of Hirayama Law Offices  
Associate Professor (Economic Law), Kyushu University Faculty of Law



## CSR Awareness Survey

We have been conducting a CSR Awareness Survey since FY2008 in order to quantitatively assess the level of compliance and CSR awareness along with the effectiveness of related promotional and educational efforts. The results of this survey are used when summarizing the activities of each fiscal year and in formulating the upcoming year's action plan, as well as in future compliance and CSR promotion activities. The survey was expanded to include group companies in FY2013.

We actively use survey results in our activities, for example by offering additional education in areas that

received lower scores than in the previous survey. FY2019, responses indicated that 975 (of 993) employees are conducting themselves in accordance with standards such as the company's Management Principles and the Takuma Group Code of Conduct, indicating that awareness of the importance of compliance and CSR have spread widely among employees.

We will continue to offer this survey and use its results to improve compliance and CSR promotion education on an ongoing basis.

## Material Procurement Policy

Our Purchasing Department carries out procurement activity in accordance with its Material Procurement Policy.

We provide fair opportunities for all suppliers, irrespective of nationality, company size, or transaction history. Suppliers are selected based on our comprehensive evaluation of their reliability and safeness in terms of quality, price, delivery, etc., as well as their abilities in technological development and supply capabilities.

Long-term stable transactions with dependable suppliers result in improved product reliability and greater corporate value. We, therefore, seek to establish relationships of mutual trust and mutual development with our suppliers.

While also respecting relevant laws and regulations as well as social norms, we strictly control and maintain any confidential information that we obtain through our business transactions.

More information about the procurement procedures used by our Purchasing Department is available on the following website:

**[Takuma website > Material Procurement]** <https://www.takuma.co.jp/procurement/> (content in Japanese)

### 【Material Procurement Policy】

1. Treat all candidates fairly when selecting a supplier.
2. Strive to discover new manufacturers.
3. Strictly control confidential information.
4. Strive to acquire new and pertinent information.
5. Promote green procurement.
6. Comply with laws and ordinances related to business dealings.
7. Always keep VA and VE\* in mind.
8. Strive for self-development.

\*VA and VE : Value Analysis and Value Engineering

## TOPICS President Nanjo visits worksites involved in plant operation

From September to October 2019, President Nanjo visited nine worksites that are responsible for the long-term operation of waste treatment plants and biomass power plants (including operational management and maintenance).

Comprehensive operation contracts for plants have grown more common in recent years, and high-quality after-sales service is becoming more important than in the past. Through these visits, President Nanjo shared with workers the Group's continued commitment to come together to provide high-quality after-sales service that aligns with customer and regional needs.

