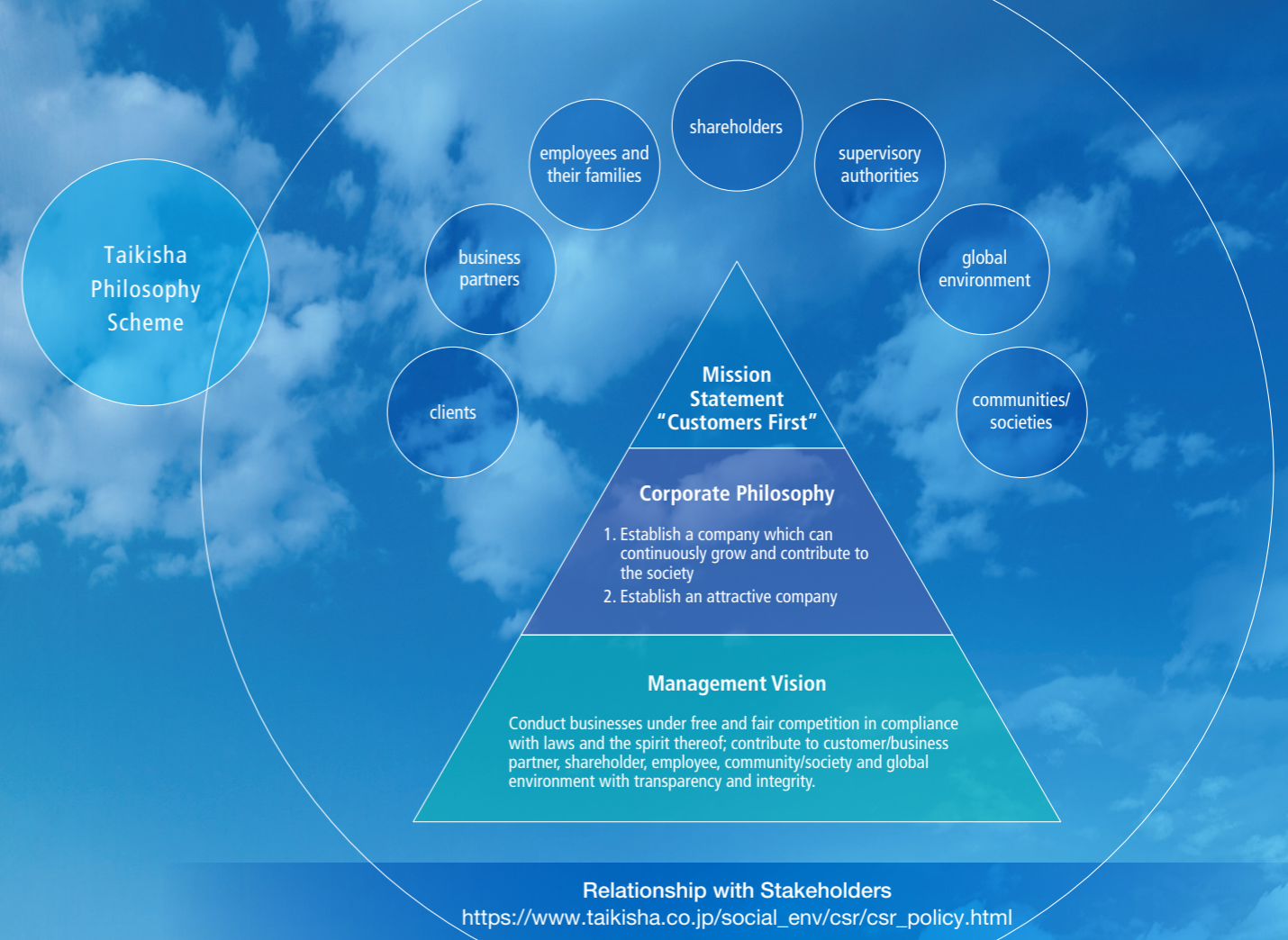


CSR Report 2019

Corporate Social Responsibility Report 2019

Build The Future Air

Considering general society as “Customers,” Taikisha is helping create a comfortable environment. Taikisha has established good business relationships all around the world, extending the border of its business. Our desire is to make people feel happy through our environmental technologies.



Editing Policy

- Organizations covered by this report
Taikisha Ltd. and its group companies in Japan and overseas are covered by this report.
- Period covered in this report
This report mainly covers activities conducted during FY2018 (from April 1, 2018 to March 31, 2019) and also includes some activities carried out before or after the said period.
- Date of issue
September 2019
- The scheduled issue date of the next edition
September 2020
- Guidelines referenced
"Environmental Reporting Guidelines (Fiscal Year 2012 version)," "Environmental Accounting Guidelines 2005," and "Guidelines for Private Sector Engagement in Biodiversity (2009)" of the Ministry of the Environment
"Sustainability Reporting Standards" by Global Reporting Initiative (GRI) ISO26000
"International Integrated Reporting Framework" by the International Integrated Reporting Council (IIRC)
- Production
CSR Report Editorial Committee of Taikisha Ltd.
- Contact for inquiries:
CSR Promotion Office, Investor Relations Section, Taikisha Ltd.
TEL. 81-(0)3-5338-5052

We will continue to grow as a company that is trusted by and can contribute to society based on our “Customers First” Mission Statement

First of all, we would like to thank you for your continued patronage.

Since its foundation in 1913, Taikisha has been providing the optimal environment and conditions for people’s daily lives and manufacturing for many years based on air-conditioning technology.

We conduct a wide range of businesses both in Japan and overseas by leveraging the strengths of our global network with energy-, air- and water-related technologies in two core business fields: the Green Technology System Business targeted at office buildings, hospitals, factories and others; and the Paint Finishing System Business targeted at paint finishing plants for automobiles, etc.

As various environmental and social issues are becoming evident on a global scale, we believe that it is our mission to create the optimal environment under any and all circumstances by making full use of energy-saving and environmental impact reduction technologies in which we excel. We have not only been further enhancing our core businesses as an engineering group that thinks and takes action at all times to resolve clients’ environmental issues by advanced solution technologies and pass on the rich global environment to future generations, but have also been expanding our peripheral business domains in recent years, including the plant factory business taking advantage of our air-conditioning control technology and the aircraft and railway car paint finishing system business that applies the technologies we have gained through automobile paint finishing system business.

By mobilizing the collective strengths of the entire Taikisha Group, we will make all-out efforts to become a more valuable company for our clients, business partners, shareholders, investors, and others who support our businesses. We would greatly appreciate your continued understanding and support.

K. Kato

Representative Director, President



Table of Contents

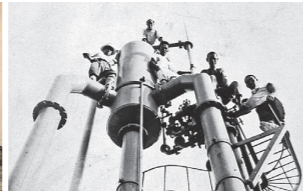
01	Taikisha Philosophy Scheme
03	To Our Stakeholders
05	Taikisha’s Corporate History
07	Taikisha’s Business Activities
09	Corporate Overview and Global Network
11	Financial and Non-Financial Highlights
13	Top to Top Dialogue: Taikisha’s approach to CSR—For sustainable growth of the company and society—
19	Value Creation Process
21	Value Creation Feature 1: Creating an environment that enables career advancement of employees: Improvement of On-site Operational Efficiency Promoted by On-site Support Team
23	Value Creation Feature 2: Utilization of diverse human resources: Global Human Resource System
25	Value Creation Feature 3: Value creation initiative with clients: Establishment of Technical Center in Zama City, Kanagawa Prefecture
27	Taikisha’s Materiality
29	Key Measures and Progress of Activities
31	Governance
39	Environment
51	Contributions to Society
62	Third-Party Opinion



1913 Founded as joint-stock company Kenzaisha (predecessor of Taikisha Ltd.)



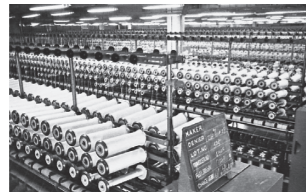
1918 Tokio Marine and Fire Insurance Building, Japan's first modern office building



1935 Steam jet units under construction at the Kinka Keito Company Tsu Plant



1953 Spray booth in the Isuzu Motors Ltd. Omori Plant



1955 Toyo Nylon Plant in South Korea



1960s Tokyo Nissan Auto Sales Building (now, Roppongi Hills North Tower)



1961 Drying Oven for the R360 Coupe at the Toyo Kogyo Co., Ltd. F Plant



1973 A newspaper advertisement upon the name change of the company



1981 Air-conditioning, water supply and drainage, hygiene, electrical and medical-use gas supply facility works for New Dubai Hospital (United Arab Emirates)



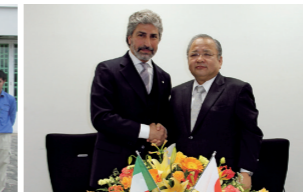
1994 Petronas Twin Towers (Malaysia)



2010 Painting robot at the Research and Development Center (Tianjin, China)



2011 Taikisha (Cambodia) Co., Ltd. opening staff



2011 Business and capital alliance signing ceremony with Italy's Geico S.p.A.



2014 Taikisha Myanmar Co., Ltd. Opening Ceremony



2018 Establishment of Plant Factory Demonstration Development Center

1913-1948 Helps build the foundation of modern Japan

Given the remarkable growth of Japan's spinning mill industry, Kenzaisha reinforced its air-conditioning technology such as temperature/humidity control and air flow control, which are essential to the yarn-making process, sharply expanding its business performance in this field.

1949-1970 Expansion of business fields during the Period of Rapid Economic Growth

Along with its high economic growth, Japan experienced a flurry of plant constructions, demanding higher quality air-conditioning systems. Taikisha strove to achieve higher technological expertise, delivering precision air-conditioning and cleanroom systems, and entered the automobile paint finishing plant construction business.

1971-1989 Global business development

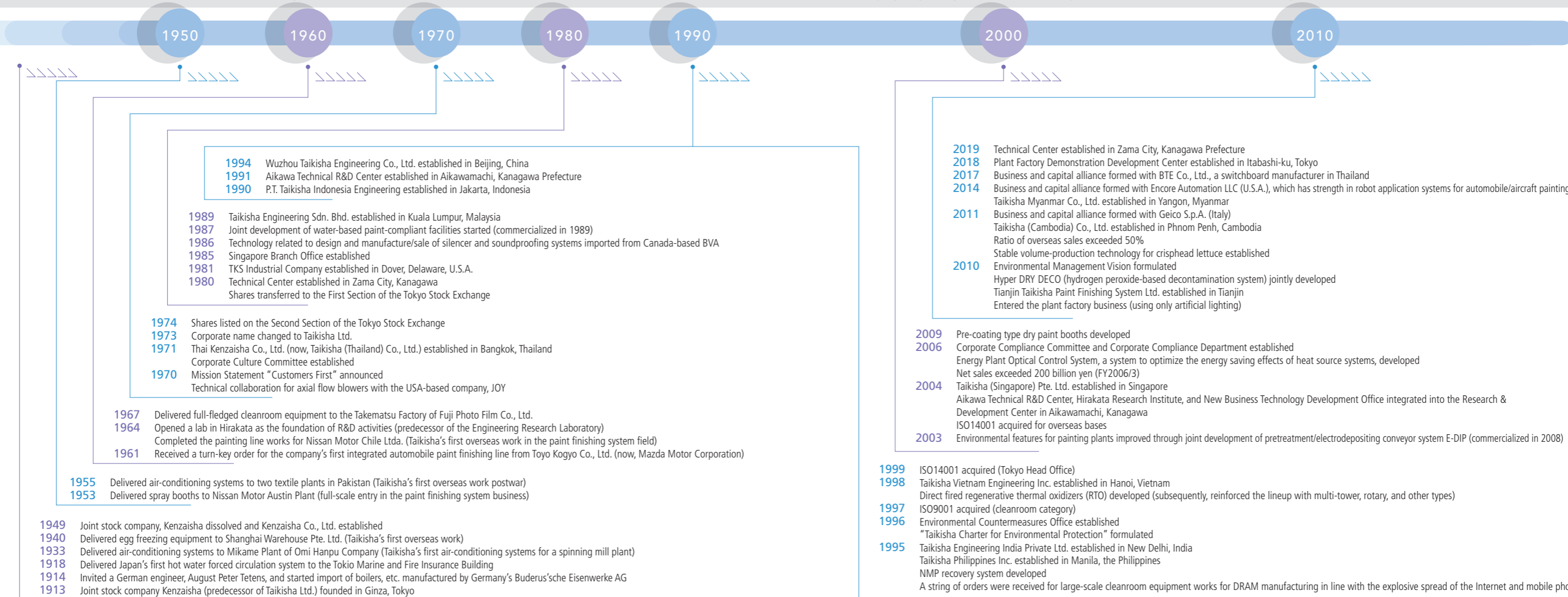
In line with shift overseas of Japanese corporate clients, Taikisha expanded new affiliates worldwide, starting with an affiliate in Thailand, to accumulate experience in overseas works. Taikisha's customer base expanded to include not only Japanese companies but also local and Western ones.

1990-2001 Advent of the IT era

The 1990s was an era characterized by a rapid spread of information technology as consumers began to widely use the Internet and mobile phones, Taikisha, with its leading-edge know-how in cleanroom design and construction, participated in projects to construct manufacturing plants for semiconductors, hard disks and capacitors, a set of devices serving as the backbone of IT hardware. This allowed the company to gain higher recognition in the electronics industry.

2002- Capitalizing on the Group's comprehensive capability

Driven by the progress of IT and globalization, it has become a norm in many industries to conduct borderless investment and collaboration. The Taikisha Group established affiliates in the so-called emerging countries including Cambodia and Myanmar. The Group's comprehensive solution is increasingly vital as affiliates complement each other in purchasing operations, human resources and project management. In response to the needs of society and clients, the Group has entered new fields such as the plant factory business and the aircraft painting business.



Orders received

158.5 billion yen
Composition ratio 65.6%

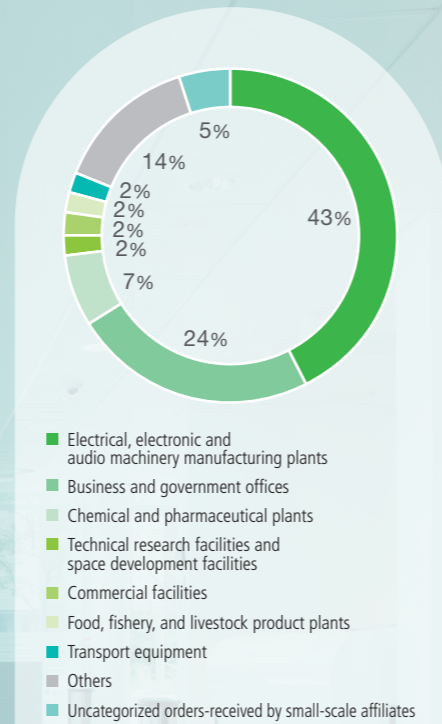
Green Technology System Division

The Green Technology System Division, comprised of the Building HVAC System business sector and the Industrial HVAC System business sector, provides services in both Japan and overseas to help improve the environmental value of its clients.

In the Building HVAC System business sector, Taikisha designs and constructs air-conditioning systems for facilities that are used by many people, such as office buildings, schools, hospitals, hotels, museums, and airport terminals. It does so by conducting new construction and renovation work on facilities with the aim of providing people- and eco-friendly, comfortable spaces.

In the Industrial HVAC System business sector, Taikisha undertakes the role of optimizing air-conditioning systems for factories and R&D facilities in the electronic parts, pharmaceutical products, biotechnology, and other fields where a very clean environment is essential in the manufacturing process.

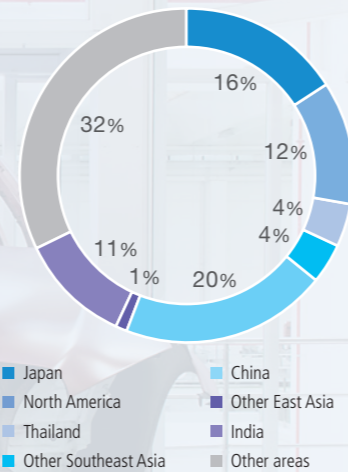
Taikisha also focuses on providing environment protection systems, such as exhaust-gas treatment devices and antipollution systems.



By market segment

Orders received

By region



Major countries or regions

- Southeast Asia: Singapore, Malaysia, Indonesia, the Philippines, Vietnam, etc.
- East Asia: Taiwan, South Korea
- North America: U.S.A., Canada, Mexico
- Other areas: Russia, South America, etc.



Energy-saving air-conditioning system
Effective energy-saving operation is available for the entire air-conditioning system by implementing the Energy Plant Optimal Control System, which calculates optimal values at all times to enable operational settings in real time.



Cleanroom
Taikisha's technology achieves the required clean level at the optimal ventilation count, and its cleanroom technologies provide a cutting-edge production environment with measures such as ultra-precise temperature control, noise control, microscopic vibrations control, and molecular contamination control.



Pharmaceutical manufacturing-related
Taikisha meets a wide variety of requirements imposed by pharmaceutical manufacturers by introducing validation support, which is compliant with the latest GMP at factories and laboratories, optimum room pressure control, the hydrogen peroxide-based decontamination system, and others.



VOC treatment and odor control systems
Organic solvents and malodorous gases are treated by the regenerative thermal oxidizer with high efficiency. Taikisha proposes optimum energy-saving systems combined with hydrophobic zeolite-based concentration equipment as required.

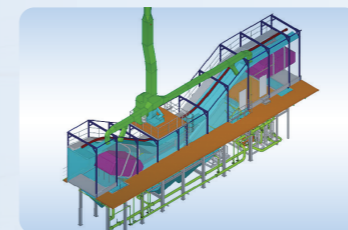


Vege-factory
A fully artificial hydroponic plant factory which ensures cultivation with the optimal biological environment for the plant by precisely controlling the lighting, temperature, humidity, nutrient solution and other elements. It is the world's only facility that can produce crisphead lettuce in a large volume.



Facility renewal
By renewing heat-source, air-conditioning and electrical facilities, etc., buildings and factories improve productivity, enable high usability at lower management, and reduce environmental loads such as lighting, fuel and water costs, increasing their asset value.

Technologies and services provided by Taikisha



Pretreatment system
Taikisha offers its paint finishing systems for pretreatment that are designed to improve processing quality and to conserve energy. Its unique lineup includes the iron powder removal system, high-performance washing system, counter-flow circulation tank in the degrease process, and high-pressure spray water washing processes.



Electrodepositing system
Taikisha's counter flow circulation system (C-FLOW Electrodepositing Circulation System) for electrodepositing tanks has been introduced in many lines. Furthermore, its multi-stage washer systems offer a high paint recovery rate using ultra filter (UF) membranes or reverse osmosis (RO) membranes.



Paint booth
Taikisha provides booth interior environments to achieve high-quality painting with its high-performance CIRCULA scrubber, which boasts a low noise level, and the adoption of advanced energy-saving technologies such as exhaust recycling and HVAC control.



Robot paint system
Utilizing simulations with CAD, the design of a robot paint system seeks the most efficient painting procedure for painting and determines the optimal required number and layout of robots. Furthermore, as its solution, Taikisha configures a system to meet each client's tailored needs with an optimized choice for devices.



Conveyor system
Taikisha's unique systems are available with overhead conveyors for pretreatment and electrodepositing lines, as well as floor conveyors for intermediate coat and top coat lines and help to design compact and highly efficient factory layouts for production.



Aircraft painting
Taikisha delivers automated aircraft painting systems aimed at enhancing productivity and quality, decreasing material requirements and reducing hazardous work by applying know-how cultivated in the automotive painting business. Taikisha can accommodate a wide variety of diversified aircraft components and parts.

83.3 billion yen
Composition ratio 34.4%

Paint Finishing System Division

The Paint Finishing System Division has employed advanced environment-related technologies based on Taikisha's core technologies cultivated in the HVAC business, such as exhaust treatment and air flow control. Taikisha also designs and constructs paint finishing systems for railway car and aircraft in recent years in addition to the mainstay automobile paint finishing systems that realize high painting quality and the enhanced use of energy-saving technologies.

Taikisha has received orders for the automobile paint finishing systems of automakers not only in Japan but also globally, including in the U.S.A., Europe, South Korea, China, and India, and currently boasts the top-level of market share in the world. Taikisha's services range from painting robots, conveyor systems, and paint supply systems, expanding to cover total plant engineering services from design to construction of the whole plant.

In recent years, Taikisha pursues increasing painting efficiency to 100% and is making efforts to minimize the amount of paint used and VOC emissions. In addition, Taikisha contributes to the energy management of clients.

Taikisha is conducting business globally as an environment engineering company in two core business fields: the Green Technology System Business (Building HVAC and Industrial HVAC) and the Paint Finishing System Business.

Taikisha boasts the highest ratio of overseas sales by far in the Japanese construction industry, with 35 consolidated subsidiaries in 18 countries (as of March 31, 2019).

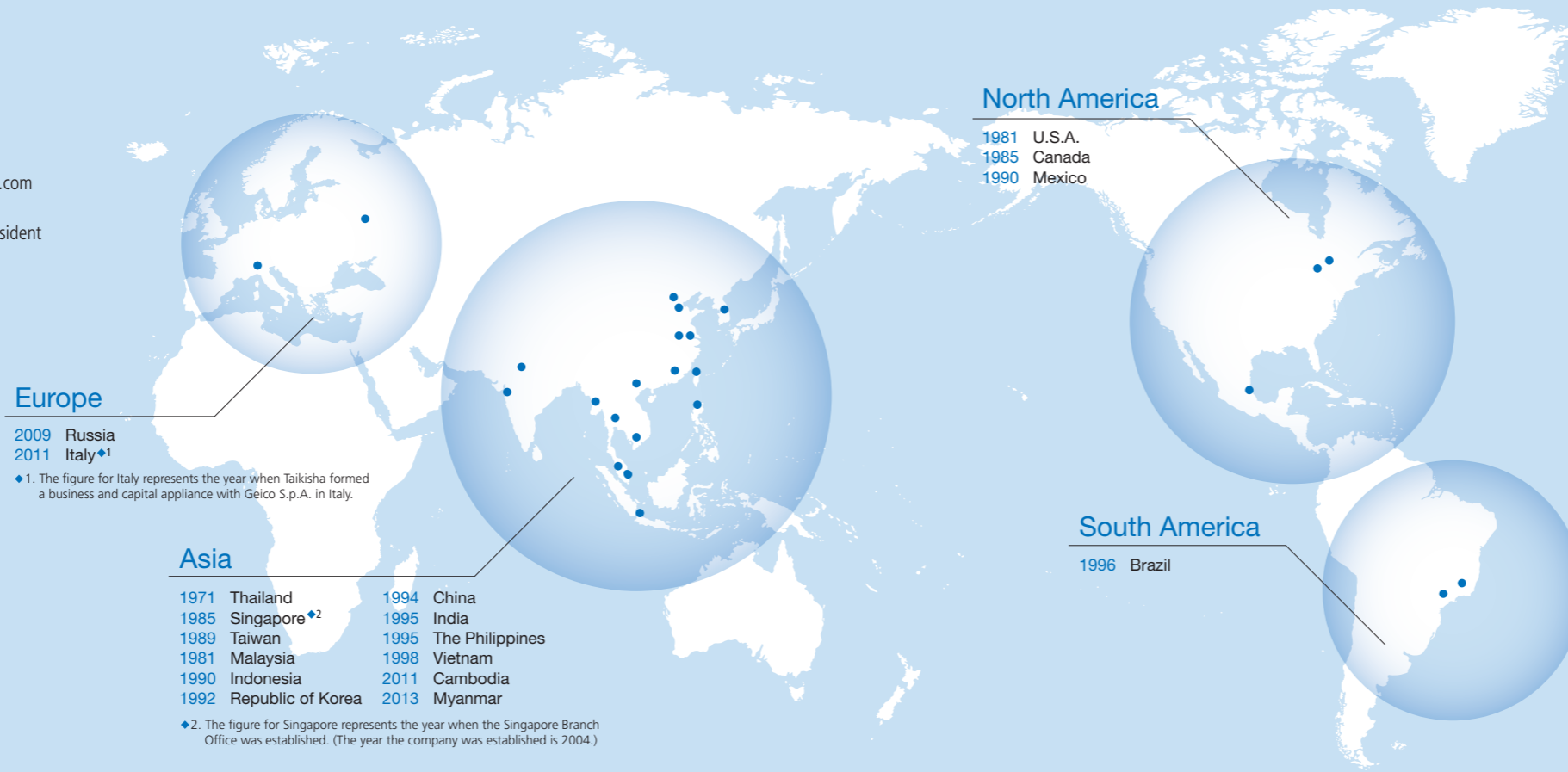
Given the accelerating shift of Japanese companies overseas, Taikisha's global network of group companies contributes considerably to attracting orders for overseas projects (the ratio of overseas sales was 47.1% for the fiscal year ended March 31, 2019).

Corporate Overview

Corporate name: Taikisha Ltd.
 Established: April 10, 1913
 Head office: Sumitomo Fudosan Shinjuku Grand Tower, 8-17-1, Nishi-Shinjuku, Shinjuku-ku, Tokyo 160-6129, Japan
 Website: <https://www.taikisha-group.com>
 Representative: Koji Kato, Representative Director, President
 Capital stock: 6,455.17 million yen
 Number of employees: 4,829 (consolidated), 1,472 (non-consolidated) (As of March 31, 2019)

Global Network

(the figures represent years when group companies were established)



Group companies

Japan
 San Esu Industry Co., Ltd.
 Nippon Noise Control Ltd.
 Tokyo Taikisha Service Ltd.

Europe
 Geico S.p.A.
 J-PM Systems GmbH
 Geico Russia LLC

Asia
 Wuzhou Taikisha Engineering Co., Ltd. (Head Office)
 Beijing Wuzhou Taikisha Equipment Co., Ltd.
 Geico Painting System (Suzhou) Co., Ltd.
 Shanghai Dongbo-Taiki Conveyor System Manufacturing Co., Ltd.
 Tianjin Dongchun-Taiki Metal Finishing & Conveyor System Manufacturing Co., Ltd.
 Tianjin Taikisha Paint Finishing System Ltd.
 Taikisha Hong Kong Ltd.
 Taikisha (Taiwan) Ltd.

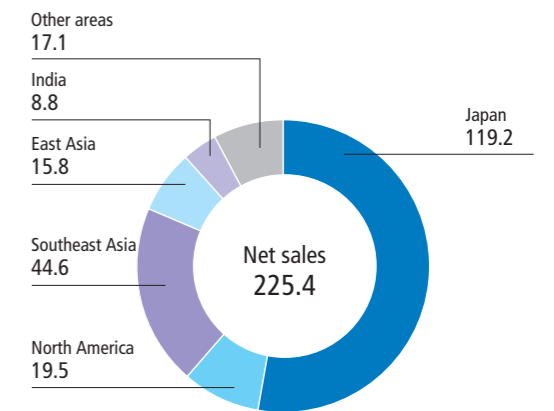
Taikisha Korea Ltd.
 Taikisha (Thailand) Co., Ltd.
 Taikisha Trading (Thailand) Co., Ltd. (Head Office)
 Token Interior & Design Co., Ltd.
 Thaiken Maintenance & Service Co., Ltd.
 TKA Co., Ltd.
 BTE Co., Ltd.
 Taikisha Vietnam Engineering Inc.
 Taikisha (Cambodia) Co., Ltd.

Taikisha Philippines Inc.
 Taikisha (Singapore) Pte. Ltd.
 Taikisha Engineering (M) Sdn. Bhd.
 Makiansia Engineering (M) Sdn. Bhd.
 P.T. Taikisha Indonesia Engineering
 P.T. Taikisha Manufacturing Indonesia
 Taikisha Myanmar Co., Ltd.
 Token Myanmar Co., Ltd.
 Taikisha Engineering India Private Ltd.

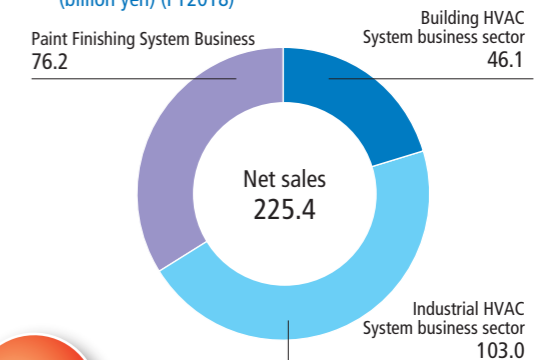
Geico Paint Shop India Private Ltd.
The Americas
 TKS Industrial Company
 Encore Automation LLC
 J-CO America Corporation
 Taikisha Canada Inc.
 Taikisha de Mexico, S.A. de C.V.
 Taikisha Mexicana Services, S.A. de C.V.

J-CO Mexico, S. de R.L. de C.V.
 Taikisha do Brasil Ltda.
 Geico Brasil Ltda.

Consolidated net sales by region (billion yen) (FY2018)



Consolidated net sales by business segment (billion yen) (FY2018)



POINT
Net sales of the automobile paint finishing system business
 Taikisha is a global environment engineering company that boasts **Japan's No. 1 position and the world's No. 2 position** globally in terms of net sales of the automobile paint finishing system business.



Financial items

*Thousands of U.S. dollars

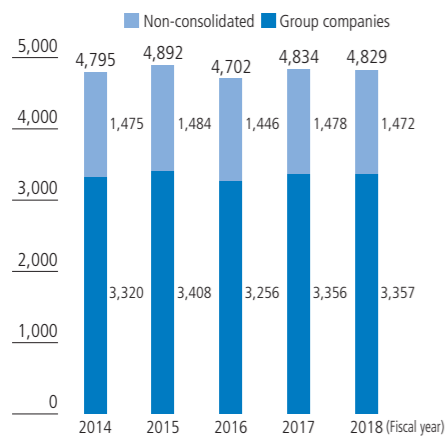
Unit	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2018	
Orders received	Million yen	164,738	118,667	165,638	195,268	195,920	189,026	187,311	221,764	218,323	219,844	241,889	2,178,989
Ratio of overseas orders received	%	41.6	41.1	57.7	56.7	61.9	52.6	49.8	54.3	50.4	46.2	46.3	46.3
Net sales	Million yen	167,306	117,234	141,160	189,716	216,051	185,421	183,648	212,424	200,604	231,898	225,402	2,030,472
Ratio of overseas sales	%	45.1	43.7	44.4	51.3	57.4	61.6	55.2	55.5	49.3	50.1	47.1	47.1
Operating income	Million yen	5,852	3,189	5,411	8,325	9,815	8,083	8,669	12,734	8,473	12,180	14,035	126,433
Ratio of operating income to net sales	%	3.5	2.7	3.8	4.4	4.5	4.4	4.7	6.0	4.2	5.3	6.2	6.2
Ordinary income	Million yen	6,694	3,699	6,166	9,033	10,728	9,292	9,579	12,343	9,842	13,082	15,085	135,891
Ratio of ordinary income to net sales	%	4.0	3.2	4.4	4.8	5.0	5.0	5.2	5.8	4.9	5.6	6.7	6.7
Profit attributable to owners of parent	Million yen	3,074	3,666	3,703	4,372	6,200	4,155	6,084	7,084	6,305	7,254	8,841	79,649
Return on equity (ROE)	%	5.0	6.0	5.8	6.6	8.7	5.3	6.9	7.6	6.8	7.2	8.3	8.3
Total assets	Million yen	119,483	121,894	132,698	156,108	163,014	166,680	188,283	189,566	199,024	215,392	223,080	2,009,551
Net assets	Million yen	61,441	66,263	66,978	69,602	78,537	84,712	99,669	95,921	100,184	110,650	113,649	1,023,781
Equity ratio	%	48.9	52.3	48.8	42.9	46.2	48.3	50.4	48.0	48.1	48.8	48.8	48.8
Cash flows from operating activities	Million yen	1,537	1,077	5,869	1,812	10,772	7,532	1,401	7,301	6,679	9,337	9,159	82,511
Cash flows from investing activities	Million yen	-4,021	2,105	-5,838	-2,336	-1,308	-1,194	-3,900	-328	-6,505	1,390	-2,830	-25,456
Cash flows from financing activities	Million yen	-1,526	-1,995	92	-361	-2,569	-3,290	1,264	-7,409	-5,286	-885	2,396	21,592
Research and development expenses	Million yen	829	668	744	784	800	876	822	889	946	1,024	1,084	9,767
Depreciation	Million yen	1,055	1,107	1,122	1,239	1,211	1,290	1,257	1,348	1,290	1,398	2,030	18,287
Purchase of property, plant and equipment and intangible assets	Million yen	-1,377	-826	-783	-1,398	-3,130	-1,734	-1,247	-1,941	-1,807	-3,832	-4,140	-37,298

Per share data:													*U.S. dollars
Profit	Yen	83.60	99.72	100.73	119.52	170.99	116.08	172.64	204.35	183.16	212.40	259.53	2.34
Net assets	Yen	1,590.08	1,734.49	1,762.28	1,834.99	2,087.16	2,282.56	2,690.76	2,633.60	2,799.30	3,087.51	3,193.18	28.76
Annual dividend	Yen	30	30	30	35	50	45	52	67	70	75	91	0.82
Dividend payout ratio	%	35.9	30.1	29.8	29.3	29.2	38.8	30.1	32.8	38.2	35.3	35.1	35.1
Total return ratio	%	36.2	30.2	29.8	40.0	44.8	80.5	30.2	63.8	54.0	42.2	35.1	35.1

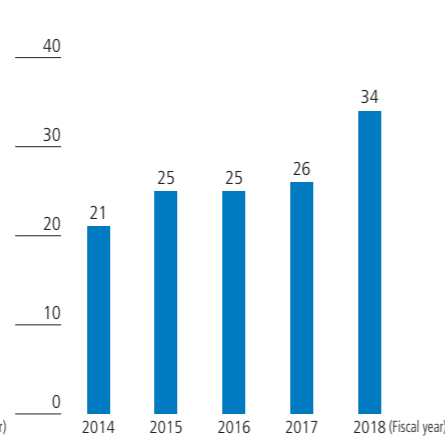
* The U.S. dollar amounts are translated on the basis of nearly 111.01 yen to 1 dollar, the rate of exchange prevailing at March 31, 2019.
 * As the company has been applying the Partial Amendments to Accounting Standard for Tax Effect Accounting (Accounting Standards Board of Japan (ASBJ) Statement No.28, February 16, 2018) since FY2018, its consolidated financial position in FY2017 is based on indicators, etc. calculated after retrospectively applying the said accounting standard, etc.

Non-financial items

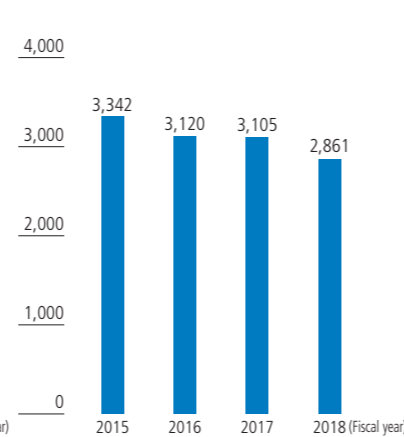
Number of employees (unit: persons)



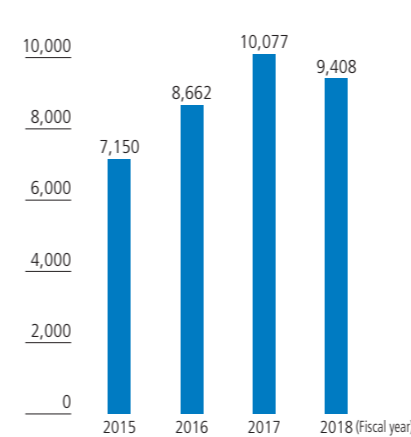
Education per employee (unit: hours)



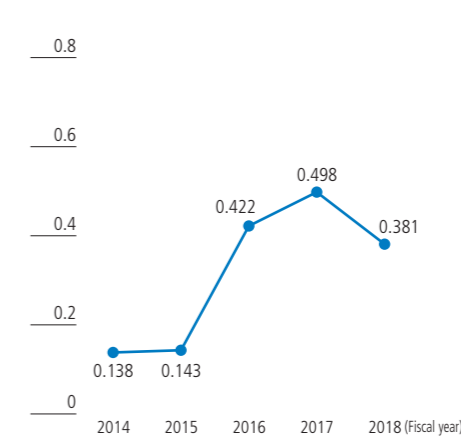
CO₂ emissions (unit: t-CO₂)



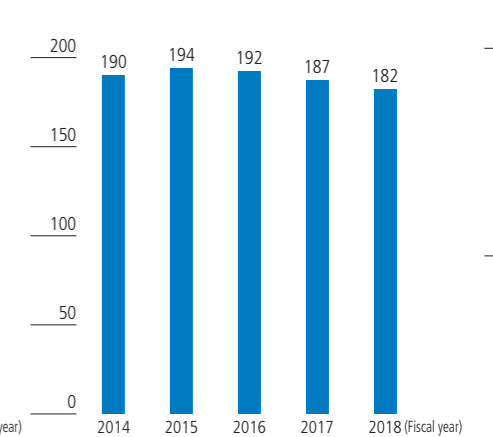
Amount of waste discharged (unit: t)

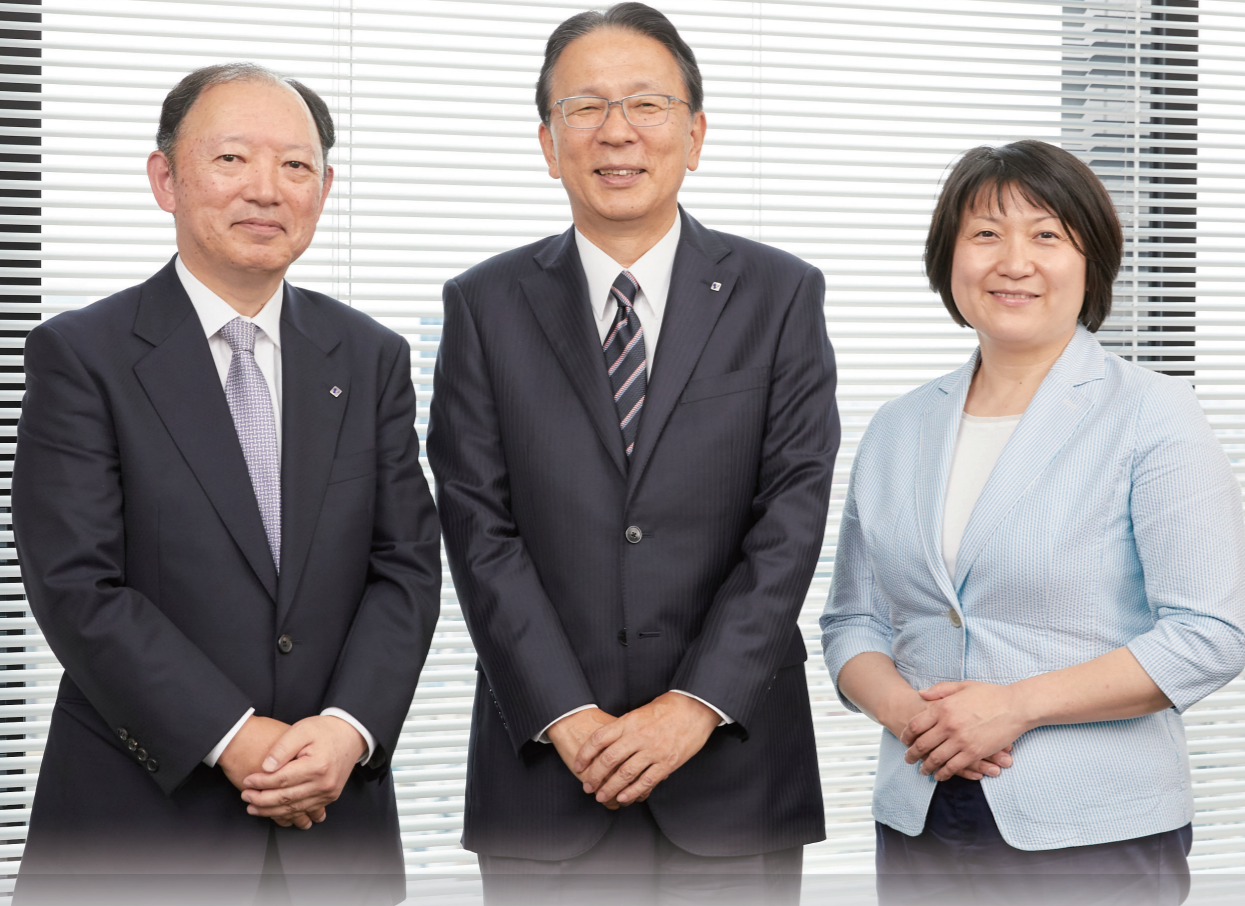


Frequency rate (unit: %)



Number of patents obtained (unit: patents)





Yasushi Nakajima

Director, Executive Corporate Officer, Chief General Manager, Green Technology System Division, Taikisha Ltd.

Joined Taikisha Ltd. in 1982. Held the positions of Senior Corporate Officer, Vice General Manager in charge of technology, and Senior General Manager, Engineering Supervisory Dept., Green Technology System Division and Senior General Manager, Global Business Management Dept.; and Managing Corporate Officer, Vice General Manager, Green Technology System Division before assuming the position above in April 2019.

Koji Kato

Representative Director, President Corporate Officer, Taikisha Ltd.

Joined Taikisha Ltd. in 1978. Held the positions of Director, Managing Corporate Officer, Chief General Manager, Green Technology System Division, and General Manager, Engineering Planning Dept., Green Technology System Division; Director, Executive Corporate Officer, Chief Executive, Administrative Management Headquarters and in charge of CSR; and Representative Director, Executive Vice President Corporate Officer, in charge of Administrative Management Headquarters before assuming the position above in April 2019.

Makiko Akabane

Director of CSR Asia Japan office

Founded CSR-related divisions at Starbucks Coffee Japan, Ltd., salesforce.com Co., Ltd., and Nikko Asset Management Co., Ltd. Also serves as Advisor to Network for Promoting Collaboration between NGOs and Companies of the Japan NGO Center for International Cooperation (IANIC), Director of WaterAid Japan, etc.

Taikisha's approach to CSR

—For sustainable growth of the company and society—

Going forward, Taikisha will work on developing the foundations for sustainable growth, by placing “technology,” “environment,” and “human resources” at the core of its new Mid-Term Business Plan. In this context, the link between business activities and Corporate Social Responsibility (CSR) will become more important.

Ms. Makiko Akabane, specializing in CSR practice at global enterprises, was invited to engage in dialogues with Koji Kato, President of Taikisha Ltd. and Yasushi Nakajima, Chief General Manager of Green Technology System Division, Taikisha Ltd.

New Mid-Term Business Plan based on CSR

Kato: I used to be in charge of Taikisha's early CSR Reports while serving as Chief Executive of the Administrative Management Headquarters. Compared to those days, I think the general public's interest in CSR has grown, and the situation has substantially changed nowadays. In today's discussion, I would like to ask you about various matters such as the direction of CSR.

Akabane: Having read Taikisha's CSR Report, I got the impression that it is a very serious-minded company and learned that it is conscientiously working on CSR. Also, Taikisha is distinctive in that half of its total sales is generated overseas, so I would like to ask questions from this perspective as well. Firstly, what are your thoughts on the Mission Statement, which is the origin of CSR at Taikisha?

Kato: Our Mission Statement “Customers First” is a concept that is targeted not only at our direct clients but at society in general. The Statement is intended to make all of us understand our mission to help improve value for all stakeholders and share and execute this mission on a Group-wide scale. Taikisha's CSR activities stem from its stance on resolving social issues through such practice and realizing sustainable growth together with society.

Akabane: How does the new Mid-Term Business Plan launched recently relate to CSR?

Kato: Our long-term vision presented in this new Mid-Term Business Plan is “Aim to become a global corporate group that creates an optimal environment through unique engineering,” and CSR is interpreted in the context of resolving issues to fulfill this vision. We have helped resolve clients' issues based on air-conditioning technology over many years, but if you take a look back, it is fair to say that they were mainly technical aspects. In regards to resolving other issues, how could we get our point across to members of Taikisha, and how should we declare our commitment publicly in the form of a business plan? In the new Mid-Term Business Plan, which addresses CSR from three angles, namely, “technology,”

“environment” and “human resources,” we have decided to roll out CSR activities from the viewpoint of what we should do to resolve the issues as required. Another agenda is to tackle these issues as a requirement for expanding our businesses globally at the same time.

Akabane: In a nutshell, Taikisha treats its engineering capabilities and environment-responsive capabilities, as well as the development of human resources that support them, as the sources of growth, and places importance on them not only in Japan but also globally. I think that is wonderful. On the subject of the environmental field, given that “climate change” has been at the top of the list of environmental problems in Asia over the past 10 years, followed by “energy” and “water,” the strengths of Taikisha's businesses seem to coincide with the global consciousness of issues.

Kato: In that sense, issues in the environmental field directly relate to Taikisha's businesses, and members of Taikisha are gaining a better understanding and awareness of such issues. However, what should we do to make each and every employee gain a sense of ownership of CSR themes in general? We are still considering as to how we could get our point across to members of Taikisha, not to mention the public.

Akabane: This problem is common among companies, and there is



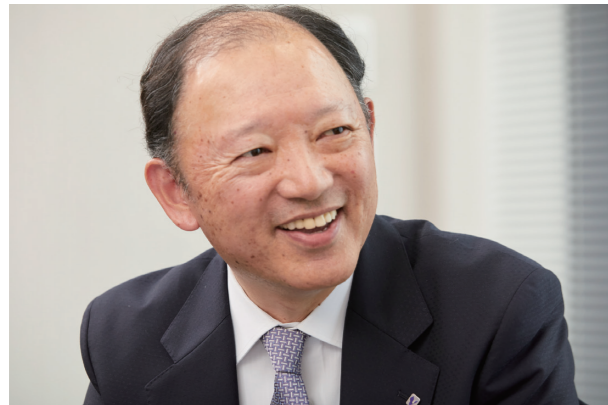
Corporate Philosophy

1. Establish a company which can continuously grow and contribute to society:

- (1) We strive to grow continuously by enhancing our added values; thereby, bringing prosperity to our customers and business partners as well as to our employees.
- (2) We strive to create rich environment and evolve the industrial society through our engineering expertise that meets the needs of the society, in order to achieve our ultimate objective to contribute to the society.

2. Establish an attractive company:

- (1) We aim to be a motivation-oriented company where the employees can demonstrate creativity and vitality through their work responsibilities.
- (2) We aim to be a company having the corporate culture in which all employees work in close cooperation to achieve the goals of the company, with the spirits of mutual trust, collaboration and rationality.
- (3) Through the expansion of our expertise in “Energy, Air, and Water”, we aim to become a unique company in all aspects of corporate management, including engineering, marketing, and human resource development.



no correct answer. That said, the top management's commitment is indispensable. It is important to work on young employees who form the majority of the organization to make them empathetic. This

involves winning the hearts of the younger generation who are highly sensitive to such themes as CSR and resolution of social issues, and meanwhile, the top management must win over the remaining mid-level employees by instilling understanding and awareness from top to bottom. More specifically, this means education and communication, and while there are still few real-world examples, it would be effective to reflect them in personnel assessment to a certain extent.

Kato: To a certain extent, initiatives to work on young employees—as far as those seen in examples of other companies—are being executed at Taikisha as well. These include initiatives to tackle social issues through volunteer activities.

Akabane: Such volunteer activities can be utilized to sow the seeds, as a trigger for employees to take ownership of CSR, and at the same time, relate CSR to clients' needs in business, say, in response to climate change and global warming.

that it would be even better if the "materiality" included items that are characteristic of Taikisha; doing so would also make Taikisha's material matters more convincing from its employees' point of view.

Kato: I see. As one of our efforts to build the framework for turning Taikisha into an ideal company, we will review "materiality" by taking your perspective into account. In the remaining part of the discussion, Yasushi Nakajima will take over to comment as a person in a position closer to the sites; he is the Director in charge of the Green Technology System Business, which is one of the two core businesses of Taikisha, namely, the Green Technology System Business and the Paint Finishing System Business.



What kind of environmental contribution is unique to Taikisha?

Akabane: To begin with, please elaborate on the strengths that are specific to Taikisha in terms of environmental contribution.

Nakajima: The business objective of the Green Technology System Division is to provide the optimal indoor environment in such places as manufacturing facilities, research facilities, and residential space by applying energy-, air- and water-controlling technologies that Taikisha has nurtured since its foundation. Notably, a huge amount of electricity is consumed in the operation of air-conditioning systems. Our expertise is truly put to the test and validated when we provide a solution to this issue by combining various energy-saving technologies in a way that is best suited to the specific situation. Methods of curbing energy consumption include, for example, executing real-time optimal control of heat source systems while utilizing AI and IoT based on simulations, creating a comfortable temperature zone exclusively in areas where people are working at the production site, effectively utilizing waste heat from production facilities, using geothermal heat whose temperature is stable throughout the year, and creating cooling water for air conditioning from cool outdoor air during winter and using it as a cooling source. In addition, we have an edge in environmental impact reduction technologies for the removal of volatile organic compounds (VOCs) that we have cultivated through industrial HVAC and automobile paint finishing to deal with air pollutants.

Akabane: Talking about air pollution, China's air pollution—claimed to have become increasingly grave at one point—seems to be getting better nowadays due to tougher environmental regulations.

Nakajima: As a countermeasure against air pollution, a system we developed called the direct fired regenerative thermal oxidizer (RTO) is available from us. The adoption of RTO, a system that directly burns and reduces VOCs released by industrial devices, has become widespread among Chinese companies. This is an example of Taikisha's technology contributing to the rectification of air

pollution in China.

Akabane: Last year's CSR Report states that the VOC treatment efficiency of RTO is 99% or higher. This reflects outstanding technological capabilities. Shouldn't this be showcased more aggressively as a solution demanded by the general public?

Nakajima: As pointed out, we intend to showcase our technological capabilities more proactively in the future. VOC treatment efficiency of 99% is a numerical target that we were committed to fulfilling. Existing VOC removal devices have a high combustion temperature at 830°C, so lowering it by almost 100°C makes a significant contribution to energy saving as well. We will not only further boost our technological capabilities and improve performance in terms of environmental impact reduction, but also make improvements that will make clients happy in terms of running costs.

Akabane: When you visit China and Southeast Asia, you see laborers working without wearing goggles or masks due to the heat in yet-to-be-modernized dye works and chemical plants. As health hazard risks are high at sites where VOCs are released, the widespread adoption of Taikisha's solutions at such plants will make their working environment much better.

Nakajima: In emerging countries, where industrial progress is underway and local firms are engaged in manufacturing, we are eager to expand in that sense, being a company that is capable of meeting their needs in many aspects, including energy as well as removal and disposal of hazardous substances as mentioned before.

Akabane: What kind of strengths are leveraged in new businesses?
Nakajima: Unsurprisingly, the air-conditioning-related business forms the core of the Green Technology System Division. By taking advantage of the air-conditioning technology that we have cultivated in this business, we are rolling out a plant factory business as a new initiative. Our temperature and humidity control technology, as well as our cleaning technology for curbing the outbreak of live bacteria,

Long-term Vision

"Aim to become a global corporate group that creates an optimal environment through unique engineering"

Technology	Aim to become an engineering group that meets the diverse needs of clients through energy-, air- and water-based technology.
Environment	Solve the clients' environmental issues with innovative solution technology and contribute to passing on the rich global environment to future generations.
Human Resources	Respect the individual's creativity and diversity, and value the corporate culture which allows employees to experience one's growth and the joy of working.

Approach to CSR through technology, environment, and human resources

Kato: Among the three pillars for fulfilling our long-term vision, namely, "technology," "environment," and "human resources," we are currently putting our efforts especially into "human resources." Going forward, Taikisha will need to expand its business scope for sustainable growth and will be required to adapt to its new business scope by developing an organization that leverages the capabilities of its diverse human resources and brings out the best in them. In conjunction with such efforts, we intend to enhance "governance"—including promoting corporate governance and compliance—and thereby help increase corporate value.

Akabane: Taikisha has specified the material matters in promoting its CSR activities ("materiality") and designated 10 items from the four

aspects of Governance, Quality, Environment, and Labor Practices. The fact that one of these items is "human resource development" indicates that Taikisha is a company that places importance on "human resources." On the topic of recent trends in global enterprises relating to materiality, there has been a tendency to narrow down the number of designated items.

Kato: Are there much fewer items?

Akabane: Yes. There is a growing tendency among overseas companies to present "materiality" in a way that it shows what kind of company it is and what kind of business it operates, while its commitment reflects the extent of what they will do within the bounds of the narrowed-down "materiality." For this reason, I think



are advantages that no one but Taikisha has. Plant factories enable stable mass production and supply of safe vegetables even at times of bad weather and even in locations not suited to vegetable growth. While continuing to establish automation and unmanned operation technologies, we will work on the development of high-efficiency LED lighting, among others, and build a structure that is capable of making comprehensive proposals to major food manufacturers and clients in the logistics industry. Going forward, we intend to expand

overseas, including China and Southeast Asia, on the back of our track record in Japan.

Akabane: Vegetable production at plant factories also has a strong connection with the themes of the Sustainable Development Goals (SDGs) such as climate change, hunger, poverty, and sustainable production and consumption. I hope Taikisha nurtures this, given that it is a field subject to growing demand worldwide.

What “Customers First” means in the Green Technology System Division

Akabane: On the subject of the Mission Statement “Customers First” explained by President Kato earlier, what is the Green Technology System Division’s understanding of its relationship with stakeholders?

Nakajima: To deal with clients directly, we have established customer service (CS) bases in the vicinity of our clients so that we can quickly respond to their requests on an ongoing basis even after handover. In the Division, clients’ needs and other such information obtained from these CS bases are reflected in the laboratories’ development themes and utilized in the integrated start-to-finish system encompassing all operations from design to construction and maintenance. This initiative, which has been executed widely centering on industrial HVAC in Japan, will be expanded into overseas projects, in which Taikisha has an edge.

Akabane: Even in other countries, it is rare to establish a front-line base that interacts with clients, rather than bringing the job to an end upon the completion and handover of the works. They will also serve as front-line bases for interface with society.

Nakajima: The “Customers First” concept is having an enormous

impact on Taikisha’s overseas expansion as well. The Green Technology System Division has been establishing overseas group companies in line with the overseas expansion of Japanese companies—our clients—and has endeavored to train local staff and subcontractors. Our history in this area is as long as 50 years, and under the Division, 12 business offices are currently active as overseas group companies. By applying the knowledge and experience of each business office that has been passed on from generation to generation in Taikisha over many years in combination with Japan’s environmental impact reduction technologies, we hope to expand our businesses in overseas locations.

On the other hand, for personnel assessment and treatment, I think there is an urgent need to formulate common standards and policies across the Taikisha Group, as many factors are currently at the discretion of the business offices. Going forward, we will build and develop a global human resource system, and at the same time, instill awareness of the Mission Statement and the long-term vision among the local staff so that we can have a shared awareness with them.

Akabane: Members of overseas group companies are motivated when the Japanese head office shows interest in them and makes efforts to bring about improvements. I think it is good to take such an initiative, as it lowers the employee turnover rate and raises their productivity in many cases. Now, let’s move on to the next topic: SDGs and environment, society, and governance (ESG).

Nakajima: We sense that clients’ awareness of SDGs and ESG has been growing significantly, and there has been an increasing number

of opportunities to explain Taikisha’s views to clients. In response, the Green Technology System Division’s plan for the current fiscal year is to give presentations to clients about energy-saving technologies and environmental impact reduction technologies, create a demonstration room in the laboratories where customers can experience the effects, and revamp the laboratories to propose construction methods and systems that help promote SDG themes and ESG management.

Developing human resources and creating a working environment for supporting value creation

Akabane: Lastly, please tell me about the development of human resources with the ability to understand and practice Taikisha’s value creation.

Nakajima: From a global perspective, it will be important to transfer authority to local staff. However, this involves problems in terms of compliance. Safety management and quality control aspects are already adequately ingrained into them, so they can demonstrate their strengths even against other local companies, but we still need to have a framework on the Japanese side to check and assess cost management and cost aspects. On the other hand, there are cases in which local staff educated by us have left their job in pursuit of better treatment. The challenge is to build their emotional attachment to the company and a sense of unity among them, including sharing of grand ideals, sense of fairness in personnel assessment, and sense of importance in society and status derived from the nature of work.

Akabane: Governance, risk management, and the employee turnover rate associated with job-hopping at overseas affiliates are common concerns for many companies. What about human resources development in Japan?

Nakajima: Three years ago, the Green Technology System Division

established an education unit called the Personnel and CAD Training Promotion Center, where we are promoting personnel’s skill advancement and career plan development. The Center conducts basic technical education and practical education targeted at personnel ranging from new recruits to employees in their tenth year of employment, and through job rotation based on their assessment, their on-site practical capabilities are enhanced. Also, as part of efforts to create a pleasant working environment, we are developing an automatic drawing software by introducing AI into 3D CAD especially for the purpose of saving labor in all processes from quotation to construction planning.

Akabane: Having learned about Taikisha from various angles today, I see that Taikisha is serious-minded and sincere, as per my first impression stated earlier, and I am impressed with its stance on engaging in competition while leveraging its strengths in the overseas arena. I look forward to seeing Taikisha proactively publicize many of its outstanding initiatives and advantages that are yet to be showcased publicly.

Kato & Nakajima: It was a great pleasure to talk with you today.



Taikisha's Mission Statement "Customers First" refers to the spirit of earning the ongoing trust of stakeholders (society in general). Since the foundation of Taikisha in 1913, this guiding principle has underpinned its efforts and was formulated anew in 1970 as the "Customers First" Mission Statement. Based on this mission statement, Taikisha will continue to create new value for others while striving to achieve its sustainable growth.

Environment surrounding Taikisha

Business opportunities

- Response to climate change
- Efficient use of resources and energy
- Development of industries and technological innovation
- Contribution to creating sustainable cities and communities
- Use of IoT/AI and technological innovations toward automation

Risk factors

- Fluctuations in private-sector capital investment
- Risks involved in overseas business operations
- Risks involved in intensified price competition
- Fluctuations in material prices
- Natural disasters/accidents

Internal issues

- Work style reform and human resource development
- Building a solid governance system
- Optimum quality control
- Stakeholder engagement

Capital invested

Financial capital



Manufactured capital



Human capital



Intellectual capital



Social/relationship capital



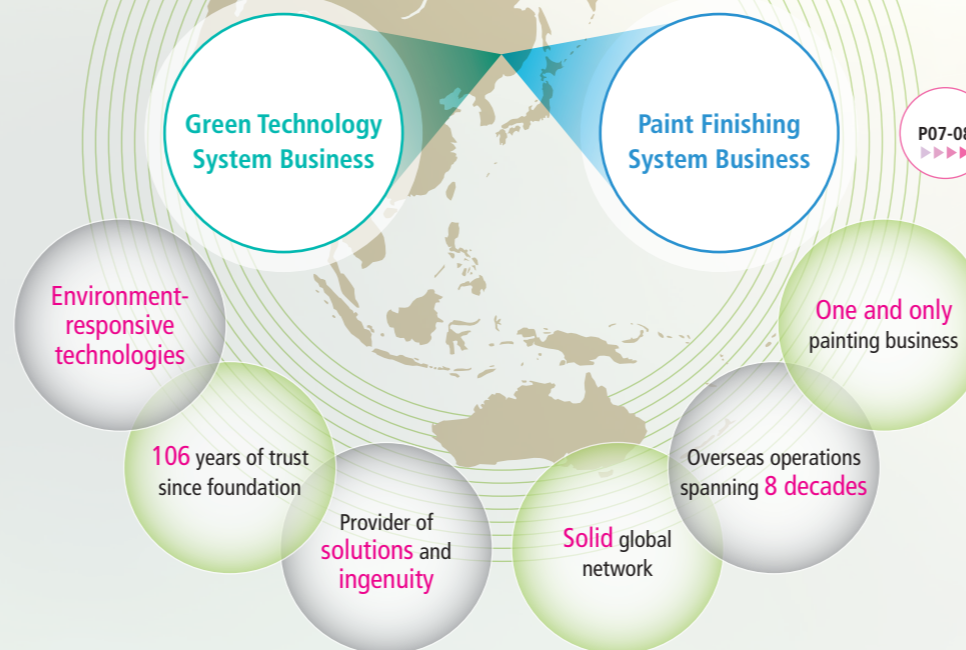
Natural capital



Optimal allocation of capital invested

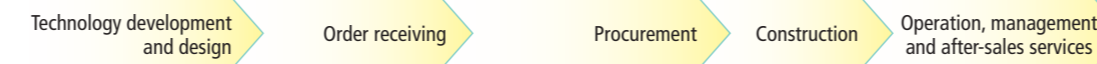
Business activities

Creating an optimal environment through unique engineering



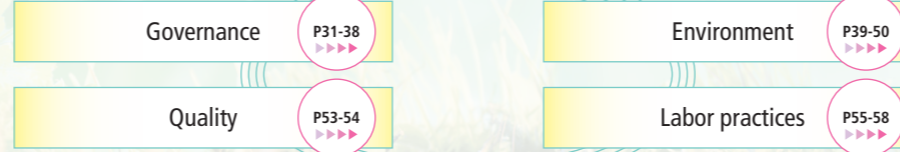
Capitalize on opportunities through business and manage risk factors

Value chain



CSR activities that support sustainable growth

Address internal issues based on our Materiality



Provision of value

Financial capital

- Maintain a solid financial foundation
 - Net assets of 113.6 billion yen
 - Equity ratio of 48.8%

Manufactured capital

- Respond to clients' needs by leveraging R&D facilities
 - Capital investment of 4.1 billion yen
 - 5 R&D facilities in Japan and overseas

Human capital

- Generate customer satisfaction
- Advancement of overseas local staff
 - Ratio of overseas employees: 65%
- Variety of education and training

Intellectual capital

- Hand down technology to the next generation
- Enhance technological platforms using IT tools
- Accumulate technologies and know-how overseas
 - Accumulated overseas sales of 2.0 trillion yen

Social/relationship capital

- Maintain a solid global network
 - 35 consolidated subsidiaries in Japan and overseas
- Abundant transactions
 - 1,878 clients and 1,796 subcontractors

Natural capital

- Reduce environmental impact
- Efficiently utilize resources/energy
- Use "air," a natural resource

*FY2018 results except for accumulated amount



For Taikisha's specific "value creation" initiatives, please see the special features on P21-26.

<p>Value Creation Feature</p> <p>P21 1</p> <p>Creating an environment that enables career advancement of employees Work style reform to improve productivity</p> <p>Improvement of On-site Operational Efficiency Promoted by On-site Support Team</p>	<p>Value Creation Feature</p> <p>P23 2</p> <p>Utilization of diverse human resources Management of human resources that support the global network</p> <p>Global Human Resource System</p>	<p>Value Creation Feature</p> <p>P25 3</p> <p>Value creation initiative with clients Enhancement of comprehensive development and quality assurance system</p> <p>Establishment of Technical Center in Zama City, Kanagawa Prefecture</p>
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Creating an environment that enables career advancement of employees

Work style reform to improve productivity

Improvement of On-site Operational Efficiency Promoted by On-site Support Team

In response to growing investments in the electronic parts industry and office buildings in the Tokyo metropolitan area, Taikisha Ltd. is enhancing productivity, flexibly allocating personnel between business divisions, increasing mid-career hiring and making other such efforts to ensure its construction capabilities, in order to capture high demand. Furthermore, with the aim of enhancing productivity, the Company is improving the efficiency of on-site operations and simplifying such operations through the promotion of IT, and encouraging experienced engineers to share their expertise and reducing the burden of on-site operations through the establishment of the On-site Support Team.

Background to establishment of On-site Support Team



While calls for work style reform are becoming louder in society, there have been issues relating to the work environment at sites in the construction industry, such as long working hours, less than two days off per week, and labor shortages.

The revised Labor Standards Act in April 2019 has placed a cap on overtime work in the construction industry as well, requiring the industry as a whole to introduce this cap in a phased manner by 2024.

In order to reduce the burden of on-site operations as a matter of urgency, Taikisha Ltd. conducted a survey by interviewing persons in charge of sites as to when and what kind of

operations are burdensome. Survey results revealed that many respondents had requested "help for processing the huge volume of clerical tasks" and "facilitation of the initial plan," leading to the launch of a new on-site support project in FY2018.

Taikisha's Mid-Term Business Plan announced in May 2019 sets forth its basic policy to "Build an attractive company and establish a solid management base." Also from this perspective, there is an urgent need to develop the work environment; Taikisha's policy is to continue making efforts to improve the environment for employees who work at the front line of sites, to fulfill its management strategies to "Secure human resources" and "Reinforce human capital and organizational capabilities through the utilization of diverse human resources."



Examples of support provided to Tokyo Branch Office

On-site IT support (tablet utilization)

Taikisha Ltd. has adopted application software that can digitize drawings in paper format so that recording, work signboard functions, optional photo ledger sheet output and other such tasks during site visits can all be completed by using a tablet. This has eliminated the need to carry bulky materials to the sites; the Company has even received reports that it has reduced the frequency of having to go back and forth between the office and the site.

In conjunction with this, the Company adopted a business chat tool in FY2018, enabling not only normal messaging functions but also easy communication by using a tablet, including sharing of information within a group at large-scale sites, and video calls and TV conferencing with remote locations. The On-site Support Team also provides support on how to utilize and operate the tablet as appropriate.



Support provided by drawing office

Assistance is provided for preparing on-site working drawings and arranging CAD operators. Furthermore, working drawings are checked on-site, in an effort to rectify inadequacies in drawings and prevent unnecessary costs from arising.

Support provided by the back-office center

Ledger sheet preparation, notifications to government offices, management of documents in storage, preparation/submitting of construction system ledgers and safety documents and other tasks that can be performed not only by engineering employees but also by other employees have been transferred to the back-office center in Tokyo Branch Office, thereby creating an environment in which the person in charge of the site can concentrate on construction supervision. Some of the tasks relating to photo albums for keeping a record on day-to-day work have been outsourced by linking them with an app on tablets to reduce on-site clerical tasks.



Site launch support provided by seasoned employees

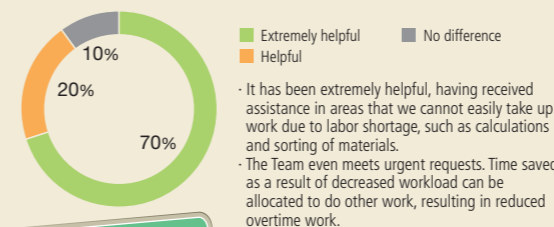
Employees with a wealth of construction experience prepare a sensible, streamlined construction plan and provide support to enable the appropriate assignment of personnel without variation in workload from employee to employee at the time of commencement of work. By keeping a close eye especially on sites where an inexperienced on-site manager is in charge and large-scale sites where construction has commenced only recently, as well as sites with a shortage of employees, seasoned employees hold meetings with each on-site manager to find out operations that require support in terms of process, quality and safety and provide assistance while setting priorities.

Reaction of Taikisha's members to On-site Support Team

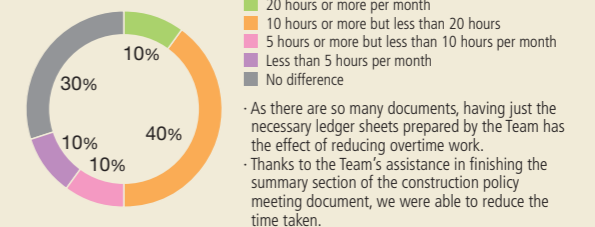
Effects of On-site Support Team [based on questionnaire survey results]

Taikisha conducted a questionnaire survey on managers of sites that actually received support after approx. one year from the full-scale launch of the Field Support Office.

Q How helpful has the Team been in your work?



Q How much has overtime work been reduced as a result of the Team's support?



Message from a site supported by the Team

Site launch team Seiichi Yoshikawa

I assist in on-site designing operations drawing on my own experience, and also strive to educate and provide advice to young employees. I would like to work with those at the site as a team so that I can help reduce on-site employees' work and their overtime work as much as possible.



On-site manager Kenji Takahashi

Mr. Yoshikawa has been very helpful, as he has been cooperating with us since examination in the early stages at the site. He assists in matters that cannot be addressed alone by staff in charge of the site and follows up on documents that require technical skills.

Message from the General Manager in charge



General Manager of Process Quality Dept., Tokyo Branch Office, Green Technology System Division Masahisa Ishikawa

In a working environment that changes from day to day, Taikisha's employees who manage the sites need to maneuver quality and safety processes instantly without making any mistakes so as to prevent subcontractors' workers from experiencing setbacks. In recent years, the mental/physical burden on on-site employees has tended to increase due to the heavy responsibilities placed on each and every one of them as a result of such factors as the extraordinary demand arising from preparations for the upcoming Olympic and Paralympic Games Tokyo 2020. Under these circumstances, we are engaging in activities by giving thought, especially to young people, as to what kind of support would put a smile on their faces while they are working. Since last fiscal year, we have stopped limiting our support to site launch and have been expanding our range of support, including lending a helping hand not just to large-scale sites but even to sole-employee-operated sites.

Utilization of diverse human resources

Management of human resources that support the global network

Global Human Resource System

Taikisha has been building its global network since the establishment of its first overseas affiliate in Thailand in 1971. Taikisha boasts a high ratio of overseas sales in the construction industry and has 35 overseas consolidated subsidiaries in 18 countries. Amid the acceleration of the overseas expansion of Japanese clients and the growth of local companies, Taikisha has adopted a global human resource system aimed at totally-optimized human resources management, in order to enhance its global network with ever-growing importance.



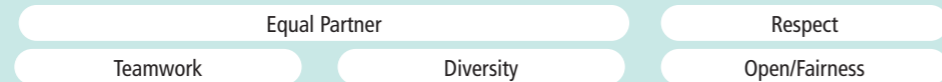
Taikisha's global human resource system



Historically, Taikisha's overseas group companies underwent growth independently of each other. Accordingly, many aspects of personnel affairs were at the discretion of each group company, and the human resource system concerning job grade, remuneration system and training had been built individually at each overseas affiliate. This resulted in lack of uniformity in the personnel assessment criteria and system, and from a long-term perspective, overseas affiliates faced such challenges as "having difficulty in securing recruitable human resources," "being exposed to the risk of labor disputes and demands for improvement in personnel treatment rules" and "lacking in core human resources."

Amid the ever-increasing presence of overseas group companies on the back of the rising ratio of overseas sales, Taikisha has been considering and adopting a global human resource system, having recognized that even in personnel affairs, the conventional individual approach taken by overseas group companies is no longer applicable and that it is important to utilize human resources and properly assign personnel at the global level and formulate standards and policies for the Taikisha Group as a whole.

Keywords of global human resource principles



Purpose of system adoption

- Widespread acceptance of the Mission Statement (values)
- Sense of unity at the global level
- Countermeasure against high employee turnover rate and recruitment difficulties
- Reduction in complaints related to personnel affairs
- Clear indication of career path and system with a high degree of fairness
- Sharing of ideal types of human resources
- Loyalty
- Training of leaders
- Promotion of overseas local staff to managerial positions
- Higher motivation

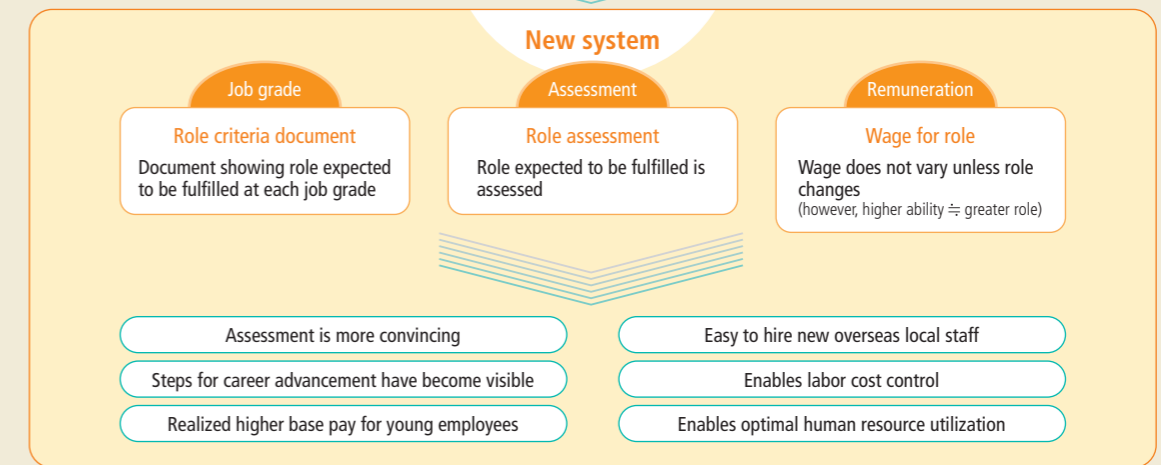
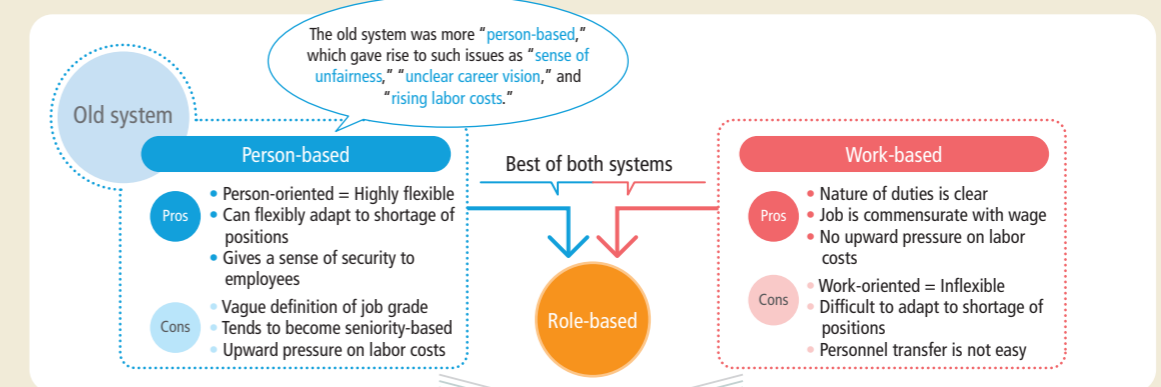
Secure human resources required for sustainable growth both in terms of quality and quantity

Example of system adoption: Thai affiliate — Taikisha (Thailand) Co., Ltd.

Upon the adoption of the global human resource system, Taikisha (Thailand) conducted interviews on-site, which revealed issues related to personnel affairs such as "undefined roles and career vision" and "the sense of unfairness in personnel assessment and remuneration system."

The global human resource system in Thailand was designed in consideration of the local staff, taking into account the national trait of Thai people, in addition to the business strategy targets and interview results. Specific elements of the system include the meticulously-planned personnel assessment system, training/development of human resources, remuneration commensurate with work and job grade, and career paths that motivate local staff, facilitate their growth and increase their retention rate. Especially with respect to job grade and personnel assessment, a fair and easy-to-understand system was sought by replacing the conventional ability-based (person-based) system with a more role-based (work-based) system.

Going forward, the Personnel Administration Dept. of Taikisha (Thailand) will play a central role in examining training and capacity development programs that meet the criteria for each skill, and will put efforts into improving leadership and management skills in collaboration with other departments.



Message from General Manager of Personnel Administration Dept., Taikisha (Thailand) Co., Ltd.



General Manager of Personnel Administration Dept. of Taikisha (Thailand) **Natcha Fangkamdee**
 As the person responsible for personnel affairs at Taikisha (Thailand), I would like to help instill the management's policies and corporate philosophy in the company by properly implementing the global human resource system and expanding it so that it would become the standard of all group companies. Personnel operations should be consistent with management strategies and management goals.
 Rapid changes in the global economy are giving rise to new technologies and business models by the day. Such developments provide members of the personnel department and organizations like us with the opportunity to take on new challenges, as well as the chance to break out of the status quo.
 I have high hopes for the personnel department's functions to not only pursue profits but also contribute to the growth and happiness of employees and provide a sustainable system.

Value creation initiative with clients

Enhancement of comprehensive development and quality assurance system

Establishment of Technical Center in Zama City, Kanagawa Prefecture

In February 2019, Taikisha opened the Technical Center in Zama City, Kanagawa Prefecture, as the new technological development hub of the Paint Finishing System Business. Having revamped and expanded part of the former Zama Technical Center and integrated it with the former Hirakata Development Center in Hirakata City, Osaka Prefecture, Taikisha will aim to further enhance its comprehensive development capabilities and quality assurance system and turn the Technical Center into an "open research institute" as a demonstration and public relations venue for clients.

Background to and objective of the establishment of the Technical Center



Taikisha has long been focusing its efforts on technological development in the field of paint finishing systems, in order to properly capture new demand for environment-responsive, energy-saving and quality improvement technologies, etc. in the automobile paint finishing market and promptly provide products and services with an overwhelming advantage. Now that the new Technical Center has been established, Taikisha has realized a comprehensive development and quality assurance system that can meet clients' needs more consistently.

On the other hand, Taikisha will also work on the development of products to enter into new markets other than automobiles. Especially for automated aircraft and railway car painting, which is

regarded as an important field with future growth potential, Taikisha has built facilities for conducting experiments on automated systems for aircraft and railway adjacent to the Center.

The integration of the development department's hubs has not only facilitated collaboration with sales departments but also enabled Taikisha to respond to clients in a more timely manner. On top of this, Taikisha will strive to improve development efficiency while sharing information on clients' needs with partner companies serving as the source of brainpower. With the development of a comprehensive paint finishing system consisting of a set of equipment and robots, Taikisha is able to conduct research for a total system efficiently.

By gaining clients' understanding of Taikisha's newly-developed cutting-edge technologies through physical presentation, Taikisha has received requests to look into their adaptability to clients' paint finishing lines and inquiries for joint development, etc. Going forward, Taikisha intends to fully utilize the Center also as a place of communication with clients.

Sustaining technological advantage of paint finishing systems and expanding into new fields

- Paint technologies that improve coating efficiency by controlling paint at the droplet level
- Development of a super energy-saving paint booth
- System development utilizing IoT and AI
- Experiment facilities for automated systems for aircraft and railway cars

Role as a place for communication

- Introduction to Taikisha's new technologies
- Verification in the presence of clients according to their needs
- A place for holding meetings on the future direction of paint technologies
- A place for education of young engineering employees (promoting their understanding by utilizing actual facilities)

Column

Environmentally-friendly laboratory

The Technical Center consists of the Planning zone, in addition to three facilities, namely, the R&D building, Quality inspection laboratory, and Pre-Assembly factory.

With solar panels installed on the rooftop of the R&D building, the Center utilizes renewable energy as an "environmentally-friendly laboratory." In order to make energy trends obvious at a glance, the amount of electricity generated through the system is displayed on the monitor in the reception lobby, along with electricity usage.

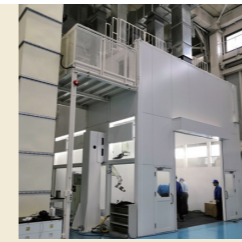


Solar panels installed on the rooftop

Use of electricity sourced from solar power generation

The generated electricity is used for lighting, etc. in the Planning zone and the R&D building

Main Facilities

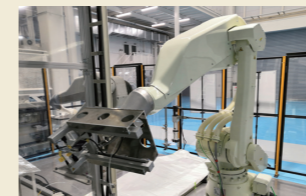


Comprehensive test area for paint booths

This area is where Taikisha performs comprehensive evaluation, including smudge evaluation on paint systems caused by the behavior of paint mist in the paint booth and irregular airflow during the robotized painting process under varying air supply conditions, performance evaluation of exhaust gas treatment and dust removal systems, and maintainability of the systems. Taikisha pursues the energy reduction of HVAC for paint booths, which consumes a particularly high level of energy in the painting process.

Comprehensive test area for MRO automation system

This area is equipped with a system for testing the automation of the paint finishing process in airframe maintenance. Among the maintenance tasks that are currently performed manually, the aircraft underbody polishing task is particularly burdensome. By automating the polishing task, Taikisha aims to reduce its burden, improves the working environment, and reduces the time taken to complete the process.

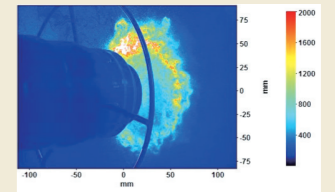


Test area for masking-free painting

This area is where Taikisha tests a masking-free system that can paint letters and graphics through the controlled, particle-by-particle discharge of paint particles. Dispersion of paint mist does not occur during the drawing process, which eliminates the need for full-fledged paint booths and is expected to substantially reduce equipment cost and energy consumption.

Test area for paint finishing systems' performance

This area is where Taikisha verifies and improves the performance of paint finishing systems on an ongoing basis by using systems for analyzing the behavior of particles discharged from paint finishing systems, as well as precision measurement and analysis systems including computerized thermo-fluid simulation tools. Through such efforts, Taikisha is aiming to ensure painting quality and build paint finishing systems with minimal environmental impact, including energy-saving systems.



Other facilities



As before, the Quality inspection laboratory continues to conduct paint tests by using painting robots and various painting equipment based on painting simulations under varying painting conditions using a wide variety of car bodies and paints. Paint booths, flash-off devices, and ovens make it possible to pursue the optimal system for the paint facility as a whole.

The Pre-Assembly factory assembles robot systems on a trial basis and performs operation check tests in order to check their functionality, operation, and quality before shipment.

Message from the Senior General Manager



Makoto Watanabe, Senior General Manager of Technical Center, Paint Finishing System Division

Since the opening of the Center, we have been asked by an increasing number of clients to introduce our new technologies to them individually (15 inquiries in five months since the opening of the Center). Notably, we have even had clients wanting to use the Center as a place for examination and preliminary discussion upon introducing their new paint finishing line. For joint development, we are already working on a number of projects. For the immediate future, we plan to install new next-generation booths and next-generation ovens and conduct polishing and painting demonstration tests using newly-developed products. Going forward, we intend to fully utilize the Center as a venue for timely development and verification in the presence of clients to win contracts and thereby help increase the orders received.

Taikisha's Materiality

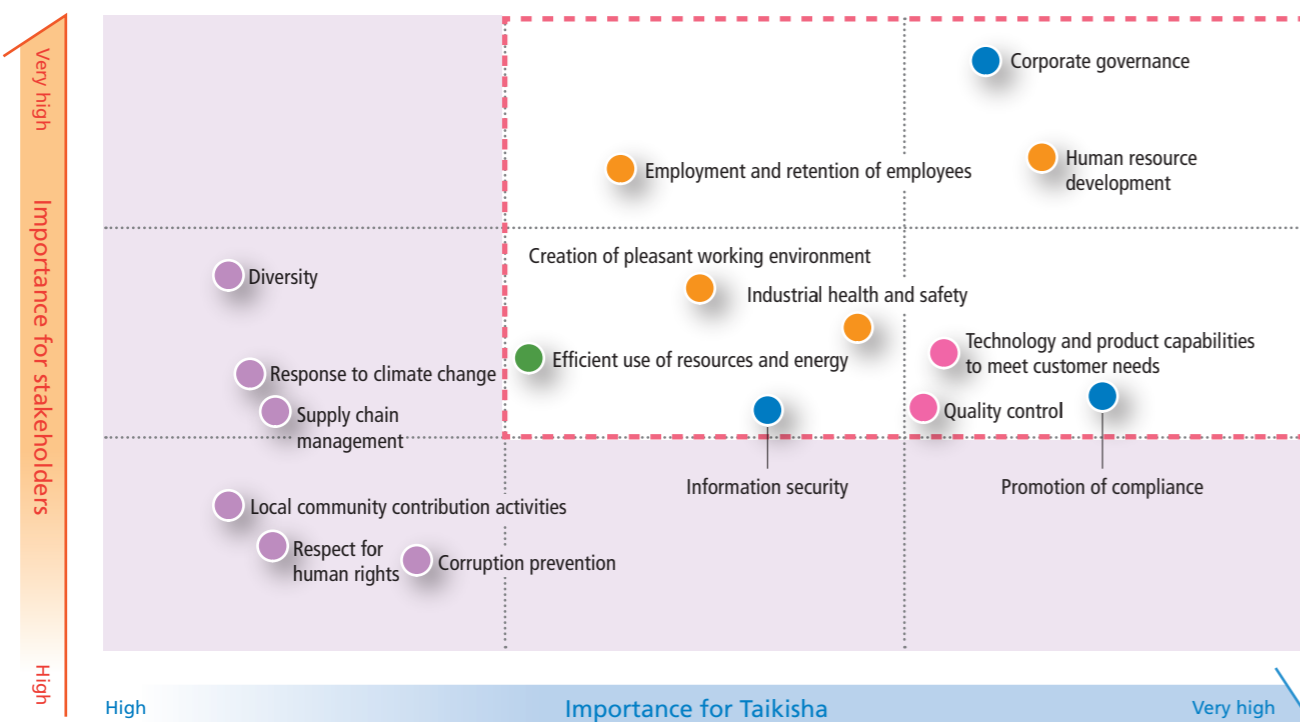
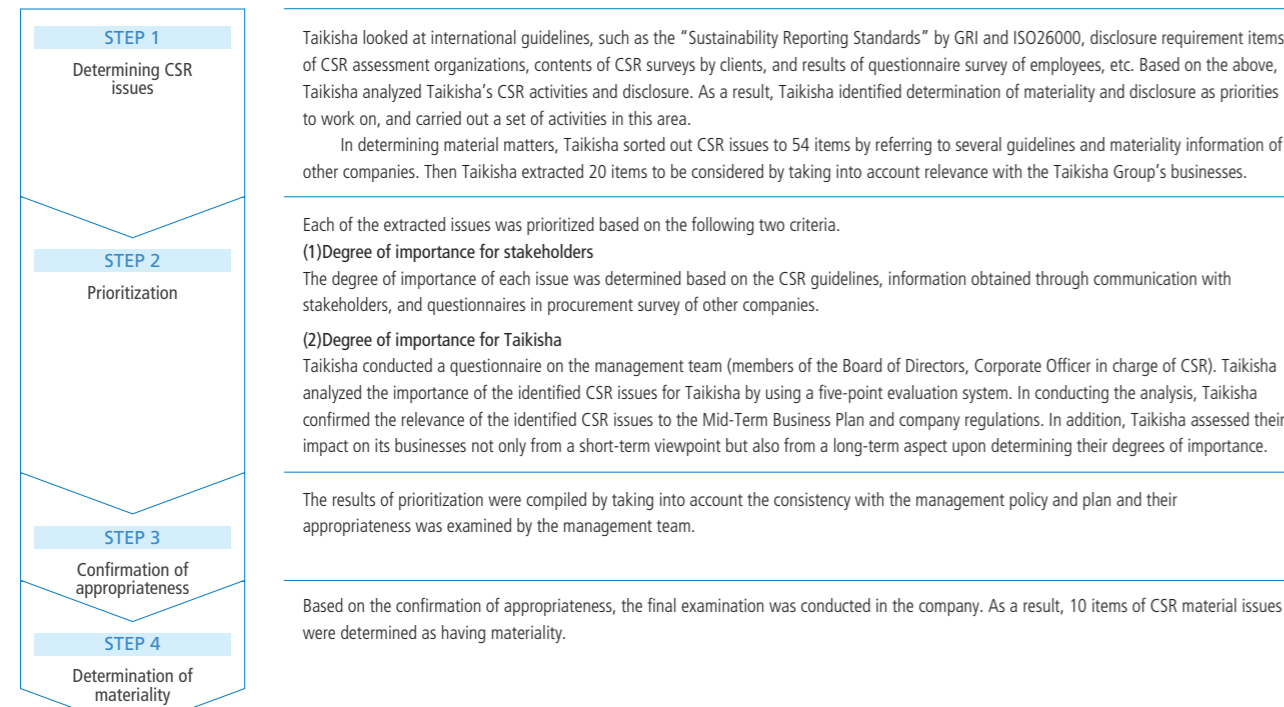
As for materiality (material matters) in promoting its CSR activities, Taikisha designated 10 items from the four aspects of Governance, Quality, Environment and Labor Practices. These material matters were selected from items toward the achievement of a sustainable society and corporate growth, based on the priority of importance to stakeholders and Taikisha.

Taikisha believes it is important to assess and verify its CSR activities and run the PDCA cycle unflinchingly based on the materiality determined.

Of note, with the aim of further improving Taikisha's corporate value, Taikisha is currently redefining the sources of its corporate value including the timeframe as well as the background of such sources in order to determine materiality of management taking sustainability into consideration, while also looking into the sustainability of its business model.



Materiality Determination Process



Overview of Materiality

Materiality determined	Taikisha's initiative	Relevant SDGs
Governance		
Corporate governance	Taikisha will strive to build good relationships with various stakeholders with the aim of achieving continuous growth and a medium- to long-term improvement in corporate value. Taikisha will also work to achieve appropriate decision-making and business execution, ensure sound management, and improve accountability.	
Promotion of compliance	Taikisha will develop a corporate ethics and compliance system and manage the system appropriately. In addition, Taikisha will strive to raise awareness of the need to have compliance with laws and regulations among employees.	16 PEACE, JUSTICE AND STRONG INSTITUTIONS, 17 PARTNERSHIPS FOR THE GOALS
Information security	Taikisha will strengthen security to prevent information leaks by stepping up security controls in the IT environment, developing educational content, and keeping everyone informed of information security issues. Taikisha will strive to ensure protection of personal information of employees, as well as personal information of contract orders and vendors obtained and retained through business activities.	
Environment		
Efficient use of resources and energy	With an aim of contributing to building a recycling-oriented society, Taikisha will make efforts to utilize resources effectively, promote energy saving in our daily lives and business activities, reduce electricity and city gas consumption, promote product recovery and recycling, and reduce the amount of containers and packaging.	7 AFFORDABLE AND CLEAN ENERGY, 11 SUSTAINABLE CITIES AND COMMUNITIES, 12 RESPONSIBLE CONSUMPTION AND PRODUCTION, 13 CLIMATE ACTION
Contributions to Society		
Quality		
Technology and product capabilities to meet customer needs	Taikisha will strive to establish technological and product capabilities conducive to improving business performance and competitiveness. In addition, Taikisha will focus on technology development and advanced efforts by taking into consideration social issues and latent needs of customers.	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE, 12 RESPONSIBLE CONSUMPTION AND PRODUCTION
Quality control	Taikisha will secure a quality level that results in a high level of customer satisfaction. By implementing continuous quality improvement and standardization, Taikisha will provide qualities that give a sense of trust, security, and satisfaction to customers. Taikisha will also work to prevent quality troubles at construction sites.	
Labor Practices		
Human resource development	Taikisha will specify the types of human resources necessary to carry out targeted strategies, and improve employees' performance by providing them with knowledge and skills in various forms to maximize their expected activities. In addition, Taikisha will provide various opportunities for education and training and develop a fair personnel assessment system to promote a work environment that fosters the development of human resources.	
Employment and retention of employees	Taikisha will secure the best human resources, and make an effort to build an organization where the hired employees will stay without leaving after a short time and can fulfill their potential.	
Industrial health and safety	Based on the safety-first principle, Taikisha will implement health and safety management systematically on an organizational level. In order to provide a working environment that considers health and safety, Taikisha will give consideration to employees' health, eliminate industrial accidents, correct long working hours and improve mental health in the workplace, etc.	3 GOOD HEALTH AND WELL-BEING, 4 QUALITY EDUCATION, 5 GENDER EQUALITY, 8 DECENT WORK AND ECONOMIC GROWTH
Creation of pleasant working environment	Taikisha will promote the building of an attractive and motivation-oriented company that provides both material and psychological satisfaction to each employee. Taikisha will make efforts to enable all employees to fully utilize their potential by enhancing its welfare program; creating a workplace environment that supports a balance between work, childcare and nursing care; developing a work environment that embraces diverse work styles; improving the treatment of employees and workplace environment; and controlling long working hours.	

Support of SDGs

The Sustainable Development Goals (SDGs) constitute the core of the 2030 Agenda for Sustainable Development, including 17 SDGs and the associated 169 targets, which were adopted in September 2015 by the United Nations. Building on the principle of "leaving no one behind," the new Agenda emphasizes a holistic approach to achieving sustainable development for all. Accordingly, all the member states are requested to achieve the goals, while governments and corporations globally are requested to independently take actions for their achievement. The Taikisha Group strongly supports the SDGs as a corporation that engages in diverse businesses globally.



Key Measures and Progress of Activities

Theme	Subsidiary theme	Issue/goal	Main activities	Results of implementation of measures in FY2018	Self-assessment	Efforts in FY2019 and thereafter	ISO26000							Pages	
							Organizational governance	Human rights	Labor practices	Environment	Fair business practices	Consumer issues	Community participation and development		
General CSR activities							●	●	●	●	●	●	●	pp. 19-28	
Governance	Corporate governance	Corporate governance	<ul style="list-style-type: none"> Operate the internal control system continuously and strengthen the risk management system of the Group as a whole Further enhancement and strengthening of corporate governance Enhancement of internal audits 	<ul style="list-style-type: none"> Confirmed the status of operation of the internal control system Established and operated Nomination Advisory Committee and Compensation Advisory Committee 	●	<ul style="list-style-type: none"> Continue with activities 	●	●	●	●	●	●	pp. 31-34		
			Internal control	Risk management	<ul style="list-style-type: none"> Sophistication and enhancement of the risk management system Step up measures to ensure the security of electronic information 	<ul style="list-style-type: none"> Performed risk recognition and assessment and formulated company-wide response policy Operated regulations appropriately 	●	<ul style="list-style-type: none"> Implement risk-reduction activities for risks requiring prioritized response Operate regulations appropriately Investigate information security risks at affiliates and take action against risks 	●	●	●	●	●	●	pp. 35-36
	Promotion of compliance	<ul style="list-style-type: none"> Conduct training and monitoring in Japan and overseas, make Whistle-blowing System widely known and disseminate various information 		<ul style="list-style-type: none"> Japan: Enhanced training based on case studies Overseas: Prepared and distributed manuals 	●	<ul style="list-style-type: none"> Continue and enhance PDCA activities in Japan and overseas Enhance harassment education (work style reform) 	●	●	●	●	●	●	pp. 37-38		
	Environment	Strengthen environmental management	Achieve the environmental management vision	<ul style="list-style-type: none"> Practice the environmental management master plan 	<ul style="list-style-type: none"> PDCA based on the master plan Continued with activities to visualize GHG emissions in the entire supply chain 	●	<ul style="list-style-type: none"> Continue with activities 	●	●	●	●	●	●	pp. 39-48	
Promote environmental business			Provision of facilities and systems with high energy-saving performance	<ul style="list-style-type: none"> [Green Technology System Division] Promote proposals for CO₂ emission reduction (energy-saving) in in-house design projects [Paint Finishing System Division] Promote reduction of CO₂ emissions from painting facilities 	<ul style="list-style-type: none"> Proposed 92 plans for CO₂ reductions (energy saving) Achieved CO₂ reduction rate (emission amount) of 25.6% Reduced CO₂ emissions per manufacturing automobile to 73.5 kg 	▲	<ul style="list-style-type: none"> Propose more than 120 CO₂ reduction (energy saving) plans Achieve CO₂ reduction rate (amount) of 20% or higher Develop measures to achieve reduction of CO₂ emissions per automobile produced in 2020 to 70 kg 	●	●	●	●	●	●		
		Removing and reducing emissions of hazardous substances	<ul style="list-style-type: none"> Grasp the reduced amount of annual VOC emissions by using VOC abatement systems Improve performance of rotary regenerative thermal oxidizer (RTO) (by reducing age-related degradation by applying baking system) 	<ul style="list-style-type: none"> Reduced VOC emissions of new constructions by 2,200 t/year Commenced prototyping improved regenerative thermal oxidizer (vertical-type rotary RTO Mark II) 	▲	<ul style="list-style-type: none"> Reduce VOC emissions of new constructions by 8,000 t/year Promote dissemination through the expansion of models of improved RTO and purchase from LCC 	●	●	●	●	●	●			
		Development of market for utilizing new environment-responsive technologies	<ul style="list-style-type: none"> Promote new business by applying environmental engineering technologies Development of a paint system designed to achieve a 100% coating efficiency 	<ul style="list-style-type: none"> Business strategy with an eye on overseas development of plant factories and system for factories manufacturing lithium-ion batteries Checked capabilities/issues through basic test 	●	<ul style="list-style-type: none"> Continue with activities Check capabilities and tackle issues for commercialization 	●	●	●	●	●	●			
Promote environmental conservation activities		Reduction of environmental impacts in the design and construction phases	<ul style="list-style-type: none"> Designing eco-friendly systems 	<ul style="list-style-type: none"> Prevented outflow of liquid caused by breakage of tanks of pre-treatment lines and electrodeposition lines of painting facilities Achieved quake-proof design implementation rate of 100% in applicable projects 	●	<ul style="list-style-type: none"> Continue with activities 	●	●	●	●	●	●			
			<ul style="list-style-type: none"> Reduce construction by-products and treat industrial waste appropriately 	<ul style="list-style-type: none"> Reduction, regeneration and recycling of construction waste: Recycling rate of 86% Rate of compliance in the number of manifests issued of 100% Electronic manifest introduction rate of 96% 	▲	<ul style="list-style-type: none"> Reduction, regeneration and recycling of construction waste: Recycling rate of 90% or more Rate of compliance in the number of manifests issued of 100% Electronic manifest introduction rate of 95% or more 	●	●	●	●	●	●			
		Energy-saving activities in the office	<ul style="list-style-type: none"> Reduction of paper usage (promotion of paperless meetings) Reduce energy use in the office 	<ul style="list-style-type: none"> Implemented thorough management by using "Fluorocarbon Refrigerant Filling and Recovery Control Manifest" Achieved a Filling and Recovery Control Manifest storage rate of 100% Purchased volume of photocopy paper (A4-sized equivalent): 8,880 sheets/person-year Reduced power usage to 142 kW/m²-year 	●	<ul style="list-style-type: none"> Implement thorough management by using "Fluorocarbon Refrigerant Filling and Recovery Control Manifest" Achieve a Filling and Recovery Control Manifest storage rate of 100% Purchase volume of photocopy paper (A4-sized equivalent): under 9,200 sheets/person-year Reduce power usage to 156 kW/m²-year or less 	●	●	●	●	●	●	pp. 49, 50		
		Promote green procurement	<ul style="list-style-type: none"> Promote purchase of equipment included in the list of green procurement items Promote paperless purchase order process through online purchases 	<ul style="list-style-type: none"> Achieved a green procurement amount of 4,270 million yen Increased the paperless rate of 81.9% through online purchases 	●	<ul style="list-style-type: none"> Achieve a green procurement amount of 4,400 million yen Increase the paperless rate to over 87% through online purchases 	●	●	●	●	●	●	p. 49		
Contributions to Society		Industrial health and safety	Health and safety of workers	<ul style="list-style-type: none"> Enhance organized safety management activities (site patrol, etc.) Improvement of the level of industrial health and safety management at each site in Japan and overseas 	<ul style="list-style-type: none"> Safety record: Frequency rate of 0.381, Severity rate of 0.025 Fatal/serious accidents: None Invited safety staff of overseas subcontractors and held a meeting of persons responsible for safety at overseas affiliate 	▲	<ul style="list-style-type: none"> Continue with safety management activities Continue to provide safety education based on safety education and training schemes Education on internal safety rules and prevention of recurrence of past disasters using Taikisha Safety Book prepared by Safety Headquarters and video showing examples of accidents 	●	●	●	●	●	●		pp. 51-52
				Quality improvement	Quality and customer satisfaction improvement	<ul style="list-style-type: none"> Ensure quality without "Muda" (wasteful), "Mura" (inconsistent), and "Muri" (unreasonable) and continuous implementation of improvement measures Gain customers' trust and high reputation from society by utilizing the QC follow-up chart 	<ul style="list-style-type: none"> Extracted technical issues at the design examination meeting and construction review meeting, and confirmed them by cross-functional departments Reduced quality defects by conducting quality inspections in each construction process 	●	<ul style="list-style-type: none"> Continue with activities 	●	●	●	●		●
	Consideration of human rights	Respect for human rights/prohibition of discrimination	<ul style="list-style-type: none"> Strengthen responses to harassment Promote employees' use of Employee Consultation Desk 			<ul style="list-style-type: none"> Provided harassment consultation Provided education to new employees/newly appointed managers Compliance audits at overseas affiliates Implemented at compliance group training E-learning education 	●	<ul style="list-style-type: none"> Continue with activities 	●	●	●	●	●	●	
			Human resource development and cultivation	Support and facilitate employees' capacity development	<ul style="list-style-type: none"> Enhancement of the career advancement system Development and improvement of the training system 	<ul style="list-style-type: none"> Provided training for persons in each target job position Improvement activities to enhance the transparency (just and fair) of personnel assessment 	●	<ul style="list-style-type: none"> Continuously improve the content of a program with an eye on PDCA Promote support for employees' career advancement 	●	●	●	●	●	pp. 55-58	
	Diversity of human resources, work-life balance	Creation of pleasant working environment			<ul style="list-style-type: none"> Achievement of work style reform Promote career advancement of female employees Enhance systems that promote diverse and flexible work styles and create working environment 	<ul style="list-style-type: none"> Measures against long working hours Introduced paid time off system and interval system Implemented an action plan based on the Act on the Promotion of Female Participation and Career Advancement in the Workplace 	●	<ul style="list-style-type: none"> Continue with activities Consider introduction of telework (telecommuting, satellite office and mobile work) 	●	●	●	●	●	●	
			Supply chain management	Sharing and promotion of CSR in the supply chain	<ul style="list-style-type: none"> Operation of the global human resource system Localization of overseas organizations and provision of more diverse and advanced employment opportunities 	<ul style="list-style-type: none"> Introduction and operation of the global human resource system 	●	<ul style="list-style-type: none"> Firmly establish the global human resource system in each overseas affiliate Provide opportunities for local employees to cross the border Transfer of authority to overseas affiliates 	●	●	●	●	●	●	
	Community/social contribution activities	Activities as a member of society (corporate citizen)			<ul style="list-style-type: none"> Promote procurement activities based on fairness and transparency 	<ul style="list-style-type: none"> Eliminated anti-social forces Confirmed appropriate trading conditions 	●	<ul style="list-style-type: none"> Continue with activities 	●	●	●	●	●	p. 59	
			Dialogue with shareholders and investors	Promote dialogue with shareholders and investors	<ul style="list-style-type: none"> Promote activities that help the sustainable development of communities and society 	<ul style="list-style-type: none"> Participated in the CSR Network in Shinjuku Conducted activities, such as community cleaning activity and offering a donation to Keidanren Nature Conservation Fund 	●	<ul style="list-style-type: none"> Continue with activities 	●	●	●	●	●	p. 60	
<ul style="list-style-type: none"> Timely and appropriate information disclosure and proactive IR activities 	<ul style="list-style-type: none"> Published shareholder newsletter Held earnings results briefing and individual meeting with investors 	●			<ul style="list-style-type: none"> Continue with activities 	●	●	●	●	●	p. 61				

Self-assessment ●: In line with the plan ▲: Fell below the plan

Governance

Taikisha is continuously working to strengthen corporate governance and build an attractive company to achieve continuous growth and contribute to society.



Corporate Governance

Taikisha has established a corporate governance system and structure that wins trust from all stakeholders.



Basic Policy

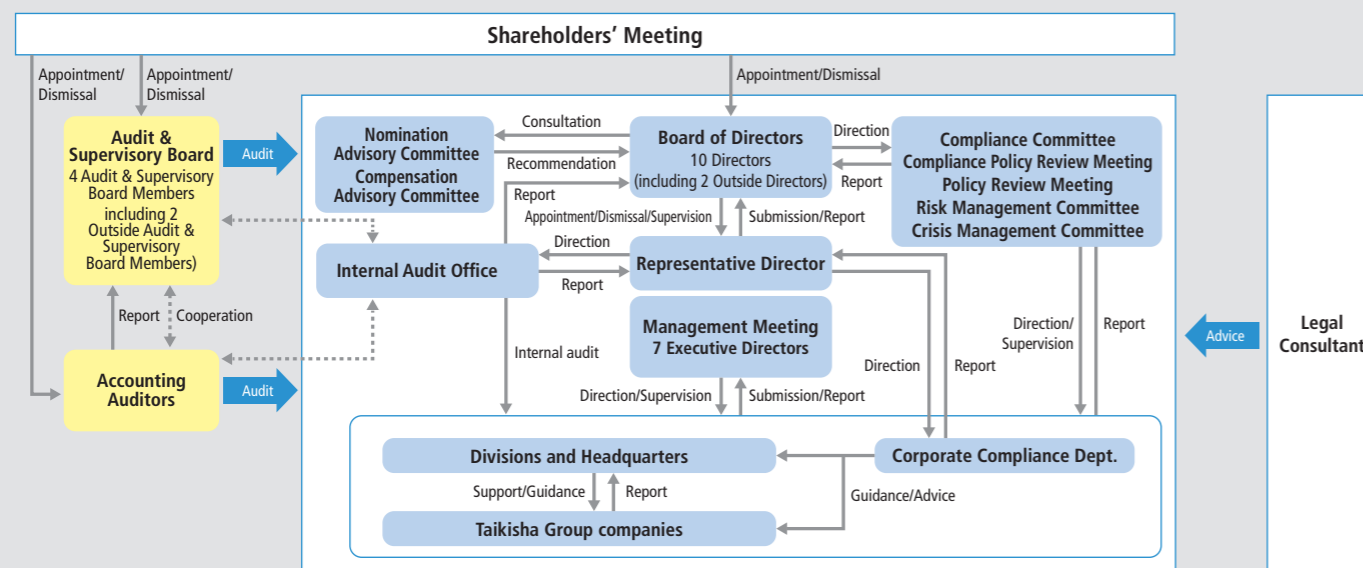
Taikisha has established a basic policy of corporate governance to gain the trust of all stakeholders and aims to become a corporate group that grows and develops in a healthy manner by thoroughly incorporating compliance awareness and realizing fair and highly transparent management. The aim is to achieve its corporate philosophy and management vision in accordance with Taikisha's Mission Statement: "Customers First."*

In conformity with the basic policy and based on the

organizational structure of a company with an audit & supervisory board, Taikisha is continuously working to strengthen the Taikisha Group's governance and reform of management by reinforcing the supervisory function of the Board of Directors through the application of Non-executive Directors (meaning Outside Directors and the Director and Chairman, the same shall apply hereinafter) and speeding up the decision-making of the Board of Directors through the adoption of the corporate officer system, aiming to further enhance and reinforce the corporate governance of Taikisha.

*"Customers" is defined as Overall Society in a broad sense. Spirit of "Customers first" is to win persistent trust from the "Customers."

Pattern Diagram of Corporate Governance (as of June 27, 2019)



Corporate Governance System

With the organizational structure of a company with an audit & supervisory board, Taikisha Ltd. is continuously working on management reform by reinforcing the supervisory function of the Board of Directors through the application of Non-executive Directors and speeding up the decision making of the Board of Directors through the adoption of the corporate officer system, aiming to establish strong corporate governance. The Company's current corporate governance system is judged to be functioning effectively through these initiatives.

Functions of the Board of Directors and the Audit & Supervisory Board

The Board of Directors, which consists of 10 Directors including 2 Outside Directors and is chaired by a Non-executive Director and Chairman, meets once each month with additional meetings as and when required. The Board of Directors makes decisions regarding Taikisha Group's management policy, items stipulated in laws and articles of incorporation, and important management matters, as well as monitors and supervises the execution of duties by each Director and Corporate Officer. Outside Directors are appointed in order to revitalize deliberation and ensure the transparency of decision-making processes in the Board of Directors, and to reinforce the supervisory function of the Board of Directors over Directors and Corporate Officers.

Taikisha has 4 Audit & Supervisory Board Members, including 2 Outside Audit & Supervisory Board Members. Audit & Supervisory Board Members review important documents, including internal approval documents, and attend major meetings, including the Board of Directors and the Management Meeting, in order to understand important decision-making processes and the execution of duties as well as to collect information about the current decision making processes for important matters, provide advice and recommendations for operational improvement and other issues as and when required. Furthermore, audits by the Audit & Supervisory Board Members related to the status of development and operation of the internal control system have been conducted based on the results of audits conducted by the Internal Audit Office, etc., reports from the internal control department and investigation into each department.

Functions that Support Corporate Governance

As functions to support its corporate governance, Taikisha has set up the following systems: 1) compliance system; 2) information management system; 3) risk management system; 4) system to ensure the efficiency and transparency of management decisions; 5) group management system; 6) system regarding audit by Audit & Supervisory Board Members (supporting system for Audit & Supervisory Board Members, system regarding reporting to Audit & Supervisory Board Members, and system to ensure the effectiveness



Corporate Governance Report

<https://www.taikisha-group.com/corporate/pdf/CorporateGovernance.pdf>

of audit). Taikisha reviews these systems continuously and makes improvements on each function where necessary.

Operation of the Internal Control System

Pursuant to the Companies Act and the Ordinance for Enforcement of the Companies Act, Taikisha strives to familiarize and thoroughly carry out execution of observance of the laws and ordinances. Moreover, Taikisha has established a basic policy for the internal control system to ensure an efficient and proper company structure, thereby improving and operating the internal control system.

Basic Views on the Internal Control System

For internal control, Taikisha implements measures that are set forth in each of the following items: (1) The system to ensure Taikisha's directors' and employees' conformance to laws and articles of incorporation, (2) The system regarding the storage and management of information related to the execution of duties by directors of Taikisha, (3) Rules regarding risk management of loss of the company and other systems, (4) The system to ensure the efficient execution of duties by directors of Taikisha, (5) The system to ensure the appropriateness of operations conducted by the Taikisha Group, (6) matters regarding employees who assist Audit & Supervisory Board Members, (7) The system for reporting to Audit & Supervisory Board Members, (8) The system for ensuring a person who made a report pursuant to the preceding paragraph is not treated in a disadvantageous manner because he or she made such report, (9) Matters regarding the policy for handling expenses or obligations incurred with respect to the execution of duties of Audit & Supervisory Board Members, and (10) Other systems to ensure the effective implementation of audits by Audit & Supervisory Board Members.

Internal Audit

The Internal Audit Office conducts audits on business execution departments and identifies and gives advice on points to be improved, while working in cooperation with Directors and Audit & Supervisory Board Members as a department directly under the Representative Director, and follows up on the status of improvement.

With a main focus on "effectiveness and efficiency of operations," "reliability of financial reporting," "compliance with laws and regulations," and "asset protection," Taikisha performed audits by visiting its business offices in Japan and overseas from the perspective of legitimacy and rationality of the status of compliance with laws and ordinances that are closely related to Taikisha's operations including the Construction Industry Act and the Antimonopoly Act, the status of construction project contract management, and appropriateness of construction activities. In FY2018, Taikisha carried out audits at a total of 50 sites (including 26 construction sites in Japan and 10 overseas business offices). The Internal Audit Office also evaluated the status of establishment and operation of internal control over the Group's financial reporting for FY2018 and reported on the effectiveness thereof to the Board of Directors.

Nomination Advisory Committee/ Compensation Advisory Committee

Taikisha Ltd. has established the Nomination Advisory Committee and the Compensation Advisory Committee as advisory bodies for the Board of Directors, with the aim of enhancing the independence and objectivity of functions and the accountability of the Board of Directors regarding nomination and compensation of senior management and Directors. Each Committee is chaired by an Independent Outside Director and comprises 3 Non-executive Directors, including 2 Independent Outside Directors, and 2 Representative Directors.

Evaluation of the Effectiveness of the Board of Directors

Evaluation method

Taikisha Ltd. conducts an analysis and evaluation of the effectiveness of the Board of Directors at least once a year and discloses an overview of its results in order to improve the effectiveness of its Board of Directors and enhance its information provision to external stakeholders.

Regarding the analysis and evaluation of the effectiveness of the Board of Directors for the fiscal year ended March 31, 2019, all Directors and Audit & Supervisory Board Members, led by the Chairman of the Board, participated in surveys on "Roles to be fulfilled by the Board of Directors" and "Matters to be considered by the Board of Directors in order to fulfill its roles" via a questionnaire distributed to the entire Board. In addition, the sharing of issues recognized at the Board of Directors meetings and the policies for dealing with such issues, etc. were deliberated based on the results of objective analysis by an outside advisor.

Results of evaluation

As a result of the above, it was determined that the Board of Directors of Taikisha Ltd. is sufficiently effective.

The Board of Directors of Taikisha Ltd. has the role of making decisions on important management matters and effectively demonstrating its supervisory function over general management to put into practice the "Customers First" Mission Statement and contribute to sustained growth and the medium- to long-term improvement of corporate value. To fulfill these roles, the provision of materials and the time for discussions have been sufficiently ensured to stimulate deliberations at the Board of Directors meetings.

Meanwhile, the status of the execution of important duties is regularly reported to the Board of Directors.

Initiatives to address the issues raised

Taikisha Ltd. is steadily improving the matters that were recognized as issues to be addressed through the analysis and evaluation of the effectiveness of the Board of Directors during the previous fiscal year. The company reexamined the level of involvement of the Board of Directors in the formulation and supervision of medium-and long-term plans and decided to have the Board of Directors participate in and supervise the formulation of the new Mid-Term Business Plan that starts from the fiscal year under review at an earlier stage than previously. In addition, this matter was also discussed at an opinion exchange meeting attended only by Outside Directors and Outside Audit & Supervisory Board Members, and the results were fed back to management. Furthermore, the company took more time for the Board of Directors meeting to discuss issues such as work style reforms, human resource development, strengthening of the risk management system of the entire Taikisha Group including overseas

affiliates', and enhancing disclosure of non-financial information. The company also introduced a stock-based compensation plan for management remuneration to serve as a sound incentive for achieving sustainable growth.

In order to reinforce the supervisory function of the Board of Directors, the company will discuss the situation regarding development and operation of Taikisha Group's risk management system of the business executive side, as it examines how to effectively supervise the progress of its medium- and long-term plans. The company will also continue its efforts to improve the effectiveness and transparency of the Nomination Advisory Committee and the Compensation Advisory Committee, which were established in the previous fiscal year.

To further enhance and reinforce corporate governance, the company will prioritize the responses to the issues raised and examine measures to improve the effectiveness of the Board of Directors on an ongoing basis.

Appointment and Development of Directors and Audit & Supervisory Board Members

In light of the business environment surrounding Taikisha Ltd., it maintains the diversity and the appropriate number of Board members to ensure that decision-making and management supervisory function of the Board of Directors will work most effectively and efficiently. The Audit & Supervisory Board appoints one or more Audit & Supervisory Board Members who have expertise in finance and accounting in light of its roles and responsibilities of auditing the execution of duties by Directors and execution of the authority relative to the appointment and dismissal of external Accounting Auditors and audit fee. Common requirements for candidates for Directors and Audit & Supervisory Board Members are as follows: persons who have a good personality, deep insights and a strong sense of ethics and compliance; and persons who are free of health concerns in executing their duties.

Taikisha Ltd. selects candidates for Inside Directors in view of their expertise and performance from each business area in a balanced manner. Requirements are as follows: persons who have an adequate understanding of Taikisha's Mission Statement and Corporate Philosophy and an excellent ability for corporate governance; persons who have adequate knowledge, experience and ability for the businesses and operations as well as an ability for realizing future development; persons who have an excellent ability for analyzing and making decisions objectively and promptly from the viewpoint of supervising the company-wide management.

Taikisha Ltd. selects candidates for Outside Directors who have deep insight and experiences in different business areas. Persons who can appropriately reflect opinions in Board of Directors meetings from objective and independent standpoints are required.

Candidates for Audit & Supervisory Board Members shall be persons who are considered to have the abilities necessary for performing their duties as Audit & Supervisory Board Members set forth in the internal rules for audit by Audit & Supervisory Board Members. Inside Audit & Supervisory Board Members are required to be well versed in Taikisha's operations and have sufficient knowledge, experience and ability. Requirements for Outside Audit & Supervisory Board Member are as follows: persons who have extensive knowledge and experience in areas of specialization, such as company management, finance, accounting and legal affairs, etc.; persons who can allocate sufficient time and energy necessary for fulfilling the roles and responsibilities of Outside Audit & Supervisory Board Members appropriately.

Taikisha Ltd. constantly provides training, etc. aimed to support acquisition of necessary knowledge regarding the company's management issues, finance and legal compliance and other matters to Directors and Audit & Supervisory Board Members, including Outside Directors and Outside Audit & Supervisory Board Members, and provides information related to the above-mentioned matters when necessary.

Compensation to Directors and Audit & Supervisory Board Members

Policy

Taikisha Ltd. has determined the following policy concerning the amount of compensation to Directors and Audit & Supervisory Board Members or the calculation method thereof.

(1) Basic views on the system of compensation

Compensation to Executive Directors (Directors who concurrently serve as Corporate Officers) is composed of basic compensation, which is fixed compensation, and bonus and stock-based compensation, which are performance-linked compensation. The amount of bonus and stock-based compensation fluctuates in close correlation with the company's consolidated ordinary income to serve as an incentive for achieving their performance goals. Compensation to Non-executive Directors and Audit & Supervisory Board Members is limited to basic compensation and no bonus and stock-based compensation shall be paid.

(2) Compensation structure

(i) Compensation to Directors and Audit & Supervisory Board Members is composed of basic compensation, which is fixed compensation, and bonus and stock-based compensation, which are performance-linked compensation. The types of compensation applicable according to officer classification are as follows:

- Executive Directors: Basic compensation, bonuses, stock-based compensation
- Non-executive Directors: Basic compensation
- Audit & Supervisory Board Members: Basic compensation

(ii) The ratio of fixed compensation to performance-linked compensation (total bonus and stock-based compensation) within the total compensation paid to Executive Directors shall be approximately 6:4 based on the standard payment amount, and reflect the content of the "(3) Performance-linked compensation scheme" below.

(3) Performance-linked compensation scheme

Performance-linked compensation is composed of bonus and stock-based compensation. A fixed percentage of the company's consolidated ordinary income shall be paid as the base payment amount of performance-linked compensation, with an amount equal to 50% of the base payment amount paid each as bonus and stock-based compensation.

The bonus is paid in cash after the company's operating performance is finalized. For stock-based compensation, points are granted after the company's operating performance is finalized. The points granted will be provided, in principle, to Executive Directors at the time of their retirement in the form of the company's shares or cash equivalent to the fair value thereof.

Consolidated ordinary income is one of the key KPIs in the company's Mid-Term Business Plan, and is thus selected as an indicator for the calculation of performance-linked compensation. In addition to the base payment amount equal to a fixed percentage of consolidated ordinary income, if consolidated ordinary income exceeds a certain amount, an amount obtained by multiplying the base payment by the ratio of excess performance shall be paid as an extra payment, which is expected to serve as an incentive for achieving numerical targets in the Mid-Term Business Plan, thereby further improving the company's operating performance.

(4) Level of compensation

The Compensation Advisory Committee verifies the level of compensation by analyzing and comparing compensation data of industry peer companies from survey data compiled by a third-party organization.

Methods for decisions on compensation

Based on "(1) Basic views on the system of compensation" above, the Representative Director, delegated by the Board of Directors, determines the system and level, etc. of Directors' compensation upon consultation with the Compensation Advisory Committee, which is chaired by an Independent Outside Director. The compensation details thus determined are reported to the Compensation Advisory Committee. In this manner, the company improves the objectivity and transparency of the process for determining compensation.

Methods for decisions on policy

The policy for compensation, etc. of Directors and Audit & Supervisory Board Members is determined by the Board of Directors upon consultation with the Compensation Advisory Committee.

Message from an Outside Director

With two Outside Directors and two Outside Audit & Supervisory Board Members as independent directors/auditors, Taikisha's management structure proactively takes in supervision and advice from an external perspective. Taikisha introduces Mr. Hirokazu Hikosaka's insight into Taikisha's corporate governance. He has been serving as Outside Director since June 2017.



Hirokazu Hikosaka, Outside Director

Outside Director's role is to examine the execution of duties by the management from the viewpoint of shareholders and society and thereby improve the Company's corporate value. In order to fulfill this role, regarding the agenda items to be deliberated at the Board of Directors meetings, I examine and express my opinions on matters to be considered for better policy measures, whether there is any risk of problems arising, measures to prevent risks and other items, by taking advantage of my experience as a lawyer.

Taikisha's corporate governance system has been steadily enhanced year by year due to diligent efforts made by all Directors and Audit & Supervisory Board Members. In the current fiscal year, as Taikisha plans to have opportunities to hold intensive discussions on the issues and direction of medium- to long-term management, the effectiveness of the Board of Directors is expected to improve.

I have high hopes for Taikisha making earnest efforts on a group-wide scale to fulfill its vision, i.e., "Aim to become a global corporate group that creates an optimal environment through unique engineering."

Risk Management

Taikisha endeavors to thoroughly manage, avoid and reduce risks on an organizational level.



Basic Policy

Taikisha has upheld the corporate philosophy of "Establish a company which can continuously grow and contribute to society." Guided by this philosophy, Taikisha is working to reduce material risks and minimize risks before they materialize, in order to continue with businesses and achieve their sustainable development. Taikisha has positioned legal compliance, work style reform, prevention of industrial accidents and leakage of important information, among others, as important issues in its management and is striving to strengthen its risk response capabilities. In addition, to prepare for the occurrence of a crisis such as a disaster, an accident or an incident, Taikisha has established a crisis management system and formulated a Business Continuity Plan (BCP).

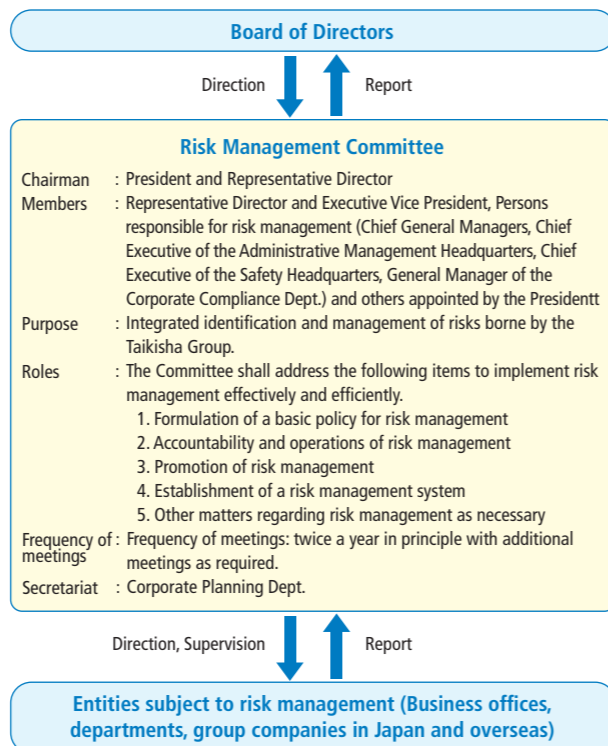
Risk Management System

Taikisha, in accordance with the Risk Management Rules that have been in place, has established the Risk Management Committee to implement effective, efficient and integrated risk management. The Risk Management Committee is chaired by the President and Representative Director and meets twice a year and as required. The Committee establishes basic policies, responsibility systems, operations, and other necessary measures for group-wide risk management, and keeps all persons involved well informed about the establishment and implementation of policies.

Regarding risks associated with operations assigned to each department, such as quality control, safety control, compliance, and finance, each responsible department extracts risks, selects risks that need to be addressed on a priority basis after determining the risk level (degree of importance) in consideration of "impact on management" and "frequency of occurrence," and then develops priority management policies and goals to be reported to the Risk Management Committee. The Risk Management Committee discusses the risk level assessment and priority management policies and goals of each risk from a group-wide and integrated perspective, and formulates the basic policy. Each responsible department monitors the status of execution of action plans and reports the results to the Risk Management Committee. The Chairman of the Risk Management Committee puts together the status of group-wide risk management and reports it to the Board of Directors twice a year.

The Risk Management Committee held during FY2018 took up long working hours as an immediate company-wide issue and formulated a policy to take a multidimensional approach.

Risk Management Structure



Major Risks and Remedial Measures

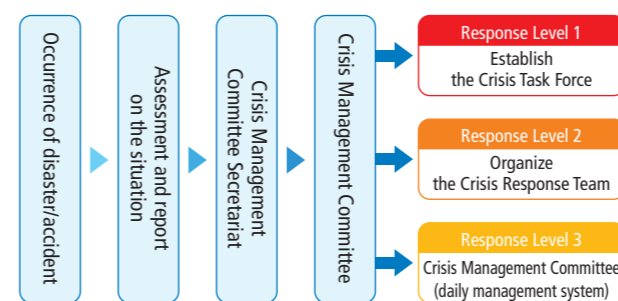
Risk	Content	Remedial Policy and Measures
Risk related to business growth	Decrease in orders received Rise in construction costs and fixed expenses Delay of delivery	Explore new clients and markets Shift to a sophisticated cost management system Strengthen alliances with subcontractors Maintain thorough management of the construction period
Risks related to personnel and labor	Employees' health impairment, long working hours, occurrence of industrial accidents	Promote work style reform Promote measures to prevent and manage serious and public disasters
Risks involving human lives	A risk of encountering an accident or a crime in dangerous regions overseas	Obtain information on the hazard, call for attention, take countermeasures and thoroughly discuss whether to permit business travel to the area
Compliance-related risks	Violation of laws, ordinances, internal regulations and rules	Establish a framework to prevent measures for legal compliance and recurrence prevention from losing substance Promote a compliance program
Risk related to IT systems	IT security	Implement countermeasures against cyberattacks and leakage of important information

Crisis Management System

Taikisha has established the Basic Policy for Crisis Management and built the crisis management system to prepare for the occurrence of unforeseen disasters, accidents and incidents in Japan and overseas.

In the event of a crisis, Taikisha classifies crises into three response levels depending on the severity of impact on human lives and business continuity, and implement crisis response measures according to each response level. The Chief Executive of the Administrative Management Headquarters assumes the position of Chairman of the Crisis Management Committee. If it is decided that a particularly serious crisis has occurred, the President and Representative Director takes command as the Head of the Crisis Task Force.

Diagram of Crisis Management System



Overseas Crisis Management System

The Taikisha Group's business fields are continuing to expand globally. For smooth business activities, Taikisha needs to implement crisis management measures overseas to be able to address diverse risks.

From the perspective of prioritizing human lives, for Taikisha employees deployed overseas and those on overseas business travel to be able to engage in business activities without concern, Taikisha has formulated the "Overseas Security Response Manual" to help employees prevent and avoid risks of crimes and terrorism and the "Overseas Crisis Management Guidelines (main vol.)," which stipulates the actions to be taken by Taikisha's headquarters and overseas affiliates in the event of an occurrence of a crisis.

Furthermore, to help each employee with his/her own safety management before overseas business travel, an e-learning course is provided to prepare for the trip.

Concerning business travel to a high-risk region, Taikisha investigates and obtains the latest information on the current situation of the country beforehand and takes safety measures such as ensuring safe transportation method, route and accommodation facilities before determining whether to permit the business travel.

To eliminate concern employees might have regarding their situation during and even after overseas travel and so that they can focus on business activities, Taikisha has a contract with a company that provides the referral of a hospital in case of an emergency such as illness or injury overseas, arranges transportation to the hospital and medical translators, guarantees payments of healthcare expenses, etc., and coordinates the transport of the patient for the patient and his/her family.

Business Continuity Plan (BCP)

Taikisha has formulated a business continuity plan (BCP) that sets out procedures and steps for employees to take in order to restore operations promptly in the event of a crisis.

The Crisis Management Manual provides procedures for dealing with crisis situations, centering on large-scale earthquakes, by placing the highest priority on protecting the lives of its employees and their families. At business offices, Taikisha periodically conducts training, such as training on wireless phone communication, taking inventories and checking expiration dates on emergency food stocks. In addition, Taikisha carries out training on how to handle the safety confirmation system. To ensure the safety of employees, Taikisha has organized a company-wide self-defense firefighter team and conducts training activities. In addition to continually conducting evacuation drills and training sessions provided by the self-defense firefighter team, Taikisha holds training sessions on AED and first-aid rescue to train employees so that they can respond to emergencies not only inside but also outside the company. Taikisha continually conducts activities to raise employees' awareness of disaster control measures, such as carrying out a questionnaire to grasp employees' commuting distances assuming disruption of public transportation in the event of a disaster.



A disaster prevention drill

AED and first-aid rescue training session

Information Security

Taikisha has strengthened the Group's overall information management system to prevent the leakage of information of clients and business partners with whom Taikisha has business contact with, as well as personal information of, employees and others.

Taikisha has drawn up the Information Security Rules with detailed rules for all employees and persons with relevant responsibilities, such as persons in charge of IT system/facility development, and rules based on the privacy policy. Taikisha also distributed the information Security Guidebook that shows concrete information security measures.

Taikisha has thus been working to raise the awareness of information security among all officers and employees.

Type of measures	Measures
Ensuring thorough compliance with rules and regulations	Formation of the Information Security Rules
	Creation of the Information Security Guidebook
	Provision of e-learning programs to officers and employees
Measures to prevent information abuse	Encrypting information terminal data
	Password authentication at startup of information terminals
	ID and password management
	Security measures for entrance and exit control
Measures to protect against malware and other external threats	Automatic encryption of email attachments
	Anti-virus measures
	Automatic application of patches
	Website filtering
	Measures to block spam
	Monitoring of unauthorized communication on the company network

Compliance

Taikisha is ensuring compliance with laws and ordinances across the organization.



Compliance System

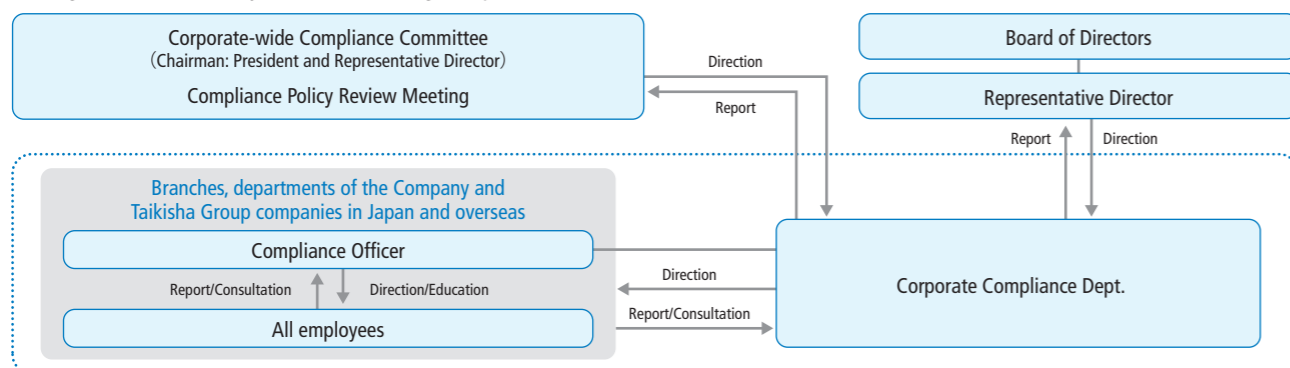
To thoroughly enforce compliance and conduct fair and sound business activities with the aim of fulfilling its Corporate Philosophy, Taikisha has set out Taikisha Ltd. Code of Conduct to be observed by all officers and employees and prescribed its compliance promotion structure in the Compliance Activity Standards. In addition, Taikisha has distributed the Compliance Manual that describes the specific standards of practice to all officers and employees to ensure thorough understanding and penetration of compliance.

Taikisha's compliance promotion structure is comprised of the Compliance Committee, Corporate Compliance Dept., Compliance Officers, and the Whistle-blowing System.

The Compliance Committee chaired by the Representative Director generally meets once a month to discuss and address the compliance issues of Taikisha's overall business activities, inspect and verify the status of observance of laws and ordinances as well as Taikisha's Articles of Incorporation, and verify measures to prevent the recurrence of any violation of compliance that has occurred. Two of the meetings of the Compliance Committee are attended by all directors as the Compliance Policy Review Meeting. In addition to the above verifications, an annual compliance policy, an annual compliance plan and response measures to any violation are discussed and verified, an outline of which is reported to the Board of Directors. In case signs of a serious situation are identified, a Company-wide Compliance Committee, which consists of all officers, etc., is promptly convened to address the situation.

The Corporate Compliance Dept. continually implements compliance-related education and enlightenment activities based on the domestic and overseas policies and plans (compliance programs) approved by the Compliance Policy Review Meeting, while maintaining independence as a department directly under the Representative Director, and reports on the status of its activities to the Compliance Committee.

Diagram of Taikisha's System for Promoting Compliance



Taikisha assigns a Compliance Officer in each business office and business division in Japan and overseas and establishes directing/reporting routes from/to the Corporate Compliance Dept. to strengthen the compliance system.

Monitoring of Compliance Risk

The Corporate Compliance Dept. regularly visits business offices in Japan and overseas to monitor compliance risks. The Corporate Compliance Dept. assesses the monitoring results of each business office on a four-point grading scale of S, A, B and C and provides guidance on PDCA toward recognition of issues and improvement.

In the monitoring of business offices in Japan, the Corporate Compliance Dept. broadly checks and verifies the status of compliance with laws and ordinances, including the Antimonopoly Act, and internal rules, and the status of its management system, as well as the status of dissemination of the Mission Statement, the Whistle-blowing System, etc. and issues regarding the work environment. On the other hand, in overseas business offices, the Corporate Compliance Dept. checks and verifies risks specific to each business office based on the conditions of the country, the framework for compliance with laws such as the Competition Act and the Anti-Bribery Act and the implementation status of such framework, and the status of dissemination of the Whistle-blowing System.

By taking these measures, Taikisha aims to establish its

Risk Rating of Legal and Compliance for Taikisha's Monitoring

Grade	Four grades of evaluation
S	No violations of Laws recognized. Weakness in the system for compliance with laws and regulations, etc. is minor.
A	Minor violations of laws recognized, but detected and controlled properly by ourselves.
B	Non-minor violations of Laws recognized. The system for compliance with laws and regulations, etc. needs to be improved.
C	Material violations of Laws recognized that could threaten the sustainability of business or a risk equivalent thereto.

autonomous compliance system that detects even minor cases and implements remedial measures on their own while preventing material legal violations both in Japan and overseas business offices.

Efforts to Firmly Establish Compliance

Taikisha has designated October of each year as the Compliance Promotion Month to promote the penetration and establishment of compliance awareness. During the Month, Taikisha holds read-through sessions of the Compliance Manual at each business office and department targeting all employees and solicits compliance slogans internally.

Compliance slogans are collected widely throughout Taikisha's affiliates in Japan and overseas. The best slogans are selected separately in Japan and overseas and displayed in the form of compliance posters at business offices in Japan and overseas.

As part of efforts to ensure thorough understanding of its mission statement and behavioral philosophy as well as education for legal compliance, Taikisha provides an e-learning program targeting all employees three times a year. This e-learning program covers all matters that should be understood by employees and has been optimized for effectiveness, including the timing and method of conducting the program.

Compliance posters



Whistle-blowing System

Taikisha has a Whistle-blowing System in place, through which any legal violation, violation of internal rules, misconduct, or unethical conduct can be reported in the event that any such act has been found, and has established a whistle-blowing hotline in the Corporate Compliance Dept. and an outside law firm. The Whistle-blowing System can be used by employees of Taikisha and its group companies as well as dispatched employees, and officers and employees of business partners.

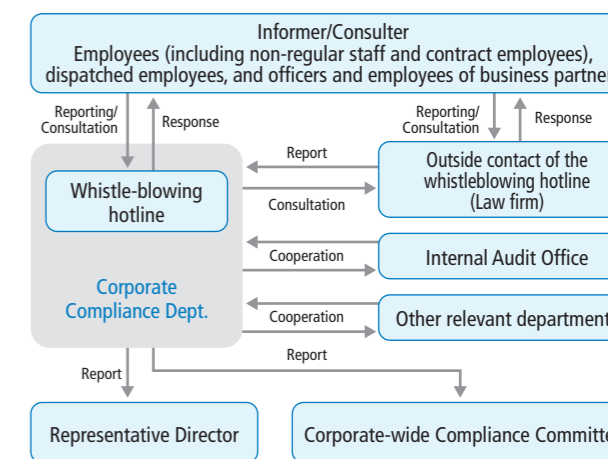
Taikisha established the whistle-blowing hotline in Japan in FY2006. In FY2015, Taikisha started developing the whistle-blowing hotline at its overseas business offices. As of the end of March 2019, the whistle-blowing hotline has been established at Taikisha's 23 overseas affiliates.

In operating the Whistle-blowing System, Taikisha takes all

possible means to protect the privacy of whistleblowers, such as strict management of the content of whistle-blowing reports received by the whistle-blowing hotline in accordance with Taikisha's Whistleblowing Rules and enlightenment activities for employees.

In FY2018, Taikisha received six whistle-blowing reports in Japan. Taikisha has taken appropriate responses to all these cases after speedily conducting investigations into them.

Whistleblowing Flow Chart



Status of Implementation of Compliance Training

The Corporate Compliance Dept. provides compliance training targeting employees at Taikisha's business offices in Japan and overseas, in order to thoroughly get across important laws, ordinances and internal rules that are deemed to have a huge impact if violated and reduce the risk of compliance violations.

In FY2018, Taikisha held 44 training sessions in Japan with the main themes of the Mission Statement, compliance with the Antimonopoly Act, prevention of harassment, case studies and dissemination of the Whistle-blowing System, and a total of 1,004 employees attended.

At its overseas affiliates, Taikisha held 19 compliance training sessions and a total of 460 people attended. Outside Japan, the main themes were the Mission Statement, the overseas compliance program, the Competition Act, the Anti-Bribery Act, case studies, and the Whistle-blowing System. In this way, Taikisha is endeavoring to raise the awareness of compliance of local staff members in its overseas business offices.

Compliance Manual



Environment

Taikisha is working to realize a low carbon society by reducing greenhouse gas (GHG) emissions and environmentally hazardous substances by leveraging its technological expertise cultivated in the HVAC business.

Corporate Governance

Taikisha has established a corporate governance system and structure that wins trust from all stakeholders.



Environmental Management Vision

Taikisha strives to improve environmental value for its clients and to protect the global environment using Taikisha's solution technologies as a company engaged in business related to the environment.

1. Improving Environmental Management

Actively engage in finding solutions for social issues related to the global environment by accurately understanding social trends changing day by day.

Continuously apply environmental management system and reduce environmental risks.

Actively disclose environmental information to the public while improving environmental education and awareness in its offices.

2. Promoting Environmental Business

Promote energy management in life cycles and reduce CO₂ emissions during the operation of systems Taikisha supplies.

Develop technologies for exhaust gas and effluent treatment and contribute to the prevention of environmental pollution.

Promote R&D of new eco-friendly technologies and products.

3. Developing Environmental Conservation Activities

Check and minimize energy consumption in its offices and laboratories.

Implement thorough measures regarding the surroundings, construction by-products and harmful materials at its workplaces.

Promote green procurement.

Operation and Promotion System

At Taikisha, the officer in charge of CSR takes the initiative to draw up company-wide action plans, check and assess the status of efforts, and review goals, with the purpose of promoting its efforts for environmental protection based on the "Environmental Management Vision." Taikisha will strive to raise its environmental protection activity level by continuously making improvements through the operation of the environmental management system.

Taikisha distributes its environmental policy to its business partners in accordance with the ISO14001 standard and requests their full cooperation in observing the policy.

Environmental Management System Operation and Promotion System Chart



Environmental Management Activities

Taikisha has set out the Business Division Environmental Policy and Branch Office Environmental Policy, based on the Company-wide Environmental Management Vision and Environmental Management Master Plan. Taikisha also evaluates the environmental impact in business processes and creates an environmental impact evaluation sheet. Each department breaks down into a development plan, design policy plan, and project policy plan for each project and development theme, and promotes day-to-day environmental management activities.

The effectiveness of environmental management policies and activities are confirmed at the Corporate Policy Review Meeting, Domestic Business Office General Manager Meeting, Branch Office Management Review Meeting, Development Review Meeting, Design Examination Meeting and Construction Review Meeting, in order to confirm the status of environmental management activities.

Development of the Environmental Management Activities



Compliance with Laws and Regulations and Responses to Complaints Regarding Environmental Issues

Taikisha stores information in an internal database about revisions to environment-related laws and regulations that need to be taken into account in conducting business operations and information on ordinances of prefectures and designated cities to disseminate the information to all employees. In addition, Taikisha puts information on laws and regulations relevant to each business process in the Quality Assurance System Diagram to further ensure compliance with such laws and regulations. Taikisha records complaints regarding environmental issues that came up in Taikisha, including information on causes of complaints, remedial measures and preventive measures, in the internal database to share information within the group.

There was no major complaint regarding environmental issues that occurred in FY2018.

Taikisha conducts employee education in all business offices to prevent the recurrence of complaints that occurred in the past, and provides guidance and education through on-site patrols and other measures.

Status of Acquisition of ISO Certification

The Green Technology System Division and the Paint Finishing System Division integrated quality and environmental management systems and were certified with ISO Standards 2015.

Taikisha Group's Status of Acquisition of ISO Certification

Country name	Company name	ISO 9001	ISO 14001
Japan	Taikisha Ltd.	●	●
China	Wuzhou Taikisha Engineering Co.,Ltd.	●	●
Taiwan	Taikisha (Taiwan) Ltd.	●	
Thailand	Taikisha (Thailand) Co.,Ltd.	●	●
Vietnam	Taikisha Vietnam Engineering Inc.	●	●
Philippines	Taikisha Philippines Inc.	●	
Singapore	Taikisha (Singapore) Pte. Ltd.	●	●
Malaysia	Taikisha Engineering (M) Sdn. Bhd.	●	
Indonesia	P.T. Taikisha Indonesia Engineering	●	
India	Taikisha Engineering India Pvt. Ltd.	●	●
USA	TKS Industrial Company	●	●
Italy	Geico S.p.A.	●	●

The certification acquisition rates at business offices in Japan are 100% in both business divisions.

Environmental Accounting

Taikisha calculates the cost and economic effects of environmental protection based on the basic concept of the Environmental Accounting Guidelines issued by the Ministry of the Environment.

Environmental protection cost	Amount of cost	Main activities
The cost within the business area	338 million yen	Waste disposal cost, introduction of eco-friendly cars
Management activities cost	9 million yen	In-house environmental management system operation cost, environmental education
Research and development cost	576 million yen	Research and development cost for eco-friendly products and services
Social activity cost	1 million yen	Donation to environment conservation groups
Total	924 million yen	

Economic effects of environmental protection measures	Amount of cost	Main activities
Revenue amount	43 million yen	Proceeds from the sales of valuables
Cost reduction	5 million yen	Cost reduction effect of introduction of eco-friendly cars
Total	48 million yen	

Environmental Education (for New Employees)

Taikisha provides introductory education on the Vision and System of Environmental Management and education on the environmental management operations of each department, to new employees every year. They also attend skill training courses for senior operations engineers relative to specified chemical substances, tetraalkyl lead, asbestos, organic solvent work, and hazardous work in oxygen-deficient air or work involving hydrogen sulfide, and obtain certifications. This system ensures that new employees learn the necessary knowledge to handle chemical substances and hazardous substance from their first year.

[Taikisha Group] Efforts for Realizing a Low Carbon Society

Taikisha is working on reducing GHG emissions in the entire supply chain.



Risks and Opportunities of Climate Change

The United Nations adopted the Sustainable Development Goals (SDGs), a set of 17 global goals to be attained by 2030. These SDGs, based on the recognition that climate change is threatening the sustainability of the earth's life support system, strongly urge organizations to take urgent measures to reduce the impact of climate change. Against such a backdrop, the Paris Agreement governing climate change reduction measures from 2020, adopted at the United Nations Framework Convention on Climate Change (COP21), has come into effect. To realize the aim of the Paris Agreement, which is to limit the rise in global average temperature, it is important to take measures toward realizing low-carbon emissions to reduce greenhouse gas (GHG) emissions and, furthermore, zero-carbon emissions.

Taikisha recognizes that the potential disturbance of the continuity of business by typhoons, heavy rain and other natural disasters as well as business development being affected by the tightening of environmental regulations are climate change risks. On the other hand, Taikisha expects that climate change could expand customer needs for environmental measures and create opportunities for many clients to utilize Taikisha's environmental technologies. By capturing such opportunities accurately, Taikisha will promote "zero-carbon emissions" through its business operations.

Energy- and Resource-Saving Achievements

Taikisha's power usage in all offices (Japanese offices) in FY2018 was 142 kWh/m². Taikisha will continue to conduct energy-saving and consumption-reduction activities by raising the awareness of each employee to ensure the implementation of energy-saving measures, such as observing Cool Biz and setting air conditioners at energy efficient temperatures.

Grasping the Level of Scope 1 and 2 Emissions to Reduce CO₂ Emissions

Companies are being required to reduce GHG emissions through business operations at construction sites and offices to help curb global warming.

Looking at Taikisha's GHG emissions in FY2018, Scope 1 emissions, which are direct emissions from combustion of fuels, etc., were 1,471 t-CO₂, and Scope 2 emissions, which are indirect emissions from use of electricity, etc., were 1,390 t-CO₂. Taikisha will continue to work on saving energy at construction sites and offices.

Breakdown of Scope 3 Emissions

Looking at Taikisha's GHG emissions in the supply chain for FY2018, Scope 3 emissions were 4,070,023 t-CO₂ of which emissions from Category 11 (use of sold products) accounted for the largest portion at 92.04%. Considering that GHG emissions from the operation phase of the facilities Taikisha provides are largest across its supply chain, Taikisha will make greater efforts than ever to provide facilities and systems with high energy-saving capabilities.

In addition, Taikisha will further promote green procurement by cooperating with suppliers and continue to reduce construction by-products and to appropriately dispose of industrial waste, aiming to curb GHG emissions from production, transportation, and disposal of materials and to help conserve the global environment.

Initiatives at the Green Technology System Division

To promote a low carbon society, the Green Technology System Division is focused on making energy-saving proposals at the operation phase of clients' air-conditioning and sanitary facilities.

Taikisha is engaged in the design and construction of air-conditioning and sanitary facilities for clients in broad areas, such as factories, office buildings and hospitals in Japan and overseas. The volumes of CO₂ emissions from the operation of those facilities over many years significantly exceed the CO₂ emissions from the construction of buildings. The Green Technology System Division proposes systems that reduce energy consumption throughout the life cycle of buildings and offer superior technologies to reduce carbon emissions and environmental impact.

Initiatives at the Paint Finishing System Division

The Paint Finishing System Division is engaged in the design and construction of large-scale paint finishing plants of automobile and aircraft makers in Japan and overseas. Reducing CO₂ emissions in the paint process at these plants has become an important issue in the automobile and aircraft industries. Through providing solutions for this issue, Taikisha contributes to clients' low carbon operation.

Taikisha strives to promote the energy efficiency and downsizing of facilities by using an energy calculation model for paint finishing lines and setting medium-term reduction targets. Taikisha also makes proposals to reduce CO₂ emissions by introducing renewable energy and a system to recover waste heat from lower temperature sources.

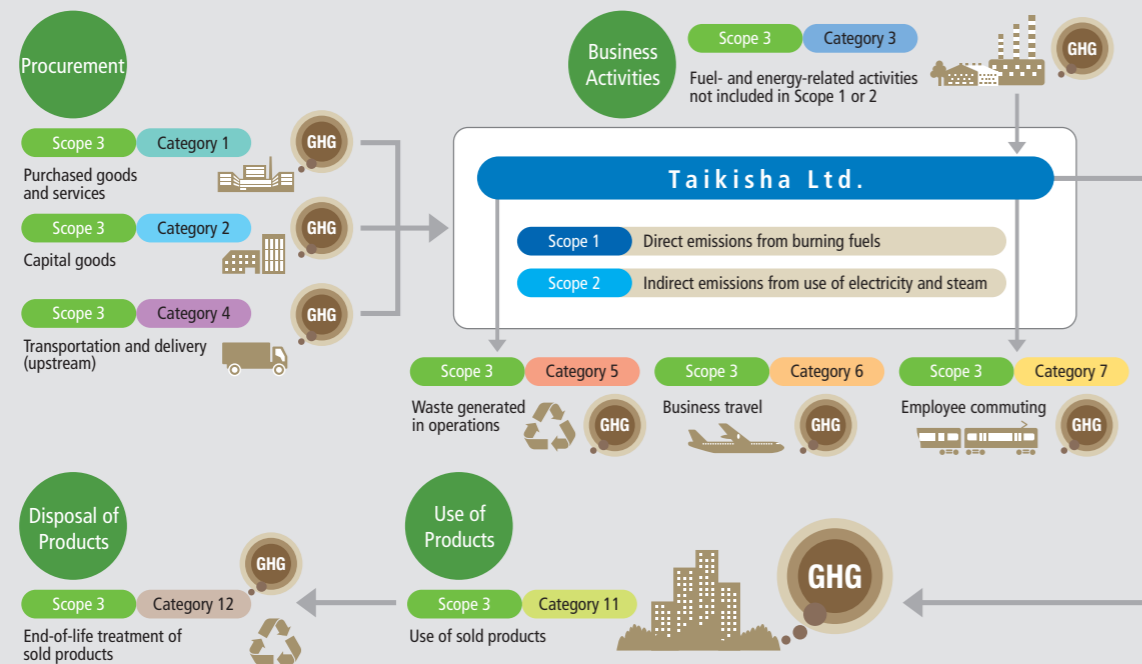
Please see the pages below for details.

	Eco-friendly design and energy-saving proposal activities	P.43
	Development of energy-saving technologies	P.45

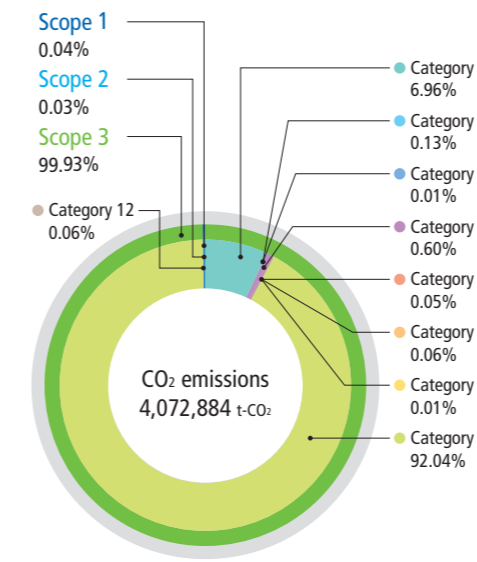
Please see the pages below for details.

	CO ₂ emissions reduction activities from the paint process	P.44
	Technology proposal plan for achieving the third medium-term target of 70 kg-CO ₂ /unit in 2020	

Conceptual Diagram of GHG Emissions Control in the Entire Supply Chain



Breakdown of Scope/Category



*Emission factor is calculated based on the Emission Factor Database on Accounting for Greenhouse Gas Emissions throughout the Supply Chain (ver. 2.6) of the Ministry of the Environment and the Ministry of Economy in Japan, Trade and Industry and CFP COMMUNICATION PROGRAM DB ver. 1.01.

Scope/Category	Accounting methods*	Emission amount (t-CO ₂)	
Scope 1	-	1,471	
Scope 2	-	1,390	
Scope 3		4,070,023	
Category 1	Purchased goods and services	Calculated from (raw) materials procurement amount (in value terms)	283,609
Category 2	Capital goods	Calculated from amount of capital investment	5,119
Category 3	Fuel- and energy-related activities not included in Scope 1 or 2	Calculated from purchased amount of electricity and fuels	321
Category 4	Transportation and delivery (upstream)	Calculated from transportation costs accompanying procurement of (raw) materials	24,545
Category 5	Waste generated in operations	Calculated from amount of waste discharged by type	2,155
Category 6	Business travel	Calculated from travel expenses paid by mode of transportation	2,629
Category 7	Employee commuting	Calculated from transportation expenses paid to employees	267
Category 8	Leased assets (upstream)	Included in Scope 1 and 2 emission calculation	-
Category 9	Transportation and delivery (downstream)	No relevant activities	-
Category 10	Processing of sold products	There are some products that are relevant, but calculations are ignored because their ratios in sales are extremely small.	-
Category 11	Use of sold products	Calculated from emissions from operation of facilities Taikisha provided, HFC leakage from equipment Taikisha provided, and estimated useful lives	3,748,860
Category 12	End-of-life treatment of sold products	Calculated from weight of main equipment by type	2,518
Category 13	Leased assets (downstream)	No relevant activities	-
Category 14	Franchises	No relevant activities	-
Category 15	Investments	Calculations are ignored because the validity of the category 15 estimates is low as a result of many portfolio companies not disclosing Scope 1 and 2 emissions and the impact of the category 15 estimates on the entire supply chain is small.	-
Total of Scope 1, 2 and 3			4,072,884

[Green Technology System Division] Efforts for Realizing a Low Carbon Society

Taikisha is helping to reduce GHG emissions at the operation phase of the air-conditioning and sanitary facilities it provides to clients.



Activities in the Field of Air-Conditioning System for Buildings and Factories

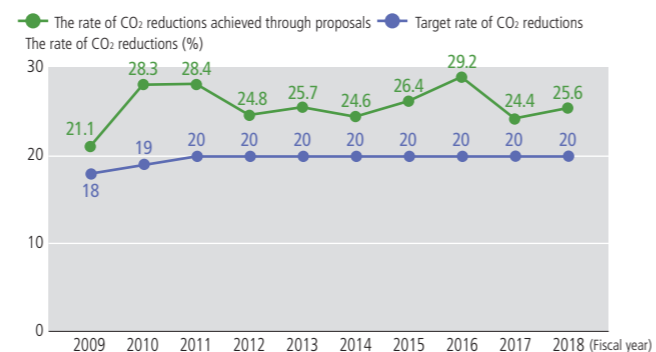
Eco-Friendly Design

The Green Technology System Division, as part of promoting ecofriendly designs, makes proposals for improving the energy efficiency (reducing environmental impacts) of facilities owned by clients. In energy-saving proposal activities, the Division repeats the cycle of energy-saving diagnosis to grasp the current status, make detailed proposals based on clients' future visions, design and construction, and verify the effects in the operation phase.

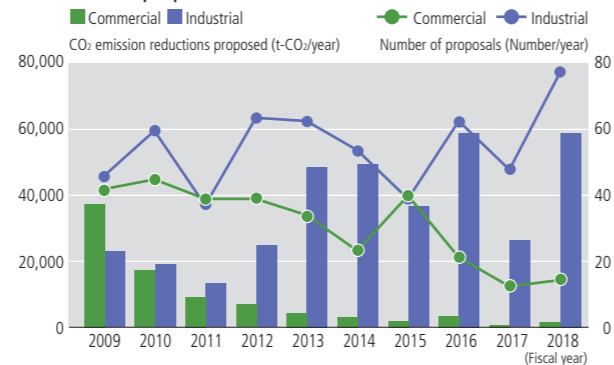
Taikisha defines the rate of CO₂ emissions reduced from facilities owned by clients due to Taikisha's proposals as the rate of CO₂ reductions. The transition in the rate of CO₂ reductions for the past 10 years is shown in Figure 1. In FY2018, Taikisha conducted activities by setting a target for the rate of CO₂ reductions of a weighted average of 20% or higher, and Taikisha exceeded the target at 25.6%. The number of proposals and the proposed amount of CO₂ emission reductions are classified by commercial client (for offices and hospitals, etc.) and industrial client (plants, etc.) and their transitions are shown in Figure 2. The amount of proposed CO₂ emission reductions that corresponds to Category 11 under Scope 3 was about 920,000 t-CO₂ (the effect of 15 years of operation). To contribute to the target reduction in energy-originated CO₂ emissions by FY2030 (25.0% reduction compared with FY2013) under the Plan for Global Warming Countermeasures, a Cabinet decision made in May 2016, Taikisha is promoting the dissemination of the Energy Plant Optimal Control System (in-house development) for overall energy saving of heat source systems, which has a significant effect on reducing CO₂ emissions. Furthermore, Taikisha has managed to visualize energy consumption with its sensing

(measurement) technology utilizing IoT equipment and is promoting more effective energy-saving proposals as well as technological development.

● (Figure 1) Transition in the rate of CO₂ reductions through Taikisha's proposals



● (Figure 2) Transition in CO₂ emission reductions proposed and number of proposals



Column

Cutting-edge, eco-friendly plant where GHG emissions are cut by 50%

In November 2018, we completed the construction of Alps Alpine Furukawa Plant 2 based on the concept of "cutting-edge factory with sustainable growth potential." At the plant, which is flagship manufacturing hub for electronic parts of ALPS ALPINE CO., LTD., stable quality is sought through its production management system utilizing IoT and AI, and efforts are also being made to create a space where employees can work safely and comfortably.

Having also given thoroughgoing consideration to the global environment, the plant is working to reduce its environmentally hazardous substances and GHG emissions by 50% compared to existing factories. Taikisha has made energy-saving efforts by constructing facilities including those for outdoor air cooling/free cooling and geothermal air conditioning that take advantage of natural energy, as well as the "high roof factory air-conditioning system," which provides air conditioning only in the working space of the production area.



[Paint Finishing System Division] Efforts for Realizing a Low Carbon Society

Taikisha is helping to reduce GHG emissions in the paint finishing process for automobiles, etc.



Activities in the Field of Automobile Paint Finishing Systems

Activities to Reduce CO₂ Emissions from the Paint Finishing Process

In order to help reduce the environmental impact of the paint finishing process, in which energy usage is particularly high in the automobile manufacturing process, the Paint Finishing System Division has proposed plans to reduce CO₂ emissions from paint facilities in the automobile manufacturing process.

Since 2000, Taikisha has been promoting activities to reduce CO₂ emissions by calculating CO₂ emissions using the energy estimation model for automobile paint finishing lines.

CO₂ emissions, which were 160.1 kg-CO₂/unit in 2005, decreased to 100 kg-CO₂/unit, which is the first medium-term target, by 2012. By 2015, Taikisha reduced CO₂ emissions further to 80 kg-CO₂/unit, which is the second medium-term target, by promoting facility technologies such as heat pumps and dry filtration booths (dry paint booths that use a combination of pre-coating materials and filters).

In FY2018, Taikisha was able to reduce CO₂ emissions to 73.5 kg-CO₂/unit.

Taikisha has set the third medium-term target of 70 kg-CO₂/unit to be achieved by 2020 and will promote proposals for the existing latest technologies.

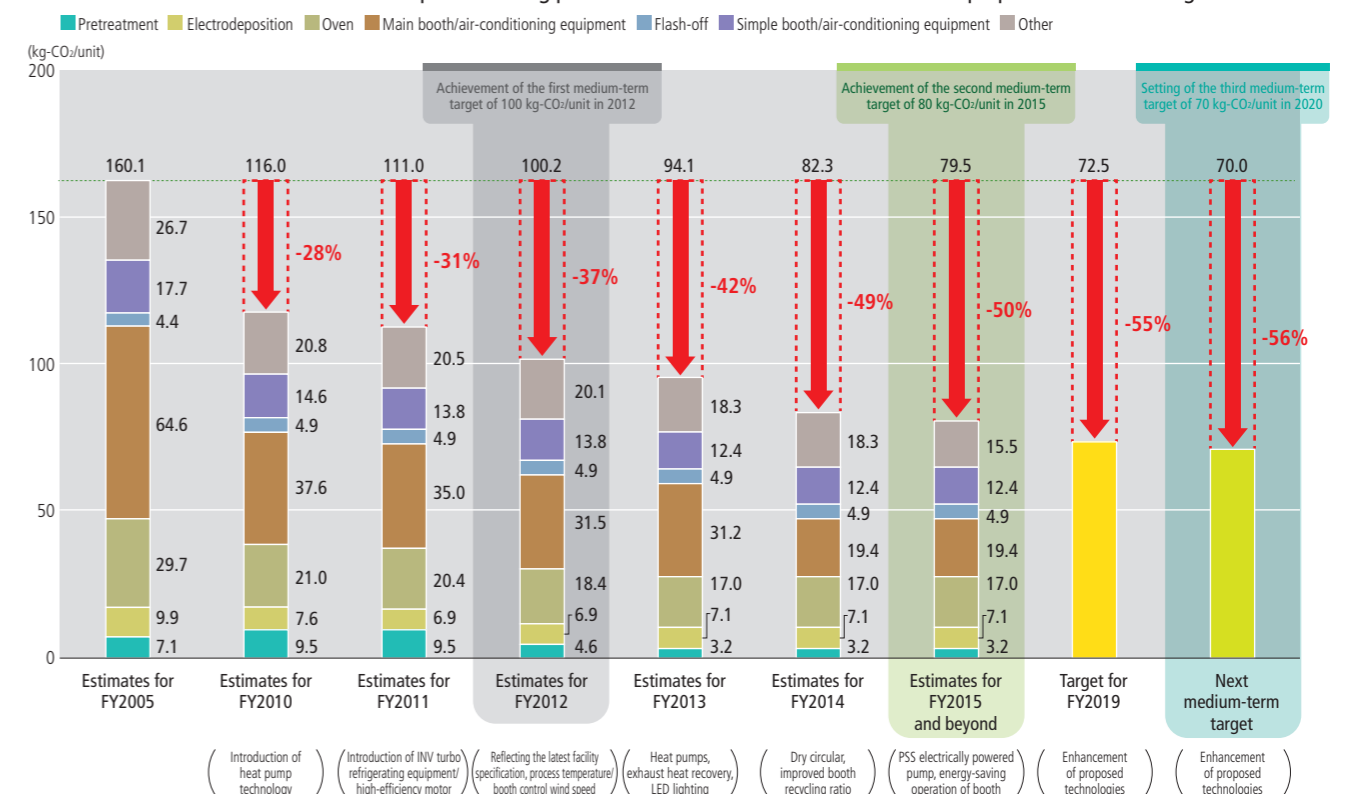
Technology Proposal Plan for Achieving the Third Medium-Term Target of 70 kg-CO₂/unit in 2020

For FY2019, Taikisha has set the target at 72.5 kg-CO₂/unit with an eye on achieving the third medium-term target of 70 kg-CO₂/unit in 2020.

Specifically, Taikisha will promote the introduction of renewable energy (solar thermal energy, etc.), consider waste heat recovery from lower temperature sources, and technology development such as downsizing paint finishing systems and enabling lower baking temperatures in drying ovens. Taikisha will consider adopting next-generation energy sources including hydrogen by 2020.

Taikisha aims to help protect the global environment by implementing these technology proposals for paint finishing systems in cooperation with automobile manufacturers and other related companies.

● CO₂ emissions estimates at automobile paint finishing plants: Transition in CO₂ emission reductions proposed and future target



[Exhaust Air Processing Technologies] Environment Impact Reduction Technologies

Taikisha is striving to reduce environmental impacts by utilizing its technologies cultivated over the years.



Environmental Impact Reduction through Exhaust Gas Treatment Technology

Volatile Organic Compounds (VOC), used in automobile painting and various other fields, are the main causative agent of photochemical smog, etc., and reducing these VOC emissions has become a major social concern in recent years.

Taikisha has been undertaking the development of high-heat recovery efficiency, direct fired regenerative thermal oxidizers (RTO) over the years based on its VOC-reduction technologies developed in the automobile paint finishing system business field. The equipment performs oxidative decomposition at a high temperature, allowing

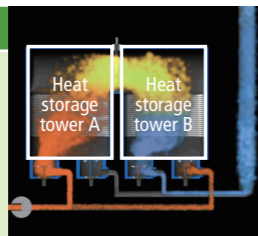
Product line of RTO

Dual-Tower RTO

Dual-Tower RTO offers a high heat recovery rate during operation of 95% or higher with minimum energy usage.

- VOC treatment efficiency of 98% or higher
- Space-saving/cost-saving

Heat storage alternates with heat release repeatedly in the two heat storage towers and efficiently performs oxidative decomposition of VOC.



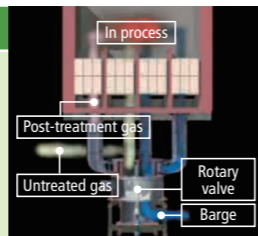
most VOC to decompose, and achieves a high thermal recovery rate of 95% or higher. Another feature of the equipment is that it can perform self-sustained combustion operation, whereby high temperature conditions can be sustained only with combustion heat of a solvent if the level of VOC is high.

Taikisha has a track record of selling more than 350 units of dual-tower RTO and more than 40 units of rotary-type RTO and offers wide-ranging product lines.

Rotary-type

Introduction of rotary valves eliminated emissions of untreated exhaust gas and bad odors and further improved the VOC treatment efficiency.

- VOC treatment efficiency of 99% or higher
 - Reduction in pressure fluctuation of exhaust air duct
- Untreated gas will be introduced from the opening of the rotary valve to the combustion chamber and decomposed completely.

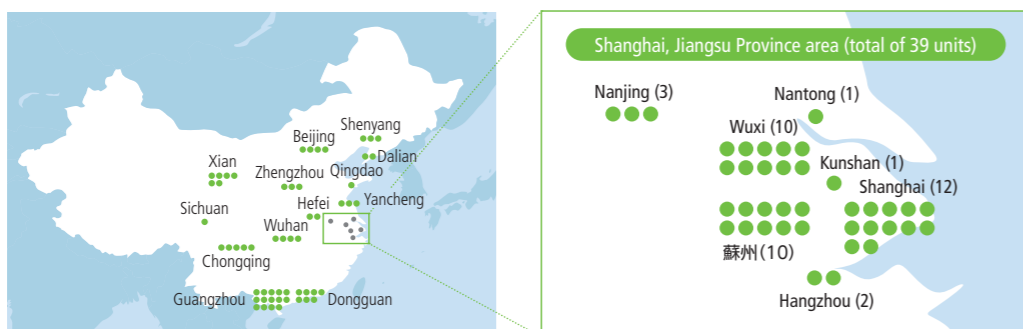


Triple-Tower RTO helps reduce environmental impact in China

In recent years, environmental regulations have been tightened at a dramatic pace in China, in line with the rapid heightening of environmental awareness. Crackdowns by the environmental protection department of the Chinese government and environment-related organizations of local governments are intensifying.

In some regions in China, the emission standards related to air pollution include a limit of total emission volume under constant monitoring. There are not a few cases where environmental standards stricter than Japan's are adopted.

Track record of construction in China



Under such circumstances, Taikisha's triple-tower RTO (direct fired regenerative thermal oxidizer) has been appreciated for its high VOC removal efficiency and energy-saving properties, and it has been increasingly adopted mainly by Japanese companies.

Compared to the conventional dual-tower RTO, a triple-tower RTO is capable of returning the untreated gas to the RTO by allocating one of the three towers to serve as a purge section, preventing gas from being released directly into the atmosphere and enabling a VOC treatment efficiency of 99% or higher.

To address some clients' request for treatment of a high airflow gas with a low concentration of VOCs, Taikisha also proposes a system with a two-stage VOC concentrator installed as a prior step to the triple-tower RTO to absorb such a gas to convert it to a low airflow gas with a high VOC concentration before treatment of the gas with the triple-tower RTO. This system enables overall VOC treatment efficiency of 99% or higher, while at the same time saving energy for operating the RTO. For that reason, an increasing number of units of this system have also been adopted in China.

Taikisha sold more than 90 units of VOC exhaust-gas treatment systems throughout China. In addition, Taikisha's local production and procurement structure is now in place in China, which enables us to offer quality products comparable to those of Japan at competitive prices in China.

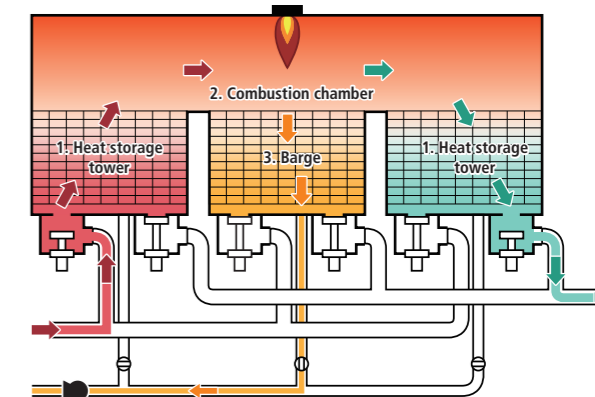
Having enhanced its maintenance structure following the increase in units sold, Taikisha is now capable of responding quickly to maintenance demand.

Going forward, Taikisha will strive to further contribute to reducing the environmental impact in China through ceaseless efforts

such as offering information and guidance on China's environmental regulations for many companies including Japanese companies, as well as enhancing the promotion of its counter-air-pollution technologies for environmental organizations in China.

Also in the future, Taikisha will proactively expand its business to Southeast Asia and India as well as in China.

Triple-Tower RTO Flow Chart



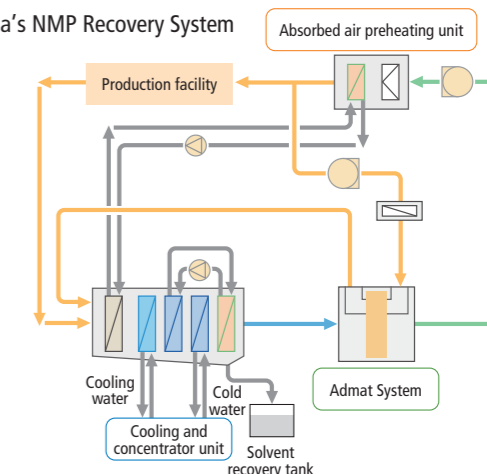
Reduction of Environmental Impact by Utilizing Our Solvent Recovery Technology

Rapid dissemination and increasing adoptions of eco-friendly cars such as electric vehicles (EVs) and plug-in hybrid electric vehicles (PHEVs) are seen especially in China, Europe and the United States.

As a major energy source of EVs and PHEVs, lithium-ion secondary batteries are the most common. For the production of lithium-ion secondary batteries, N-Methyl-2-Pyrrolidone (NMP) is the essential solvent. From the manufacturing process of these batteries, high volumes of gases containing NMP are emitted.

Taikisha possesses ample experience in its NMP Recovery System to recover NMP from gases containing NMP, and this system has been adopted by many battery makers.

Taikisha's NMP Recovery System



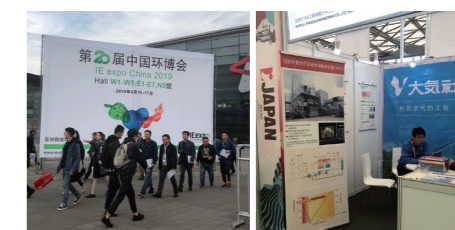
Column

Exhibited at 20th Environmental Technology Conference (IE expo China 2019) held in Shanghai, China

Taikisha's Chinese affiliate Wuzhou Taikisha Engineering Co., Ltd. was an exhibitor at the 20th Environmental Technology Conference (IE expo China 2019), one of the biggest environment-themed expos in China, from Wednesday, April 15 to Friday, April 17, 2019. Using 13 out of a total of 17 halls at the venue of the Conference, the Shanghai New International Expo Centre, the number of exhibitors was the largest ever, totaling 2,047 companies (16% increase from the previous year). During the exhibition period, the exhibition site as a whole attracted 70,000 visitors, symbolizing China's growing environmental awareness and brisk environmental business.

Wuzhou Taikisha Engineering set up a booth as one of the exhibiting companies in the Japan pavilion sponsored by JETRO Shanghai Office and the Japan-China Environmental Service Center Co., Ltd., and promoted regenerative thermal oxidizer (RTO) and other products in the lineup of VOC exhaust-gas treatment systems as well as its track record of delivering such products. The booth attracted more than 300 visitors, mainly consisting of persons related to Chinese companies.

Going forward, Taikisha will continue to engage in technological exchange with persons involved in environmental protection in China, while also widely showcasing its VOC exhaust-gas treatment systems and boosting its track record of delivery, to help resolve China's air pollution problem.



Recycling-Oriented Society

Taikisha disposes of waste appropriately for effective use of limited resources.



Industrial Waste Disposal and Recycling

Among the industrial wastes generated at sites where Taikisha performs construction work as the main contractor, Taikisha encourages 4R* activities whereby waste is collected in a classified manner for recycling so that landfill at final disposal sites is reduced and the amount of mixed waste is curbed.

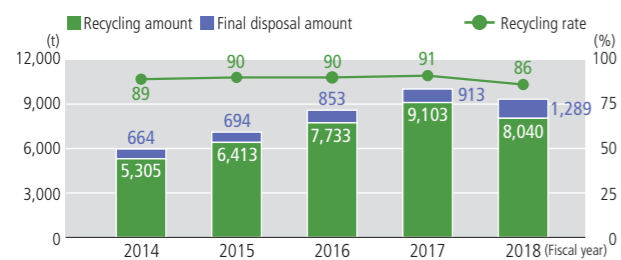
The disposed industrial waste is sorted into the categories of recycling and final disposal for landfill. The ratio of recycled resources is indicated as a recycling rate.

*4R=Refuse (eliminating waste in resource use); Reduce (reducing waste); Reuse (reusing waste); Recycle (recycling waste)

Main efforts for recycling

Recycling of work uniforms	Recycling of heat shield materials
Recycling of helmets	Recycling of specified equipment

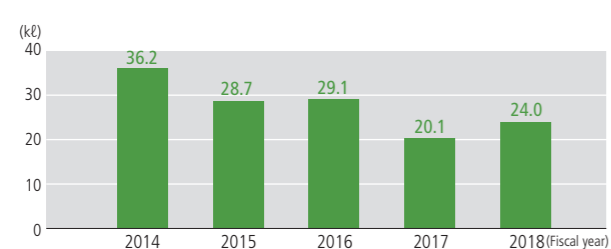
Industrial waste disposal amount and recycling rate



Collection and Management of Hazardous Substances

Taikisha uses Hazardous Substances Collection Control Sheets to manage the collection and proper disposal of hazardous substances (lithium bromide, etc.) generated during renovation work or other projects. Taikisha carries it out from the design and construction stage upon confirming whether there are any substances applicable with its Design Policy Plan and Site Environment Control Plan.

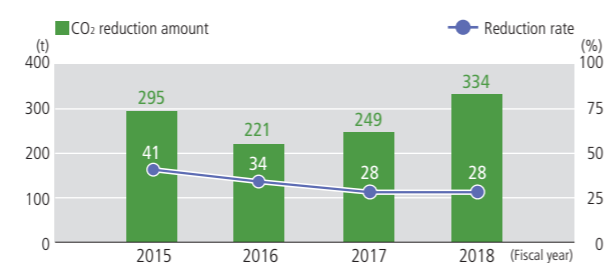
Amount of hazardous substances collected (collection rate: 100%)



Reduction of Waste Generation

Taikisha draws up a plan for reducing waste generation in the site environmental control plan created at construction sites and incorporates such plan into construction plans and drawings. In performing construction works, implemented measures and the reduced amount of waste are calculated, and good improvement cases are updated on the internal document database and shared across the company. Taikisha is reducing CO₂ production by making efforts for preventing waste generation and planning and implementing construction methods and measures, enabling reduction of waste generation.

The amount and rate of CO₂ reduction achieved by curbing waste generation



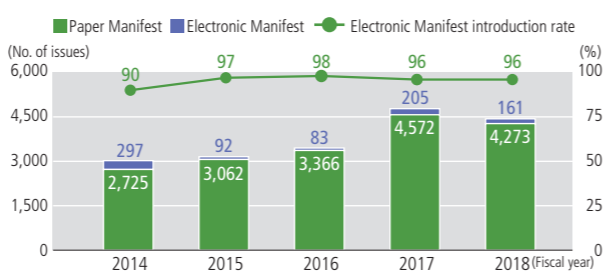
Proper Waste Management

All projects in which the main contractor is Taikisha are listed up and the waste disposal status is monitored to ensure the waste is treated properly.

Also, local government permit information on all industrial waste disposal agencies with which Taikisha has contracts is collected, listed, and regularly updated on its internal database, and Taikisha develops and manages a scheme whereby contracts are conducted only with the listed agencies.

Taikisha has introduced the Electronic Manifest scheme since 2009. It has been promoted by the Ministry of the Environment with the purpose of ensuring proper disposal of industrial waste. Taikisha's current introduction rate is 96%.

No. of Manifest issues/Electronic Manifest introduction rate



Management of Chemical Substances

Taikisha thoroughly manages chemical substances to reduce environmental impacts.

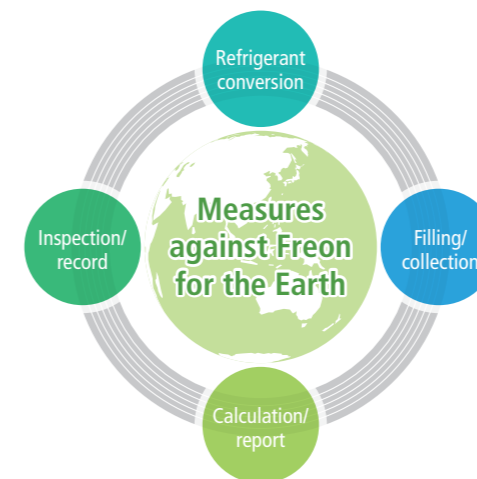


Efforts for Chemical Substance Management

Taikisha manages chemical substances handled in construction sites by creating a Design Policy Plan and Site Environment Control Plan. It then implements proper management of related substances in the design and construction phases of each project based on the Environmental Impact Assessment Sheets.

Before performing day-to-day on-site work, chemical substances to be used on the day are identified, and their risks are assessed.

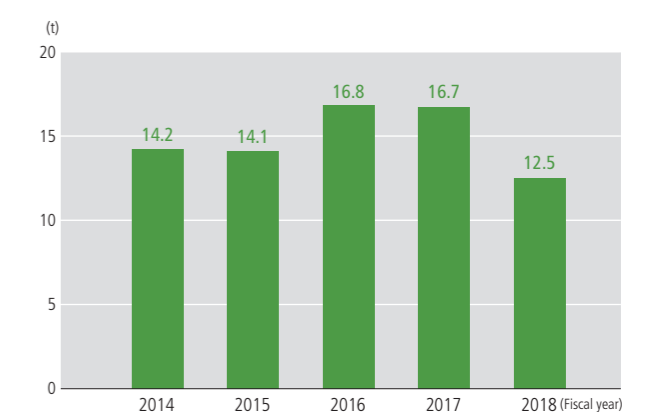
The Research and Development Center isolates and properly manages chemical substances to be handled in the stage of creating the Development Plan for each research and development item.



Efforts for Freon Management

In compliance with the Fluorocarbons Recovery and Destruction Law, each business office creates Freon Collection Control Sheets and manages the status of filling, collection, and proper disposal of Freon (process management system). When conducting Freon collection work, Taikisha draws up Freon collection plans and procedures and endeavors to prevent Freon leaks and other accidents.

Freon collection amount (collection rate: 100%)



Column

ZERO WASTE: Reduction of water and chemicals

Automobile plants as a whole use a lot of water, including pretreatment for spraying paint onto the auto body, not to mention the automobile paint finishing process in which water use is indispensable. Consideration also needs to be given to water supply and discharge, such as areas with poor water quality and areas where water price is high depending on the region. Geico S.p.A., which is in alliance with Taikisha, has devised a "ZERO WASTE" solution for the appropriate treatment of wastewater released from automobile plants. This is a technology for reducing water supply and discharge by filtering and recycling the water used at plants, evaporating the wastewater and extracting contaminants in the form of solid or semisolid waste.

"ZERO WASTE" solution, which is based on energy analysis, minimizes the use of water and chemicals, thereby enabling low-energy evaporation. As a result, it realizes low-cost waste treatment and solves effluent problems by such means as recycling of treated water.



Green Procurement

Taikisha is helping to reduce environmental impact through procurement activities conducted based on its own guidelines.



Green Procurement Policy

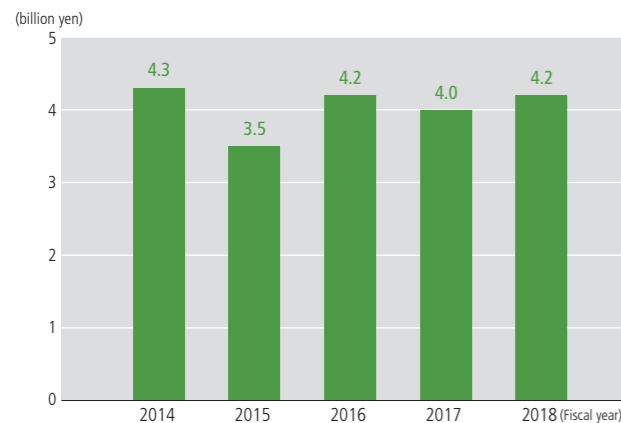
To lead the green procurement described in the Environmental Management Vision, Taikisha strives for preferential procurement and selection of new equipment, systems, working methods and technologies to help reduce environment impact in business activities (design and construction). Taikisha has determined green procurement items based on its own standards, and grasps the results of procurement and conducts periodic reviews on these green procurement items.

Judging Criteria for the Green Procurement Items

Decision on whether or not items are acceptable as green procurement items shall be made after a comprehensive evaluation. This is based on how they contribute to reduction of the impacts on the environment compared to conventional products with equivalent functions. Evaluation criteria are as follows:

- 1 Less impact on the environment when equipment and materials are manufactured or operated (for consumption of energy and resources, etc.)
- 2 Use of recycled resources for production materials
- 3 Less impact on the environment during construction (for waste generation, noise, vibration, etc.)
- 4 Less impact on the environment during operation (for energy consumption, emission of harmful substances, etc.)
- 5 Long life expectancy (durability, easy renewal and convertibility, etc.)
- 6 Easy recycling after disposal
- 7 Easy processing after disposal (easy processing, whether or not it contains harmful substances, etc.)

Performance in Green Procurement



Adoption of Carbon Offset Products

Taikisha selects office supplies for its construction site offices from among the carbon offset applicable items so that Taikisha can help reduce environmental impacts. For example, Taikisha has adopted goods with carbon offset credits attached, provided by Yamanashi Prefecture under the Yamanashi Prefecture Project to Combat Global Warming by Forest Utilization, in an effort to promote procurement with consideration for conserving forest ecosystems.



Tree thinning work to protect the forest (Yamanashi Prefecture)



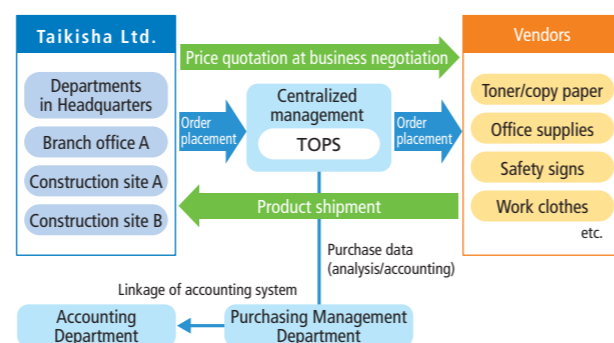
Carbon Offset Certification of a project

Promotion of Paperless Operations with Online Purchasing System

Taikisha has been promoting the use of TOPS, its online purchasing system for indirect materials. Users access the TOPS website to purchase various office supplies, ranging from daily necessities and office stationery to work clothes and safety-related products necessary at construction sites. The use of TOPS eliminates the need for processing individual purchase invoices, and, by linking the online purchase system to the accounting system, drastically reduces the number of account slips used for payment, promoting paperless operations.

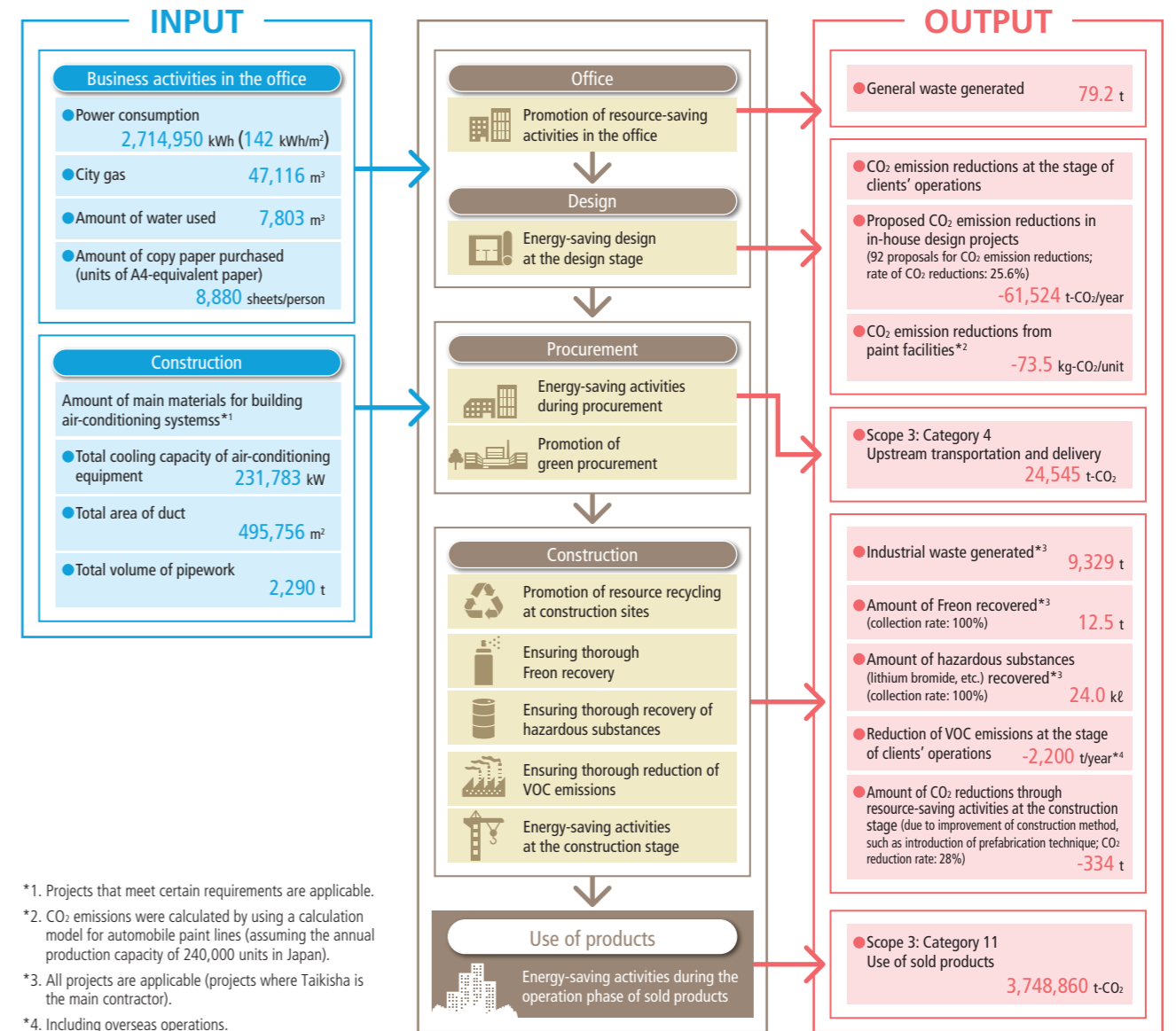
During FY2018, the total value of online purchase amounted to 91.109 million yen, and the ratio of paperless operations was 81.9%.

System flow diagram



Material Flow Diagram

Taikisha quantitatively grasps the overall picture of the environmental impacts associated with business operations to lead efforts for reducing environmental impacts.



*1. Projects that meet certain requirements are applicable.
 *2. CO₂ emissions were calculated by using a calculation model for automobile paint lines (assuming the annual production capacity of 240,000 units in Japan).
 *3. All projects are applicable (projects where Taikisha is the main contractor).
 *4. Including overseas operations.

Column

Afforestation project for the environment and people

CSR activities by Geico S.p.A. may be deemed as an approach to the "environment" and "people." That is why Geico S.p.A. has continued its afforestation activities all over the world, helping reduce CO₂ emissions and contributing to local communities. In collaboration with Italy's environmental conservation group Freedom, Geico has planted 10,000 orchard trees at eight locations in the past five years. By setting the scope of its activities targeted for communities suffering from various poverty problems, it aims to create new employment and facilitate economic growth. Actual activities involve calculating CO₂ emissions based on flight costs incurred in business trips in the previous year and determining the number of trees to be planted in accordance with the calculated volume of CO₂ emissions. Since last year, Geico S.p.A. has planted 2,700 trees by also taking into account the CO₂ emissions released in the procurement process of raw and other materials. On top of this, activities in FY2018 involved increasing the number of trees planted to 3,750 trees by additionally factoring in the CO₂ emissions equivalent to paper usage in its offices over the past 10 years.

Contributions to Society

Taikisha is promoting business activities that meet the expectations of stakeholders to widely win the trust of society.

Initiatives for Industrial Health and Safety

Taikisha aims to build a more comfortable working environment by placing the utmost priority on safety.



Basic Principles of Industrial Health and Safety

Based on an understanding of the importance of human life as its basic principle, Taikisha thoroughly implements safety-first planning and construction and fulfills its social responsibilities as a company in the construction industry out of respect for the law. Taikisha aims to protect the health and lives of employees and workers and makes efforts to build a more comfortable working environment.

Health and Safety Management System and Activities

Taikisha has established its own Taikisha Occupational Health & Safety Management System with respect for human lives and a law-abiding spirit as its basic principle.

Taikisha has established the Safety Headquarters in its Headquarters and the Safety Control Department in each of its business divisions, and they support safety activities of Branch Offices and Offices while supervising and managing industrial safety of the entire group.

The following is one example of the management initiatives under the Health & Safety Management System: Prior to starting project operations, the Safety Control Department holds a "Safety Review Meeting" with those who are responsible for on-site operations, including section managers, on-site managers, and persons in charge, focusing on health and safety matters per project at the stage of planning construction work, and they conduct disaster risk management whereby disaster risks expected at the construction stage are shared and risk-mitigation measures are considered and proposed. In addition, a Morning Safety Information E-mail is delivered to each employee every morning to enhance their safety knowledge and awareness to enlighten and help them perform day-to-day safety work.

Information and improvement technologies relating to safety

management as well as past cases of industrial accidents are disclosed on the Internal Safety Website for all employees to share and put into practice.

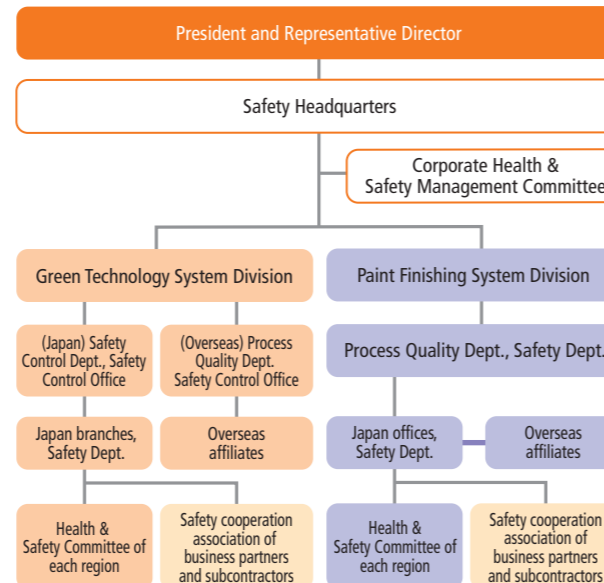
In FY2018, Taikisha summarized the materials relating to internal safety rules and relevant laws and regulations in the form of the portable version of Taikisha Safety Book and distributed it to all employees.



"The portable version of Taikisha Safety Book"

As a result of endeavors to achieve its highest priority goal of zero fatal and serious industrial accidents, Taikisha has maintained zero fatal and serious industrial accidents for more than 10 years.

Diagram of the System for Health & Safety Management

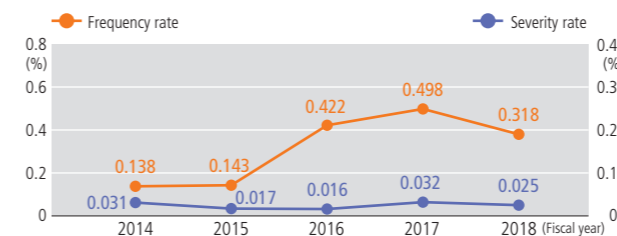


Monitoring of Safety Activity Results

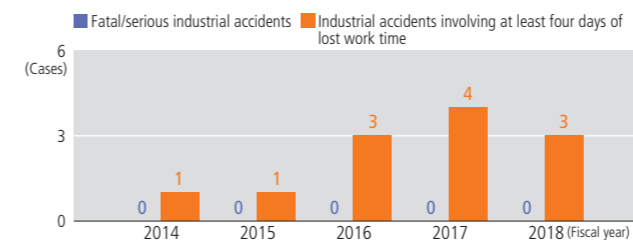
Taikisha measures and monitors the effects of safety activities by using a frequency rate that indicates the frequency of industrial accidents and a severity rate that indicates the severity of accidents as safety indicators. The transition of these indicators is as follows.

Frequency rate: This indicates the frequency of occurrence of industrial accidents, which is calculated based on the number of deaths and injuries due to industrial accidents (accidents involving at least four days of lost work time according to the criteria of the Ministry of Health, Labour and Welfare) per 1,000,000 cumulative hours worked. Severity rate: This indicates the degree of seriousness of the accident, which is calculated based on the number of work-days lost per 1,000 cumulative hours worked. Scope: Taikisha's construction sites (employees on a non-consolidated basis and subcontractors)

Frequency and severity rate indicators for the past five years in Japan



Number of industrial accidents occurred



Efforts for Improvement of Industrial Health & Safety Management in Overseas Affiliates

Taikisha has recognized that the levels of industrial safety & health management vary among business offices due to differences in safety requirements in each country and that there are safety management issues in some countries due to diversification in the nationality of employees at worksites.

In order to solve such issues, Taikisha introduced the Occupational Health & Safety Management System ("OHSMS") in eight main overseas business offices, and is conducting safety

activities in the entire organization to maintain and improve industrial health and safety levels. Specifically, Taikisha invites local staff of overseas business offices to Japan and provides periodic safety education to enhance their safety management capabilities. Taikisha has also launched a website that connects its Headquarters and overseas staff to share information with each other (TISW) and started making reports on its staff's activity status and providing safety-related materials on a periodic basis.

Launch of Website for Sharing Information with Overseas Safety Staff

For the purpose of deepening communication with local staff at overseas business offices, Taikisha has established Taikisha Anzen Site, where employees check each other's reports on practical operations and provide safety-related materials.



Safety Training by Inviting Overseas Local Staff

In order to improve the safety activity levels of business offices overseas, Taikisha convenes staff members from the safety department and construction department of each country to Japan every year to provide various education and training programs.

(Safety education items for staff members of overseas affiliates)

- (1) Safety activity guidance
- (2) Presentation of safety activities of each country
- (3) Group discussion
- (4) Inspection of sites in Japan
- (5) Crisis experience training
- (6) Education on various safety management capabilities
- (7) Opinion exchange meeting, etc.



Voice



YEDI HERMAWAN
General Manager,
Quality and Safety Dept., P.T. Taikisha
Indonesia Engineering

Safety Initiatives at P.T. Taikisha Indonesia Engineering

At P.T. Taikisha Indonesia Engineering, we have been making cross-departmental efforts to enforce daily safety patrols and identify issues, examine countermeasures and share information at monthly Health & Safety Committee meetings.

Giving top priority to the issue of eliminating accidents, we are making ongoing efforts, in particular, to eradicate the risks of falls from ceilings and electric shock accidents.

Safety targets set by P.T. Taikisha Indonesia Engineering

- (1) Continue making improvements to prevent accidents
- (2) Share safety targets with everyone
- (3) Find risk factors and establish measures to reduce them
- (4) Conduct ongoing safety training
- (5) Check safety activities during construction
- (6) Raise safety awareness at the workplace

Initiatives for Quality Improvement

Taikisha is continuously working on quality improvement to gain high reputation and trust.



Basic Policy of the Green Technology System Division

The Green Technology System Division has established the basic principle of quality policy: "We will continuously work on business process management and improvement amid changing social requirements and under the quality management system, aiming to achieve product quality that is free from Muda (wasteful), Mura (inconsistent) and Muri (unreasonable)." In addition, it has set out action guidelines for each business process and is conducting quality improvement activities.

Basic Policy of the Paint Finishing System Division

The Paint Finishing System Division has set out the following three quality policy initiatives based on the basic principle of the quality policy: "We will continue to provide paint systems that meet customers' needs and expectations to gain trust from customers and high reputation from society." In addition, it has created a checklist of the Quality Control (QC) Follow-up Sheet and is promoting quality control projects.

- 1 Provide eco-friendly paint systems.
- 2 Strive to improve technology, maintain and improve design quality, and enhance construction quality.
- 3 Increase productivity as a result of the above to reduce costs and meet customers' quality requirements.

Design and Construction Quality Improvement Activities

In the design process, Taikisha constructs a system by applying design policies based on client needs and examines them at the Design Review Meeting and the Examination Meeting, and hands them over to the construction division.

Before the commencement of a construction project, persons responsible at each of the sales, design, safety, quality, purchase and construction divisions work together, and at the Construction Policy Meeting and the Review Meeting, they identify risks regarding defective works and legal violations, the following six important quality control issues and other project-specific risks, and reflect the findings in construction plans.

- 1 Prevention of water leakage in important functional rooms
- 2 Prevention of cross connection
- 3 Prevention of leakage of oil, chemical solutions, and waste liquid
- 4 Prevention of lack of smoke exhaust air flow
- 5 Prevention of frozen coil
- 6 Prevention of stoppage of existing production facilities

Before starting construction, on-site managers, department and section managers and the quality department work together on the following five items.

- 1 Review of design drawings
- 2 Review of construction work instructions
- 3 Preparation of the rules for creating work drawings
- 4 Review of work drawings
- 5 Review of the specifications of delivered equipment

A construction quality inspection at construction sites involves self-inspection by subcontractors at each construction milestone and self-inspection by worksite managers, as well as quality inspection by the Engineering Dept. and Quality Control Dept. prior to construction, during construction and before the completion of construction. The status of correction of defects is checked periodically based on inspection records, and confirmation and follow-up on the status of correction are carried out until the correction is completed.

After the completion of construction, the fulfillment of design conditions is confirmed through trial-run calibration and performance verification, followed by an assessment at a project completion report meeting and the implementation of the PDCA cycle.

In addition, efforts are made to raise the quality awareness of engineering employees through quality standardization materials and the periodic provision of employee education.



On-site quality patrol

Efforts for Quality Improvement at Overseas Affiliates

In order to improve quality at overseas affiliates, specific matters to be implemented are prescribed in the Policy Implementation Table of the Global Business Management Dept. and applied by preparing a Policy Implementation Table at each business office with a shared awareness in accordance with the policy.

In order to improve the construction quality on the ground, on-site inspections by employees of the Global Engineering Supervisory Dept. have been increased to have employees at the site understand the importance of on-site physical checks, accompanied by the business office's general managers, section managers and worksite managers, and guidance is given to young overseas local staff on matters such as important points to be checked for quality improvement. Having also increased the frequency of the Construction Review Meetings held at the site, the content of the Initial Construction Plan is examined, and education/guidance is provided to on-site managers according to their skill level.



Training at the overseas business office in Thailand

Voice



Norio Matsuda
Manager, Quality Control Section,
Tohoku Branch Office,
Green Technology System Division

Raising awareness of quality among young employees and subcontractors through education and guidance based on communication

At the Tohoku Branch Office, we prepare "One Sheet for Quality Control" by work type for each site. Conventional construction work instruction documents contain too much information, making it difficult for young employees to remember all the information. This One Sheet summarizes the key

points of the site on a single sheet of paper, so it has been received positively not only by Taikisha's new employees but also by subcontractors.

When we talk to young employees and subcontractors, we try not to do all the talk; we endeavor to think with them by listening to their ways of thinking and their views on matters even if it takes time. We are always mindful that education and guidance based on communication will help spur interest in the power of engineering and translate into higher quality from the bottom up.

Going forward, we will continue to build a "trusting relationship in which anyone can express their opinions frankly through open communication," and work on quality improvements together with relevant departments and subcontractors.

Column

Osaki Garden Tower: Reduction of on-site man-hours and improvement of safety by adopting an early construction plan and unit method

In January 2018, the construction of Osaki Garden Tower in the redevelopment block of the southwestern area of JR Yamanote Line's Osaki Station was completed. This project—a statutory project under the Urban Renewal Act—involved the establishment of an urban renewal association for Nishishinagawa 1-chome district by relevant right holders led by Sumitomo Realty & Development Co., Ltd., and construction commenced in January 2016.

At the construction site of the large-scale, 114.15 meters high office building with 24 stories above ground and two below, boasting a total floor space of 178,141 m², Taikisha conducted process-conscious studies from the planning stage with the aim of reducing on-site man-hours and improving safety.

To maximize the benefits of standard floor construction, Taikisha subdivided the construction order classification, implemented measures to deal with busy periods and simplified construction patterns, while also standardizing the construction quality among companies based on model construction.

Given that on-site construction around the outdoor water-source heat pumps to be installed in the void core was a troublesome task, including scaffold planning, we adopted condensing units in an effort to not only shorten the construction period but also reduce work in high places, decrease the risk of fall accidents and ensure quality.

Taikisha formulated an early construction plan, executed pre-spray early construction of the private sections on standard floors to help accelerate the timing of commencement of work on facilities and level out the construction work, and also adopted condensing units at the rooftop to eliminate tasks that have to be performed above/below them, in pursuit of accident prevention.

Taikisha succeeded in satisfying its clients, having been told that despite the site being gigantic in scale, they were able to carry out the processes smoothly to their satisfaction in terms of quality.

The efforts made at this site have been presented to other sites, to spread construction quality across similar high-rise building projects.

Taikisha will continue making efforts to reduce man-hours and apply labor-saving construction methods at construction sites, for future large-scale projects as well, and strive to make further improvements in productivity.



Osaki Garden Tower, Sumitomo Realty & Development Co., Ltd.

[Respect for Human Rights and Development of Human Resources] Labor Practices

Taikisha is continuously working on quality improvement to gain high reputation and trust.



Basic Policy on Human Rights

For Taikisha, respect for human rights is one of the top priorities as a company operating globally. In line with this policy, the Taikisha Ltd. Code of Conduct stipulates respect for basic human rights and says Taikisha shall not engage in behavior that would undermine individual dignity, such as discriminatory treatment and harassment.

Taikisha respects international legal norms, such as the Universal Declaration of Human Rights, ILO Declaration on Fundamental Principles and Rights at Work, and Guiding Principles on Business and Human Rights. Taikisha endeavors to conduct business activities with consideration to human rights of all stakeholders, including employees and business partners.

Taikisha makes its policy regarding human rights known to all employees. In addition, it makes efforts to grasp conduct that goes against human rights through internal audits and the whistle-blowing hotline, and promptly takes appropriate responses.

Taikisha Ltd. Code of Conduct (abstract)

I. Principles of behavior

3. We act prioritizing contribution to customers, business partners, stockholders, communities/societies and global environment; and give proper consideration to employee rights

II. Standards of ethical conduct

1. Respect for basic human rights and maintenance of sound workplace environment

(1) We respect basic human rights in corporate activities, and do not discriminate against any employee based on her/his race, religion, creed, origin, sex, disability, physical characteristics, are or other attributes that are not related to the business of our company.

(2) We prohibit sexual and other harassment using hierarchical relationships or superiority of position, regardless that such harassment is intentional or not.

Corporate Culture Committee

The Corporate Culture Committee was set up in 1975 with the aim of creating an organizational culture that provides material and spiritual job satisfaction based on the spirit of mutual trust and cooperation among all employees. In this committee, the employees broadly exchange opinions about operational improvements or organizational revisions while researching, discussing, and planning in cooperation with related departments. In addition, it is engaged in activities to proactively incorporate employees' opinions and thoughts; for example, a person in charge of planning can request opinions from the committee if any important changes are made in the schemes related to employment treatment, such as labor regulations and others. In labor and management discussions, the Chairman of the Group Culture Committee, who represents the majority of employees, serves as the labor representative.

Employee data (scope: non-consolidated)

Item		FY2016	FY2017	FY2018	
Number of employees (as of March 31)	Non-consolidated	Male	1,290	1,314	1,297
		Female	156	164	175
		Total	1,446	1,478	1,472
	Consolidated	Domestic	1,638	1,679	1,669
		Overseas	3,064	3,155	3,160
Total		4,702	4,834	4,829	
Average length of service (years)		18.3	18.1	18.1	
Number of non-regular employees (as of March 31)	Fixed-time employees	86	87	89	
	Contract employees	82	87	92	
	Total	168	174	181	
Number of newly employed employees (from April 1 of the previous year to March 31 of the relevant year)	New graduates	Male	40	51	47
		Female	4	3	7
		Total	44	54	54
	Mid-career employment	Male	17	23	17
		Female	5	7	6
Total		22	30	23	
Number of new graduates retained		33 (newly employed in 2014)	40 (newly employed in 2015)	44 (newly employed in 2016)	
		26 (as of 2017)	34 (as of 2018)	40 (as of 2019)	
Retention rate of new graduates (%)		78.8	85.0	90.9	
Number of employees who left their job (from April 1 of the previous year to March 31 of the relevant year)	Mandatory retirement	19	26	27	
	Retirement for personal reasons	23	28	38	
	Total	42	54	65	
Number of re-employed employees after mandatory retirement		87	86	88	
Rate of re-employment after mandatory retirement (%)		94.7	87.0	91.3	
Employment rate of persons with disabilities (%)		1.99	2.23	2.14	

Harassment Prevention

Taikisha has a specialized consultation counter for workplace harassment (i.e., sexual, maternity, power and other types of harassment). Harassment is also addressed by handling reports made to internal and external reporting counters established by the Corporate Compliance Dept.

The consulter and informer are protected by Taikisha's Whistleblowing Rules and other similar rules. As soon as a matter is reported for consultation, Taikisha takes quick actions to resolve it. Taikisha offers enlightenment activities to make people aware of the need for countermeasures and the significance of preventing and resolving issues.

Basic Policy for Human Resource Development

Taikisha is an engineering company, and its best asset is its human resources. Human resource development and education is positioned as one of the most important management challenges.

There is a lineup of training schemes available in Taikisha to enhance its members' skills in managing projects and teams and communicating with clients, business partners, supervisors, colleagues and subordinates in addition to improving the expertise of individual employees. Training programs continue to be improved and developed so that they can help employees acquire the knowledge and skills they think they need, thereby providing target-oriented education.

With the aim of developing self-motivated human resources, Taikisha provides education to accelerate the development of professionals and leaders.

Human Development Vision

1. Improving Environmental Management

- They are able to conduct fair and just business activities using global perspectives while observing the norms of society, regulations and laws, and rules

2. Develop human resources who are capable of achieving goals and realizing the visions of organizations and individuals through their work

- They are highly creative
- They are cooperative and logical through their actions that are made based on mutual trust in principle

3. Develop human resources who flexibly respond to market changes

- They are able to handle operations on a global scale
- They are able to strive for business expansion

Support for Career Advancement and Acquisition of Certifications

Taikisha will introduce career advancement schemes to provide support for employees to advance their career and improve their skills over the medium- to long-term. Based on our Corporate Philosophy that "we aim to be a motivation-oriented company where the employees can demonstrate creativity and vitality through their work responsibilities," Taikisha will encourage employees to develop their abilities in a proactive manner.

Just and Fair Assessment

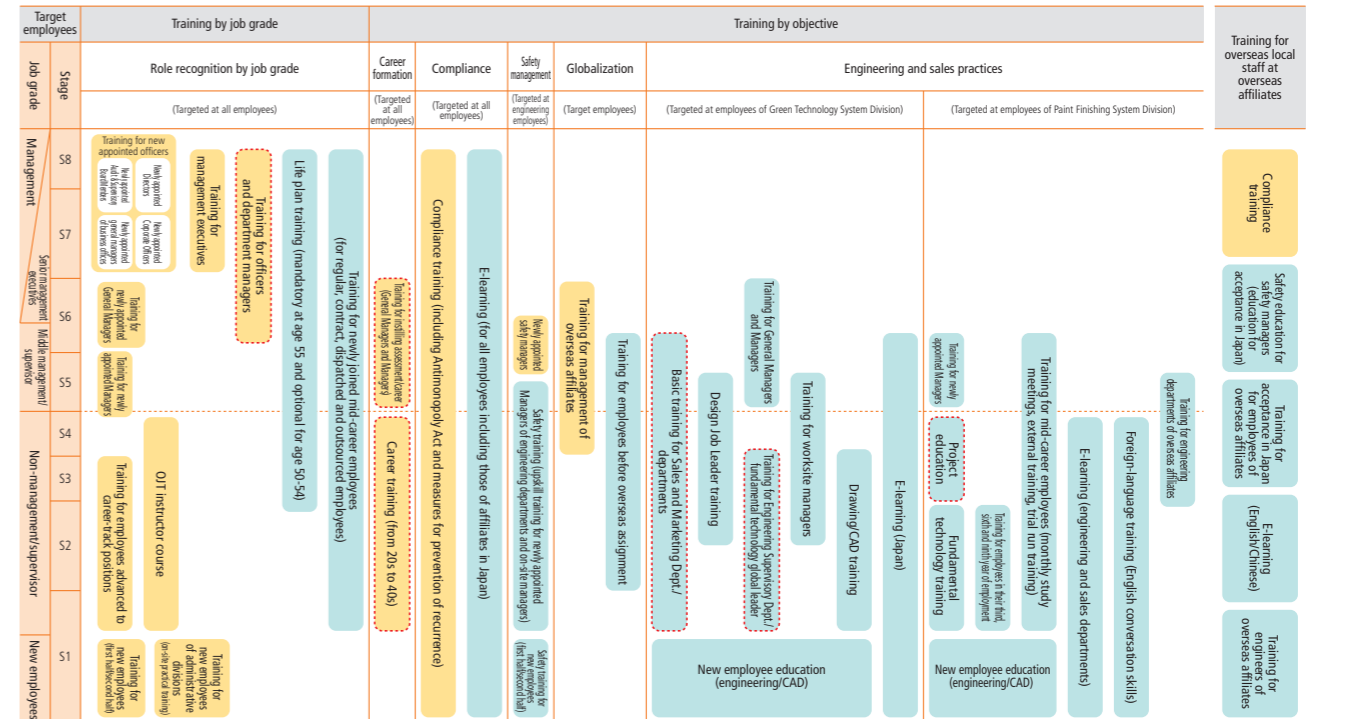
Taikisha's personnel assessment is conducted based on the philosophies of fair and transparent operations.

In performance evaluation, employees are assessed based on their abilities, motivation and conduct required for each employee and the degree of contribution to business performance. The results are given to employees as feedback, and this is expected to lead to enhanced human resource development. The evaluation of skills, which is one area of ability evaluation, is based on a clear and transparent definition of skills according to the grade and type of job.

At the beginning of the fiscal year, employees and their supervisors set job targets and individual growth targets through interviews and have a monthly dialogue in each month, while being mindful of a monthly PDCA cycle to achieve the targets. By doing so, Taikisha nurtures employees and gives them guidance.

Evaluations at the end of the fiscal year are not limited to assessing employees based on numerical performance results alone, which an excessive achievement-based system tend to do; instead, employees are evaluated not only in view of how much they have boosted their capabilities relative to their individual long-term growth targets, but also by placing importance on how much they have contributed to the creation of added value that Taikisha seeks to generate for society, such as making efforts and demonstrating creativity repeatedly in tackling matters beyond their knowledge as a challenger with enthusiasm while getting others involved as well.

Taikisha Training Programs



[Diversity of Human Resources and Work-Life Balance] Labor Practices

Taikisha is striving to build a company that provides job satisfaction to its employees.



Basic Policy for Achievement of Diversity

For organizations and corporations, making efforts for diversity has become more important in recent years. Taikisha believes that sharing diverse perspectives and values helps an organization to respond to the changing environment and needs while creating a more attractive and comfortable work environment.

Taikisha's overseas affiliates have 3,160 employees of various nationalities, while its domestic organization also has human resources with a wide range of individual characteristics varying in race and gender, totaling 16 foreign employees from six countries (i.e., China, South Korea, the Philippines, India, Nepal, and Russia) as of April 1, 2019.

In the recruitment of new graduates in April 2019, 66 newly-hired employees included six female employees and one foreign employee. Going forward, Taikisha will continue to engage in hiring activities without prejudice against any nationality, gender, or disability.

For the employment of disabled persons, Taikisha will continue to hire disabled persons at a higher rate than the statutory employment rate.

Taikisha considers that its approaches to diversity bring out enhanced human resources and increase their motivation for work.

Promoting Career Advancement of the Overseas Local Staff

Taikisha is promoting the introduction of a global human resource system that will allow the transfer of staff between countries in the future, in order to facilitate the career advancement of overseas local staff across national boundaries.

This system defines the roles expected of employees to realize the Corporate Philosophy and enables just and fair evaluations and the appropriate level of compensation that reflects such evaluations.

The global human resource system has been introduced step by step since FY2014 and is operational in India, Indonesia, and Thailand as of April 2019.

Going forward, Taikisha will promote overseas local staff to key positions and transfer authority to them so that human resources of overseas affiliates will be sourced locally.

Re-employment after Mandatory Retirement

Taikisha is working on the active participation of diverse human resources also in terms of age, having introduced a post-retirement re-employment system. In FY2018, 21 out of 23 persons who reached mandatory retirement age opted for re-employment. Work and personnel treatment plans tailored to their life cycles are made available to them at Taikisha.

Promoting Women's Career Advancement

As part of Taikisha's efforts for promoting diversity at the workplace, Taikisha is working hard for career advancement for its female employees. Taikisha believes all employees must be allowed to pursue career advancement and fully demonstrate their individuality and abilities to make Taikisha an attractive company to its employees.

In 2016, Taikisha set its aim at increasing the ratio of female employees in managerial positions in the plan of action for general employers pursuant to the Act on the Promotion of Female Participation and Career Advancement in the Workplace, and has since been making gradual progress. In April 2019, Taikisha formulated a new action plan and announced its aim to double the number of female employees among new graduates hired compared to each of the past three years.

Going forward, Taikisha will not only proactively hire and train female employees but also further enhance its upskill training and systems to create a better working environment for female employees and step up support for women's career advancement.

Trends in the ratio of female employees in managerial positions

Fiscal year	April 2016	April 2017	April 2018	April 2019
Ratio of female employees in managerial positions	0.77%	0.78%	1.12%	2.19%
Number of female employees in managerial positions	2 persons	2 persons	3 persons	6 persons
Total number of employees in managerial positions	260 persons	256 persons	268 persons	274 persons

Basic Policy for Improvement of the Work-Life Balance

Taikisha considers that work supports our living base and provides inspiration and joy to our lives. But at the same time, time spent with family and friends and on hobbies is essential in our lives as well.

When there is a good balance between them, the inspirations and joys are doubled and our lives are satisfying. A balance between work and life ensures, develops, and radicates high-level human resources that is the driving force and competitive power of Taikisha.

System to Support a Good Balance Between Work and Childcare/Nursing Care

As part of Taikisha's efforts toward improving the work-life balance of employees, the Company has introduced various systems to help employees strike a balance between work and childcare/nursing care. In FY2019, Taikisha takes out new nursing care leave compensation insurance that provides income protection covering approximately 80% of the salary of employees who take nursing care leave.

Furthermore, Taikisha has formulated a "plan of action for general employers" relating to employees' work and child-raising pursuant to the Act on Advancement of Measures to Support Raising Next-Generation Children.

Going forward, Taikisha will work on creating a workplace in which everyone can work with vigor and enthusiasm and advance their career by developing an environment in which male employees can participate in childcare and enhancing the nursing care support system.

Childcare/Nursing Care Support System

Item	Taikisha Ltd.	Laws and regulations
Childcare leave	If the employee is the primary income earner, 30% of his/her base salary is paid	The employee may receive no pay
Short-working-hours system for childcare	Until the child finishes the third grade of elementary school (until March 31 of the applicable year)	Until the child reaches three years old
Time off for sick/injured childcare	Until the child finishes the third grade of elementary school (until March 31 of the applicable year)	Until the child enrolls in elementary school
Leave due to spouse giving birth	Up to three days of paid leave	-
Nursing care leave	Payment of nursing care leave benefits (approx. 67% of salary) plus approx. 13% of salary	Nursing care leave benefits (approx. 67% of salary)
	If the employee is the primary income earner, 20% of his/her base salary is paid	The employee may receive no pay
Time off for nursing care	Up to two days per week for a maximum of one year (approx. 104 days on a single-year basis)	Up to five days per year

Status of Use of Support System and Paid Leave (Scope: non-consolidated)

Item	FY2015	FY2016	FY2017	FY2018
Number of employees on maternity leave	5	4	2	3
Number of employees on childcare leave	9	7	4 (including 2 male employees)	4 (including 0 male employees)
Ratio of employees who returned to work after childcare leave (%)	100	100	100	100
Retention rate 12 months after returning to work (%)	100	100	100	100
Number of employees who are using the short-working-hours system	22	21	22	23
Average paid leave taken by all employees (days)	6.2	6.0	7.0	9.1

Example of Taikisha's holiday/leave benefits

- Consecutive holidays after peak-time work: If an employee oversees project work that takes more than a month, when such work is completed, he/she is allowed to take at least three consecutive days off.
- Refreshing holidays for long-service employees: If employment has continued for over 25 years and the long service employment award is given to the employee, he/she is allowed to take 15 days of paid leave in addition to his/her paid holidays.
- Utilization of remaining paid holidays: Employees who have unused and expired paid holidays over the last 10 years are entitled to use them for extended care, childcare leave, time off for nursing care and/or time off for sick/injured childcare (unpaid under normal conditions).
- Paid time off (introduced in April 2019): A system that allows an employee to take time off in one-hour increments up to five days from his/her annual paid holidays

Physical and Mental Health of Employees

Taikisha has set up the Taikisha Group Health Insurance Association and opened an online physical and mental health counseling service called Health Counseling Dial 24, through which it provides speedy

and appropriate support to help employees and their family members eliminate any concerns and worries about physical and mental health. This is done through counseling given by specialized counseling staff who are experienced doctors, health nurses, nurses, registered dietitians, etc., 24 hours a day, 365 days a year. Concurrently with the introduction of the stress check system in accordance with the revised Industrial Health and Safety Act, Taikisha has established a mechanism that can provide employees with the opportunity to monitor their mental state and cope with stresses and support employees in doing so. Taikisha will continue to create a pleasant working environment based on the results of group analysis.

In April 2019, Taikisha introduced an interval system, which sets an eight-hour interval from the close of business to ensure that employees who worked long hours will have time to rest.

In October 2019, Taikisha will adopt a Group Long Term Disability (GLTD) insurance scheme, under which full-time employees below the age of 60 who take long-term leave to undergo medical treatment will be entitled to income protection covering 80% of the standard monthly remuneration amount. Taikisha supports employees' early reinstatement to work by bearing the cost of insurance premiums in full and developing an environment in which employees can concentrate on their recovery while securing income similar to the level of take-home pay received when they were working.

Mental Health Support

Prevention 1 Activities to protect the employees from mentally unwell conditions.

Internal training to raise awareness of the employees.

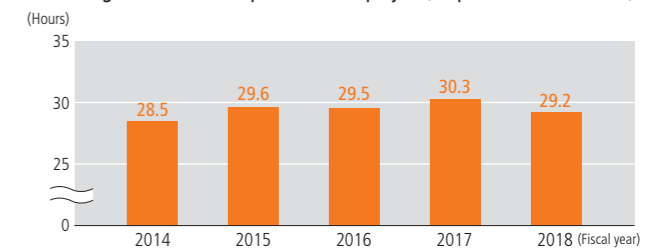
Prevention 2 Measures to find problems at an early stage and take prompt and appropriate actions.

Appropriate advice and instructions are given upon consultation or communication with the supervisors or the division leader of the person who is unwell. If needed, consultation is available for the employee.

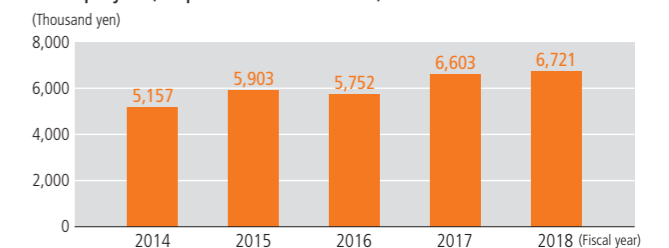
Prevention 3 Measures to precisely learn and manage symptoms in order to prevent them from becoming worse.

The Personnel Administration Department at the Administrative Management Headquarters immediately responds, follows and provides support until the employee can return to his/her work.

Average overtime work per month/employee (scope: non-consolidated)



Monthly net sales of completed construction contracts per employee (scope: non-consolidated)



Relationships with Business Partners

Taikisha promotes procurement activities based on the principle of fairness and justice.



Basic Policy for Procurement

Taikisha conducts procurement activities in accordance with the following basic policy based on the principle of fairness and justice.

- Compliance with laws and regulations and the spirit thereof
- Reasonable selection of business partners and proper transactions therewith
- Management of confidential information
- Concern for resource protection and environmental conservation
- Promotion of trusting relationships with business partners

Business Partner Selection System

In order to conduct fair and just transactions, Taikisha has set a basic principle of asking more than one business partner to submit a quote. It then selects business partners based on the evaluation of purchase quality (specifications, performance, delivery time, price, etc.). Price negotiations are carried out based on reasonable grounds (past performance, etc.).

Management of Confidential Information

Taikisha strictly manages confidential information, personal information, and client information in accordance with the Information Security Regulations. In order to prevent information leakage, Taikisha signs a written pledge on prevention of confidential information leakage to make business partners aware of this issue.

Coordination with Business Partners

In order to maintain favorable relationships with business partners, Taikisha holds a liaison workshop with business partners. There, participants learn about revisions of laws and regulations related to business transactions, check points to keep in mind, and deepen mutual understanding about a work flow that accommodates changes in society. In FY2018, Taikisha held seven liaison workshops targeting approx. 700 companies consisting of construction/equipment contractors in Tokyo, Osaka, Chubu, Sapporo, Tohoku, Kyushu, and Hiroshima.

Exclusion of Anti-Social Forces

Taikisha ensures no anti-social forces are involved in its operations and refuses any request from anti-social forces according to the Taikisha Ltd. Code of Conduct. Taikisha also forbids the employees from having any involvement with anti-social forces. In order to clarify the exclusion of anti-social forces in transactions with all business partners, Taikisha signs basic agreements and individual agreements with its business partners that include a clause to exclude anti-social forces. Taikisha signs transaction agreements with new business partners only after it has confirmed that they have no relation with anti-social forces.

Award of "Excellent Green Procurement Company"

Taikisha's Award of "Excellent Green Procurement Company" began in FY2011. It is designed to annually recognize the business partners for their contribution to green procurement and their proactive involvement in environmental activities to further promote green procurement activities. In selecting the award winners, Taikisha conducted an environmental activity survey on business partners, and selected an "Excellent Green Procurement Company" for FY2018 based on the results of the environmental management system (EMS) assessment.



Global Procurement Activities

Taikisha has constructed a system for sharing procurement data of the overseas affiliates to visualize the supply chain and optimize procurement. Taikisha periodically checks the status of execution of agreements with overseas business partners to ensure timely and appropriate fulfillment of agreements.

Contributions to Community

Taikisha is conducting activities to contribute to the community as a member of society (corporate citizen).



Basic Policy

Under the Taikisha Management Vision, Taikisha positions the community and society as important stakeholders and proactively promotes activities to respect culture and customs as well as contribute to their development in addition to participation in community and social contribution activities.

Taikisha is conducting various activities toward resolution of issues faced by communities and society and their development as a member of society (corporate citizen) that builds a favorable relationship with communities and society and coexists harmoniously with society.

Social Contributions

Support for the NPO Environmental Veterans Firm

As part of its social contribution efforts for environmental preservation, since 2017, Taikisha has been endorsing and supporting the Environmental Veterans Firm (EVF), a nonprofit organization that proposes solutions to environmental issues tackled by various domestic and overseas organizations by taking advantage of the expertise of middle-aged and older engineers who have been involved in environmental technologies.

In an effort to prevent people from forgetting the Great East Japan Earthquake and pass on the memories of the disaster to future generations, EVF is engaged in the Koro-koro Project, which involves planting saplings grown from acorns sourced from disaster-affected areas. Taikisha plans to continue proactively supporting EVF into the future.



Support for regions struck by the Great East Japan Earthquake

Community Contribution Activities

Cooperating as Exhibitor at Itabashi Ward Tropical Environment Plant Museum

In the Delicious Plants Exhibition held from April 16 to May 12, 2019 at the Itabashi Ward Tropical Environment Plant Museum, Taikisha's Plant Factory Demonstration Development Center in Itabashi Ward cooperated as an exhibitor.

For the special exhibition themed on "delicious" edible plants, the Center showcased Taikisha's Vege-factory, a hydroponic plant factory using artificial lighting only, and held a tasting event for visitors to try out the lettuce harvested at the Vege-factory.

During the exhibition period, a total of approximately 10,000 visitors flocked to the Exhibition, allowing us to provide not only adults but also children with the opportunity to learn about the plant factory and hydroponic culture mechanism.



(Other activities of business offices in Japan)

- Head Office: Participation in 15th Shinjuku Year-End Cleaning Campaign
- Osaka Branch Office: Donation of calendars and pocketbooks to Hokkaido UNICEF Association
- Tohoku Branch Office: Participation in "Hirosegawa River 10,000 People Project" (general cleanup of the Hirosegawa River basin, etc.)
- Chubu Branch Office: Collection of PET bottle caps for ECOCAP and collection of goods for Eihokai
- Kyushu Branch Office: Collection of PET bottle caps for ECOCAP and collection of used stamps

Initiatives at Overseas Affiliates

Establishment of First Corporate Library in Italy

Geico S.p.A., which is in alliance with Taikisha, has established Italy's first corporate library in its headquarters located in Milan, Italy in 2017, driven by its passion for playing a proactive role as a member of the local community. As this library is linked with the CSBNO network formed by more than 53 public libraries, employees are able to borrow books from any library affiliated with the network. The number of books in the corporate library, which was a few hundred at the time of its establishment, now exceeds 2,000. Since 2018, the corporate library has been open to the local community not only to employees, making it available for use to members of the general public using the CSBNO network in the same manner as employees.



Involvement with Shareholders and Investors

Taikisha discloses financial data and management information to its shareholders and investors as a company with higher level of transparency.



Information Disclosure Policy

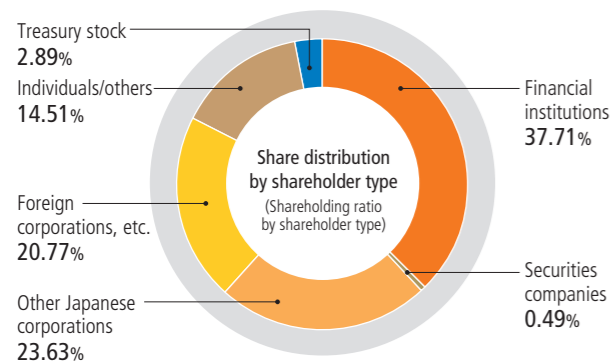
Taikisha promptly discloses important information regarding Taikisha based on the transparency, fairness and consistency stated in the Taikisha Management Vision: "Conduct businesses under free and fair competition in compliance with laws and the spirit thereof; contribute to customers/business partners, shareholders, employees, communities/society and the global environment with transparency and integrity."

Basic Policy for Shareholder Returns

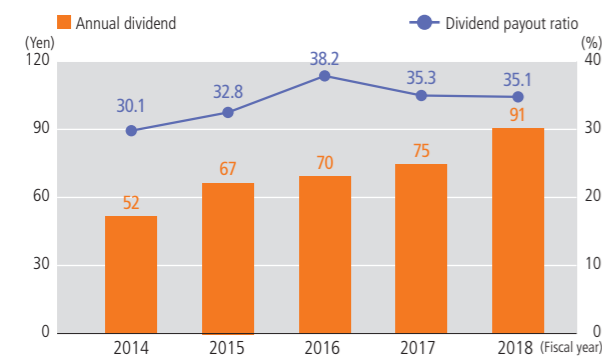
Taikisha considers providing shareholder return through dividend payouts to be one of the top-priority measures, and strives to pay stable dividends and target a consolidated dividend payout ratio of 35%.

Stock information (as of March 31, 2019)

Number of shares authorized: 100 million (100,000,000)
 Number of shares issued: 35,082,009
 Number of shareholders: 2,965



Transition in annual dividend and dividend payout ratio



Dialogue Status

In addition to the Annual Shareholders' Meeting in June, year-end and half-year financial result briefings are held in May and November.

Also, company information sessions take place irregularly but several times a year for individual investors.

In FY2018, Taikisha held financial results briefings for 19 companies (23 participants) in May and for 22 companies (27 participants) in November. In addition, Taikisha participated in the "IR Seminar for Individual Investors" hosted by Nikkei CNBC Japan, Inc. in September.

Information Tools

There are publications that Taikisha distributes to its shareholders: Shareholder newsletters (issued in June and December) and Annual Reports (issued in August).

Taikisha's website has PDF files of the publications, as well as items disclosed at the Tokyo Stock Exchange such as earnings releases, financial results, quarterly reports, mid-term business plans, materials for earning release conferences, and a Fact Book.

External Evaluation

Information given via Taikisha's website is highly acclaimed by external organizations. Taikisha received the Best Corporate Website Award in the "All Japanese Listed Companies' Website Ranking 2018" by Nikko Investor Relations Co., Ltd.

In addition, Taikisha was adopted as a constituent of the SNAM Sustainability Index managed by Sampo Japan Nipponkoa Asset Management Co., Ltd. ("SNAM") for the second consecutive year. Taikisha's addition to this index, which places importance on the ESG evaluation by research firms, reflects its continuous engagement in ESG (environment, society and governance) efforts.



Third-Party Opinion



Mr. Keisuke Takegahara
 Executive Officer
 Deputy Chief Research Officer
 Development Bank of Japan Inc.

Taikisha's CSR Report 2019 is a report in which Taikisha's conventional values are upheld, but at the same time, "buds of change" in the lead up to the next stage of development can be found in many places, at this juncture in time when Mr. Koji Kato has assumed office as the new President and the new Mid-Term Business Plan has been formulated.

This is reflected most clearly in the Top to Top Dialogue column placed at the beginning of the Report to define the overall direction. The choice of the topic of discussion as grand as "Taikisha's approach to CSR" indicates the breadth of social issues that are deemed inseparable from business activities by Taikisha, and the long-term vision set forth in the new Mid-Term Business Plan clearly shows the direction of Taikisha's growth as a "global enterprise with an edge in unique engineering." In particular, Taikisha's pursuit of "technology," "environment" and "human resources" as the underlying factors of unique engineering is brilliant, as Taikisha's characteristics are described in an easy-to-understand manner. The fact that the dialogue adopts a three-party conversation format and unfolds with the participation of the head of management and an outside expert followed by the head of the Green Technology System Division—which is one of the two core businesses of Taikisha—is also an excellent way of not only strengthening the message to a wide range of stakeholders outside Taikisha but also prompting Taikisha's employees to think about the relationship between their own work and CSR. This, combined with employees' opinion column "Voice" scattered throughout the Report, has the effect of highlighting "human resources" as a keyword. It is noteworthy that the Dialogue forecasts that materiality will be reviewed to adapt to the new direction, as it reflects the stance of Taikisha, which places importance on making relentless improvements and disclosing processes.

Hopes for the future of Taikisha can be regarded as an extension of such "buds of change." The first point is to state the timeframe more explicitly. The fact that Taikisha's Corporate Philosophy is to "continuously grow" and its long-term vision is emphasized in the new Mid-Term Business Plan may be enough for us to deduce that Taikisha has formulated its strategy based on a long-term outlook; however, greater emphasis ought to be placed on its long-term vision and backcasting therefrom. As part of this, the review of ESG activities on pages 29 and 30, which is presented in terms of single-year fulfillment status, should be based on a medium/long-term timeline format that is more in line with today's trend of nonfinancial information disclosure as an integral part of strategy discussion. Many parts of the Report give us an idea as to how materiality may be reviewed, say, the emphasis given to the importance of the global human resource system as an underlying factor of competitiveness, the allocation of many pages to Efforts for Realizing a Low Carbon Society, and the establishment of highly-unique KPIs adapted to the volume of GHG emissions in the "use of sold product" stage (CO₂ reduction rate and technology proposal plan). I look forward to seeing the continued evolution of your CSR reports.

In Response to the Third-Party Opinion



Masanori Nakagawa
 In Charge of CSR
 Director, Managing Corporate Officer

I would like to express my sincere gratitude to Mr. Takegahara for always sending us a powerful message. In order to provide our stakeholders with an easier-to-understand explanation of the sustainable growth of the Taikisha Group's corporate value, we are currently launching a new initiative to enhance the link between nonfinancial information and strategies. We highly appreciate the fact that attention has been given even to such "tiny buds."

We highly appreciate the thought-provoking comments covering the entire Report by Mr. Takegahara, as well as those by Ms. Akabane (Director of CSR Asia Japan office) in the Top to Top Dialogue at the beginning of the Report. The advice given by these two CSR experts gives us tremendous encouragement.

Going forward, we will continue to engage in activities to fulfill our "Customers First" Mission Statement. We would like to ask for candid advice and opinions from all our stakeholders.



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