

CSR Activities for the Future

To become a sustainable company while fostering and expanding a broader range of CSR activities, we began compiling a CSR activity roadmap in FY2011, which we have subsequently implemented over time. In FY2012, we chose a number of key issues based on international guidelines on corporate sustainability reporting published by the Global Reporting Initiative (GRI) as well as ISO 26000, an international standard on organizational social responsibility. We are currently working to resolve those issues.

● Activity report for FY2016

Each department discussed CSR issues in line with those key issues and developed its own action program. At the end of the year, those departments then conducted self-evaluations to assess how well they had implemented their programs. (The table below outlines some of the results of that process.)

● Future issues

Going forward, we plan to implement CSR activities using techniques that we consider appropriate while relying on guidance and advice from outside experts as we choose key issues and develop CSR issues and action programs.

The global business environment that characterizes the environmental and energy fields in which Takuma's business operates grows increasingly diverse day by day, and that environment remains one of intensifying competition. Our technological capabilities in the environmental and energy fields, which we have refined over many years of experience, form the basis of our CSR management as well as our greatest strength as we look to make a broad contribution to society. We will continue to draw on this strength in our activities going forward.

ISO 26000 core subjects	Key issue	CSR issue	Department	FY2016 action program		
				Action plan	Self-evaluation of results	
Organizational governance	Corporate governance	Verification of corporate administrative procedures	Internal Auditing Division	Verify whether corporate activities (general operations) are being carried out in accordance with predetermined control procedures (such as rules) by means of an internal audit.	We carried out an internal audit in accordance with the audit plan. We found that activities were generally conducted according to plan and that they generated results.	
	Compliance	Cultivation of a robust corporate culture	CSR Division	Share formulations of Takuma's basic approach, for example Management Principles, the Takuma Group Ethics Charter, and the Takuma Group Code of Conduct, and work to ensure that they permeate the organization and take hold.	We highlighted the Management Principles, the Takuma Group Ethics Charter, and the Takuma Group Code of Conduct in the CSR Report 2016 and in internal education and worked to ensure that they permeate the organization and take hold.	
	Risk management	Mitigation of risks to employee safety	Improvement of risk management techniques (reduction of additional costs)	General Affairs Division	Carry out activities to reduce the number of traffic accidents, including those caused by company vehicles and bicycles.	We worked to raise awareness, for example by holding training at a driving school for individuals who have been involved in two traffic accidents and holding safety lectures given by an outside instructor. We believe that awareness increased as a result.
				Engineering Division	Reduce the risk of incurring additional costs by enhancing partnerships with departments placing orders.	In addition to continuing preliminary studies, we worked to reduce the risk of incurring additional costs by enhancing partnerships with departments placing orders.
				Construction Division	Enhance the information included in construction plans for each project by identifying risks associated with work in the field in order to eliminate accidents and disasters at construction sites, carry out audits to determine whether safety activities are being conducted according to plan, and work to implement improvements.	Although we identified risks in our safety and health plans, incorporated that information into construction plans, audited safety activities in accordance with those plans, and worked to make improvements, accidents resulting in work stoppages still occurred, preventing us from achieving our goal. Going forward, we will augment guidance and education for workers with education for site managers.
	Information disclosure (fulfillment of accountability requirements and assurance of transparency)	Appropriate disclosure of technical information to outside parties	Engineering Division	Promote useful Takuma technologies and spread awareness outside the company by having employees apply for and win awards.	We applied for and received one award during this fiscal year. Combined with the results of similar activities last year, we have now received two such awards.	
	Employee training on social responsibility	Promotion of employee understanding (awareness) of social responsibility	Marketing Division	Apart from companywide education, offer departmental education to deepen employees' understanding (awareness) of social responsibility.	We offered educational experiences such as holding readings of documents related to social responsibility and carried out initiatives to deepen employees' understanding of CSR in general.	
Stakeholder engagement	Development of trusting relationships with customers	Engineering Division	Work to resolve issues by organizing and sharing customer information and examples of problems encountered during past projects.	We worked to deepen trusting relationships with customers and to resolve issues by organizing customer information and examples of similar problems that have occurred in the past and sharing that information with operational management.		
Consumer issues	Safety and quality of products and services	Provision of products that contribute to customer satisfaction	Marketing Division	Work to ensure effective communication with customers and comply with customer requirements.	Customers who responded to this year's customer satisfaction survey praised Takuma for its fast, sincere service, and we were able to provide products that contribute to customer satisfaction thanks to the cooperation of involved departments.	
		Preventive measures related to risk concerning the safety and quality of products and services	Engineering Division	Enforce precisely targeted safety guidance and safety patrols in the field.	We offered safety guidance and education by holding safety patrols and liaison meetings.	
		Improvement of construction quality	Construction Division	Work to improve construction quality by carrying out voluntary inspections in the field and strengthening checks of the status of construction management in the field by internal coordinators.	We worked to improve construction quality by carrying out voluntary inspections at all sites in the field and having internal coordinators carry out checks of the status of construction management in the field at least once a month, with the result that we had no orders of additional work due to defective construction.	
		Provision of high-quality products that contribute to customer satisfaction	Manufacturing Division	Carry out process intermediate inspections in a reliable manner.	We carried out process intermediate inspections in a reliable manner, but inspection mistakes led to the occurrence of defects.	
Fair operating practices	Compliance with the Antimonopoly Act	Understanding of the provisions of the Antimonopoly Act	Marketing Division	Hold workshops about the Antimonopoly Act, for example as part of compliance education.	We held workshops about the Antimonopoly Act as part of compliance education and other programs.	
	Fair business relationships with customers and business partners	Implementation of fair transactions with business partners	Administration Division	Offer support for fair business practices in sales, manufacturing, procurement, and construction departments (support for transactions that comply with all applicable laws and regulations).	Cost management department personnel offered support for fair business practices on the part of ordering departments after carrying out cost assessments in a fair and appropriate manner.	
	Respect of property rights	Protection and utilization of intellectual property rights	Engineering Division	Offer education about intellectual property rights and work to raise employee awareness about protecting and utilizing those rights.	We worked to raise employee awareness by holding courses on patent basics for new employees as part of new employee training and for all employees at company branches.	
Labour practices and human rights	Appropriate employment relationships and labor conditions (including safety and health, social dialog, etc.)	Initiatives to address occupational safety and health	Safety Control Division	Prevent the type of fatal accidents that occurred last year based on the FY2016 safety and health plan.	We were able to prevent fatal accidents by implementing a variety of measures, including by strengthening Safety and Health Committee structures.	
		Pursuit of appropriate labor conditions and initiatives to balance work and personal life	Marketing Division	Work to enhance the balance between work and personal life by encouraging employees to make appropriate use of leave time.	Employees were aware of planned paid holidays and took paid time off while coordinating their plans with coworkers in their department.	
	Employee skill development (skill enhancement)	Leadership for young employees and efforts to pass down expertise	Marketing Division	Work to improve the mastery of knowledge with an emphasis on participating in learning opportunities such as OJT related to operations involving the export of parts to previously delivered plants as well as seminars related to employees' own departments, for example with a focus on subjects such as English contracts and export controls.	Concerning the export of parts, we offered education for department employees with a focus on OJT. Despite handling a comparatively large volume of such exports during the fiscal year under review, there were no incidents with detrimental effects.	
Environment	Contributions to resolving environmental problems	Energy-saving initiatives	Engineering Division	Deploy systems that can be expected to (1) maximize generating capacity, (2) minimize power consumption, and (3) reduce utility use.	We were able to orchestrate more deployments than we planned at the beginning of the fiscal year.	
Community involvement and development	Impact of business activities on the local community and society at large	Contribution to the communities around our worksites	Marketing Division	Engage in activities that contribute to communities around worksites.	Worksite employees participated in cleanup activities and were able to make a contribution to the local community, however slight.	
	Contribution to society	Community service and other volunteer opportunities	General Affairs Division	Actively participate in the activities of local organizations (disaster prevention, crime prevention, safety, economic stimulation, etc.).	Department employees coordinated with events held by local groups and government organization, participating whenever possible. This effort helped strengthen personal relationships with local residents.	

Group Company CSR Topics

This section introduces messages from the presidents of major Takuma Group companies describing issues they have identified in the course of pursuing CSR activities and how they are working to address them.

NIPPON THERMOENER CO., LTD.

Established August 1, 1961
 (The current name was adopted on April 1, 2005, after the company merged with Ebara Boiler Co., Ltd.)
 Businesses Manufacture, sale, engineering, and maintenance of a wide range of boilers and related equipment
 Employees 395 (as of March 31, 2017)



Masato Fujita
 President and
 Representative Director
 NIPPON THERMOENER CO., LTD.

● Message from the President

Our management principle is "Service to the nation through boiler manufacturing," and we are committed to enriching all stakeholders in accordance with that principle. Our vision calls on us to become a leading company in the public thermal energy sector, and we define "leading" in this context in terms of thermal output and our ability to reduce CO₂. In short, our corporate activities are themselves CSR activities.

Thanks to support from our stakeholders, we have delivered close to 100,000 boilers nationwide to date, and most of them remain operational today. Consequently, our customers have a broad array of needs, and our products go beyond boilers to include chemical agents and maintenance service. As a result, partnerships with numerous stakeholders, including employees and business partners, play an extremely important role in our ability to offer fast, precise service. To enrich our customers and indeed all stakeholders, we believe enhancing CSR activities is directly related to the company's continued evolution, and all of our employees will continue to come together to pursue that goal.

SUNPLANT Co., Ltd.

Established September 15, 1941
 Businesses Design, construction, and superintendence of air-conditioning equipment, feed-water/drainage sanitation equipment, and electrical equipment
 Employees 104 (as of March 31, 2017)



Keiki Kamada
 President
 SUNPLANT Co., Ltd.

● Message from the President

We've been involved with environmental optimization in the full range of building types through the design and construction of air conditioning, water supply and drainage, and other equipment.

Rock-solid legal compliance is one of the CSR issues that we must fulfill as part of the Takuma Group. We strive to observe all laws and regulations related to our operations, to engage in fair competition, and to operate in a fair and just manner. A second CSR issue involves strengthening risk management. In addition to reliably carrying out technical patrols to prevent quality-related accidents, we strive to ensure that all employees report relevant information and communicate and consult with their colleagues and that issues are dealt with in a timely manner. A third CSR issue is dealing with overwork. Overtime work for extended hours has become the rule in the construction industry, and that trend is having an adverse effect on healthy family life. It's also had a major impact on our personnel planning, and we can no longer afford to overlook it. We're working to create a workplace environment in which employees can balance the competing demands of their jobs and their personal lives.

An accurate understanding of the legal system is necessary in order to address these issues. Going forward, we will work to acquire legal knowledge and to ensure that a commitment to corporate ethics permeates our organization.

Takuma Technos Co., Ltd.

Established September 27, 1967
 Businesses Maintenance, management, and operation of waste treatment facilities, water treatment facilities, industrial waste treatment facilities, boiler facilities, power generation facilities, and other buildings
 Employees 1,523 (as of March 31, 2017)



Kazunori Tsuji
 President
 Takuma Technos Co., Ltd.

● Message from the President

Local government agencies in 59 communities throughout Japan entrust us with the operation and management of their waste incineration, bulk waste treatment, recycling, and other facilities. We maintain a worksite, branch office, field office, or administrative office at each of those sites so that we can provide safe and secure service at all hours.

As a company that's responsible for one aspect of government service and one that's engaged in business activities that are intimately related to the lives of community residents, we realize that our mission is important, and we are confident that we can increase our corporate value by carrying that mission out in a reliable manner.

Our executives and employees come together to ensure that everyone who is involved with the company is satisfied. We emphasize the need to improve compliance and CSR awareness, and we offer a systematic program of education and guidance in order to ensure that attitude permeates every aspect of our organization. Going forward, we will continue to strive to become a company that can achieve sustained growth by making social responsibility a core part of our approach.

Dan-Takuma Technologies Inc.

Established August 21, 1969
 Businesses Supply and maintenance of clean equipment, systems, and other products for customers in the electronics and precision machining industries, particularly the semiconductor industry in Japan and overseas
 Employees 70 (as of March 31, 2017)



Chiaki Nagahama
 PRESIDENT & CEO
 Dan-Takuma Technologies Inc.

● Message from the President

We supply an extensive range of new products while carrying out the important mission of creating a clean environment, which is an essential task in the electronics and precision machining industries, by drawing on technology and experience gained in semiconductor-related industries over many years. As you know, semiconductor and electronic devices are widely used in a broad range of industries, products, and social systems, and they play a vital role in contemporary life. We help maintain the advanced, clean environments used in production of these semiconductor and electronic devices and improve rational productivity that helps solve global issues involving the environment and energy resources while achieving a rich, safe, and secure society by supplying clean devices and systems. We're also striving to make an even greater contribution in other fields that require a clean environment, including medicine and food products, based on our accumulated technology and experience.

As part of the Takuma Group, which is a manufacturer of environmental and energy plants, we work with customers to make a broad contribution to the resolution of problems involving the environment and energy resources in Japan and overseas by supplying clean-running equipment and systems.

Group Company CSR Activities

Spreading Takuma's Company Motto and Management Principles among overseas Group companies

To spur shared understanding of the Takuma Group's basic approach, we have prepared Chinese and Thai translations of key documents such as the Company Motto and Management Principles for overseas Group companies in order to deepen local employees' understanding of these important guides.

The Takuma Group will continue to cultivate a healthy and robust corporate culture throughout the Group going forward.

Takuma Group corporate policies

Chinese edition

The Chinese edition consists of five slides:

- Slide 1: 田熊集團 企業方針 (Takuma Group Corporate Policy)** - Lists 5 items: 1. 社訓, 2. 經營理念, 3. 企業願景, 4. 合規宣言, 5. 田熊集團社會倫理憲章.
- Slide 2: 1. 社訓 (Motto)** - 珍惜技術、珍惜人、珍惜地球 (Value technology, value people, value the earth).
- Slide 3: 2. 經營理念 (Management Philosophy)** - 生產出為世界所需、被世人所認可具價值的產品，志在對社會有所貢獻、提高企業價值、長期性發展，及滿足所有利益相關者。
- Slide 4: 3. 企業願景 (Corporate Vision)** - 目標是成為以活用可再生能源與環境保護領域為重心的領導企業，並為社會所需的永續存在，且2020年的經常利潤達到100億日圓。
- Slide 5: 4. 合規宣言 (Compliance Statement)** - 本公司的經營理念是建立在為世界所需、被世人所認可具價值的產品，志在對社會有所貢獻、提高企業價值、長期性發展，及滿足所有利益相關者。
- Slide 6: 5. 田熊集團社會倫理憲章 (Takuma Group Social Ethics Charter)** - 本公司以及田熊集團公司，進行企業活動時，所有的董事以及員工，需自覺到本公司以及集團公司所處的環境與社會關係，遵守相關法令與規則，採取合于社會倫理的行動。

Thai edition

The Thai edition consists of five slides:

- Slide 1: นโยบายบริษัทของทาคูมากรุ๊ป (Takuma Group Policy)** - 1. บริษัทบริษัท, 2. แนวคิดการบริหารธุรกิจ, 3. วิสัยทัศน์ของบริษัท, 4. คำปฏิญาณเรื่องคอมเพลกซ์ (การปฏิบัติความ), 5. ธรรมเนียมปฏิบัติของบรรษัทของทาคูมากรุ๊ป.
- Slide 2: 1. บริษัทบริษัท (Motto)** - ให้ความสำคัญกับเทคโนโลยี, ให้ความสำคัญกับคน, ให้ความสำคัญกับโลก.
- Slide 3: 2. แนวคิดการบริหารธุรกิจ (Management Philosophy)** - องค์กรที่สิ่งทีได้รับการยอมรับว่ามีความจำเป็นและมีคุณค่าต่อโลกใบนี้ เพื่อแสดงบทบาทที่สร้างสรรค์ต่อสังคม สร้างเสริมคุณค่าของบริษัท ตลอดจนมุ่งเป้าหมายเพื่อการพัฒนาที่ยั่งยืนและความพึงพอใจของลูกค้าส่วนที่เกี่ยวข้อง.
- Slide 4: 3. วิสัยทัศน์ของบริษัท (Corporate Vision)** - รักษาด้านความเป็นองค์กรที่จำเป็นของสังคม ในฐานะบริษัทชั้นนำในสาขาหลักเรื่องพลังงานทดแทนและการอนุรักษ์สิ่งแวดล้อม โดยวางเป้าหมายจะทำกำไร 1 หมื่นล้านบาทในปี ค.ศ. 2020 (ปี 2563).
- Slide 5: 4. คำปฏิญาณเรื่องคอมเพลกซ์ (Compliance Statement)** - วัตถุประสงค์ของปฏิญญานี้คือการสร้างความเข้าใจเกี่ยวกับ CSR (การรับผิดชอบต่อสังคม) ที่มีความสำคัญต่อความสำเร็จของธุรกิจและความสำเร็จขององค์กรในระยะยาว.
- Slide 6: 5. ธรรมเนียมปฏิบัติของบรรษัทของทาคูมากรุ๊ป (Takuma Group Social Ethics Charter)** - ใ้บริการและปฏิบัติงานอย่างมีประสิทธิภาพและมีความรับผิดชอบต่อสังคม.

This page introduces feedback from overseas Group company employees who have read the Takuma Group's corporate policies in their own language.

Taiden Environtech Co., Ltd. (Taiwan)

Helping maintain and manage waste treatment facilities in Taiwan

Chien-Lung Shen
President

Taiden Environtech Co., Ltd. has worked to protect and improve the environment in Taiwan as part of the Takuma Group since its establishment in 1988. Four plants built by Takuma in locations such as Taipei together process more than 4,000 tons of municipal solid waste per day. We've earned high praise for our earnest approach to maintaining and managing these plants, and we're currently offering similar services at other facilities as well. We strive to facilitate the company's development while satisfying all stakeholders, and in so doing to help protect the local environment, by proposing equipment maintenance and construction plans that take the local environment into consideration and by providing safe, secure products and services. Going forward, I look forward to continuing to implement and utilize the Takuma Group's corporate policies through daily operations such as these.



CSR Activities for the Future

Siam Takuma Co., Ltd. (Thailand)

Customer trust is our first priority

Pornpetch Petchsuwannakit
(Joy)
Manager
General Affairs Section

Siam Takuma is actively standing at the front of business activity of Takuma. It has been over 50 years after starting supplying numerous Takuma boilers in Thailand and customers rely on Siam Takuma since we opened office in Bangkok.

In responding to the customers we shall present whole necessary information without delay and do have an efficient strategy growing with the reliance ever. Through handling environmental friendly equipment, the matter of reducing impact on Earth will be our pride. The extensive experience will always keep customers feel confident in our safety and stable performance even competition is increasing nowadays. At the same time, we also give appropriate advice on energy use and operating costs creating full satisfaction. Above all, our boiler technology is particularly designed to generate lower carbon effect to the society and environment than those of others in term of pollution.

Besides that, we realize to be a giver to our society by donating old or unused office equipment to temples or poor people as well as recycling. We are, therefore, contributing to Society through our businesses and products under clean energy. Customers, Society and Environment are the keys for the development in our service, and Takuma Group Ethics Charter and Code of Conduct, etc. should be our underlying principles for our business activity.

Corporate Governance

Corporate Governance

As of June 28, 2017, the Board of Directors was comprised of six directors (excluding directors who are members of the Audit & Supervisory Committee) and four directors (of whom three were outside directors). The Board of Directors meets regularly once a month as a rule and whenever else it is necessary to make decisions about important issues related to business management and issues established by law and ordinances, as well as to oversee the execution of the directors' duties.

In order to accelerate management decision-making and clarify where management responsibilities are placed, we have adopted an operating officer system in which we appoint operating officers who are entrusted with the responsibility of executing our business activities. As of June 28, 2017, there were 14 operating officers (including those who also serve as directors). Moreover, we have also established an Executive Execution Committee, which is chaired by the president/chief operating officer, as an organization that deliberates matters that are brought up at meetings of the Board of Directors and other important issues related to the execution of our business activities. This committee communicates and provides direction about items decided by the Board of Directors and other important items related to the execution of our business activities appropriately to the divisions that are to execute them.

An Audit & Supervisory Committee that consists of four members, of whom three are outside directors, is responsible for accounting and operational audits. Members of the committee attend important meetings, including those of the Board of Directors and the Executive Execution Committee, and they strive to understand and observe the status of business execution in a timely and appropriate manner. Drawing on their professional background and experience, they express their opinions as necessary from an objective perspective, and they conduct strict auditing of the business execution performed by the directors.

To facilitate the effectiveness of audits carried out by the Audit & Supervisory Committee, the president holds regular meetings with committee members to ensure good communication, and we have established an Audit & Supervisory Committee's Office to provide staff to help carry out the committee's work.

In addition to the above, we have established a Human Resources & Remuneration Advisory Committee comprised of independent officers, representative directors, and the officer in charge of human resources. The committee works to increase transparency and objectivity in the selection of candidates for director and operating officer positions and in the determination of compensation as well as to enhance the supervisory function of the Board of Directors.

Internal Control

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

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

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

In this way, we are working to ensure thorough compliance while carrying out business properly and efficiently while also deepening risk management.

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

Compliance & CSR Promotion Structure

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

This organization is composed of a chairman (the Executive Manager of the Compliance & CSR Promotion Division), a secretariat (positioned in the CSR Department), and an executing organization in each division, center, and department.

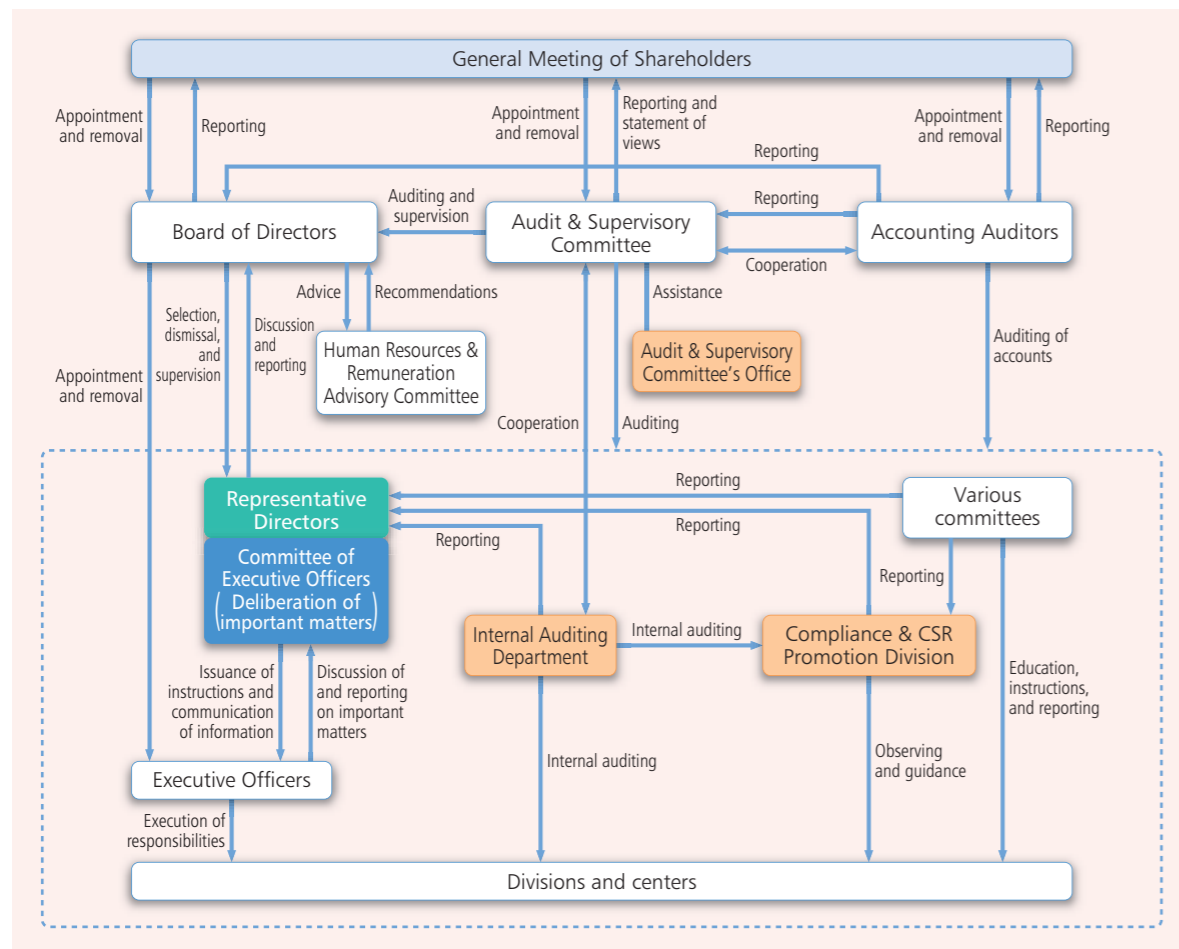
As the person in charge of promoting compliance and CSR in his or her division, each division or center manager is appointed as a Compliance and CSR Promotion Administrator. As persons who implement awareness and education in compliance and CSR in their respective departments, department managers are appointed as Compliance and CSR Promoters.

The meetings conducted within this mechanism include regular meetings and departmental meetings.

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

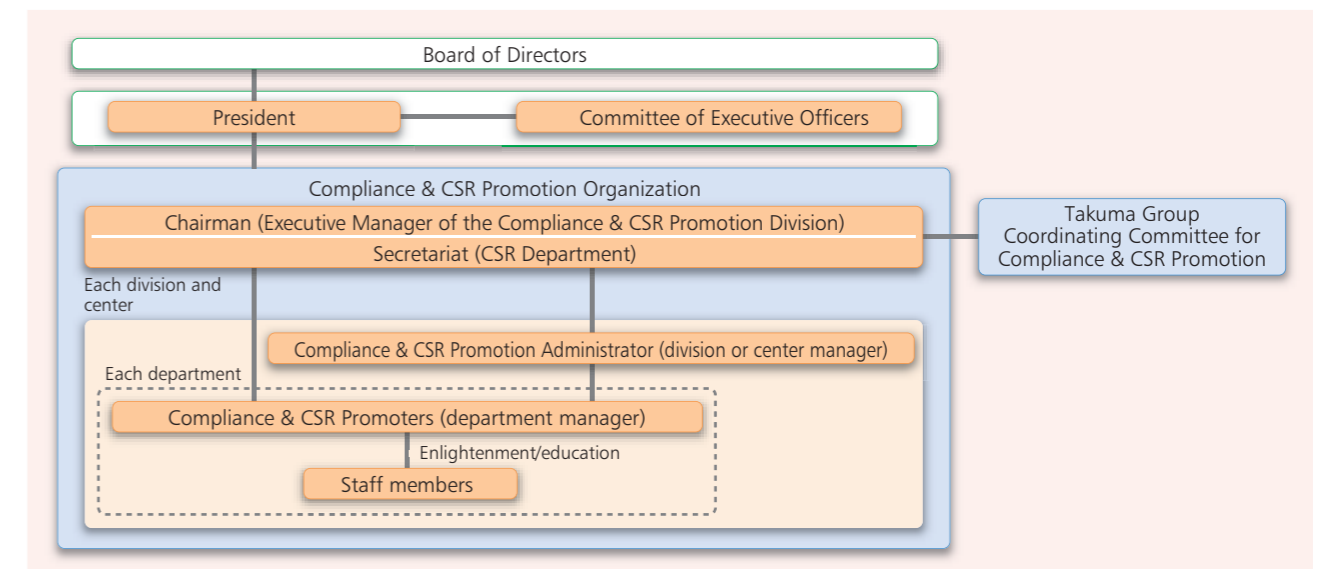
Promotion members convene departmental meetings once a quarter, with educational training aiming at the permeation of compliance and CSR in each department. After departmental meetings, promotion members implement compliance and CSR promotion education in their respective departments using training materials or in-house educational materials and report the result to the Secretariat. (Details of the compliance and CSR promotion education implemented in FY2016 can be found on page 59.)

We are also pursuing awareness-raising and educational activities targeting Group companies through our Takuma Group Coordinating Committee for Compliance & CSR Promotion to ensure thorough compliance and risk management throughout the Group.



Corporate governance structure

(As of June 28, 2017)



Compliance & CSR promotion structure

Risk Management Structure

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

We are also building the risk management organization shown below and constructing a system of risk management and promoting the strengthening of management for group companies as well through our Takuma Group Coordinating Committee for Compliance and CSR Promotion.

Risk Management Policy

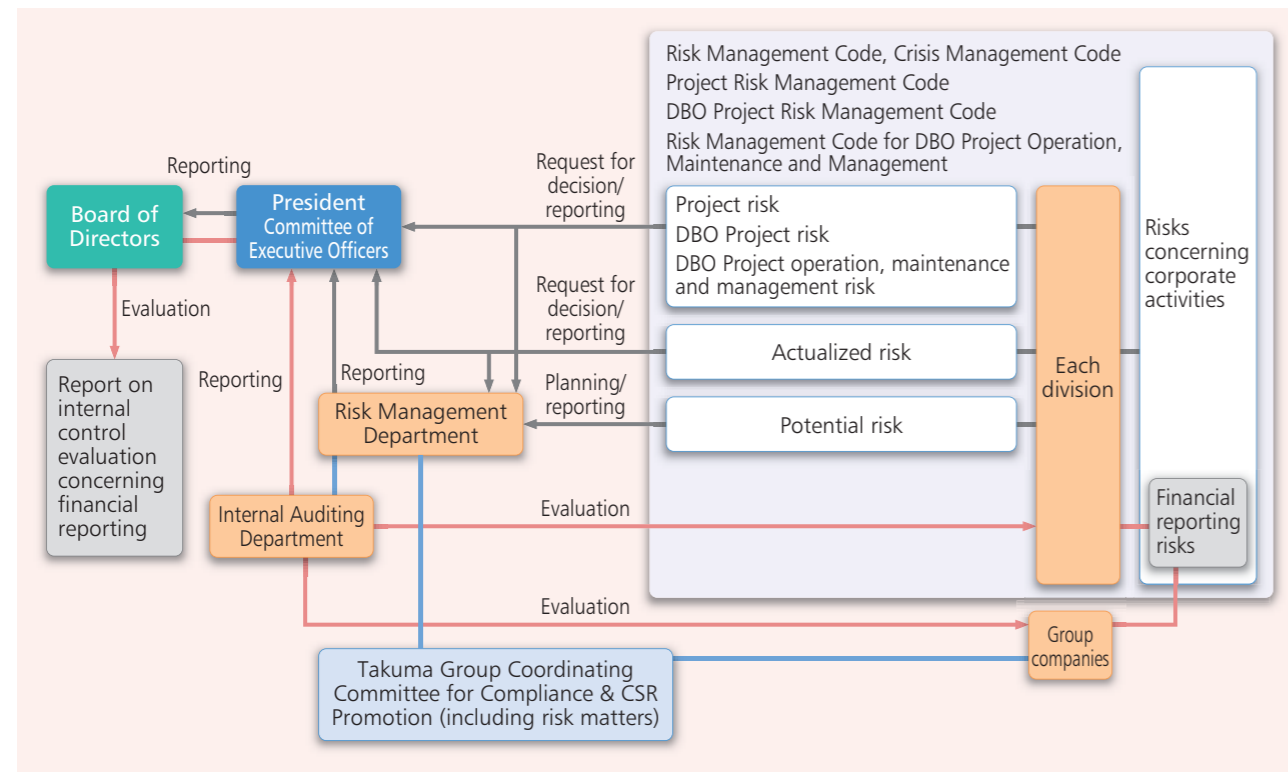
Basic purpose of risk management

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

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

Risk management action guidelines

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



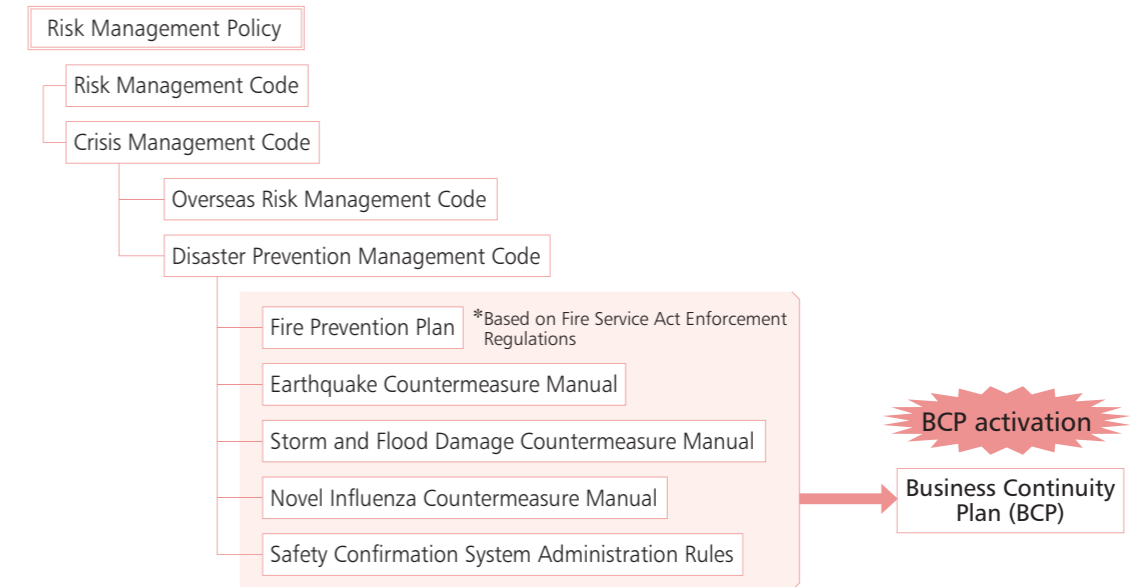
Risk management structure

Business Continuity Plan (BCP)

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

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

Disaster rule system diagram



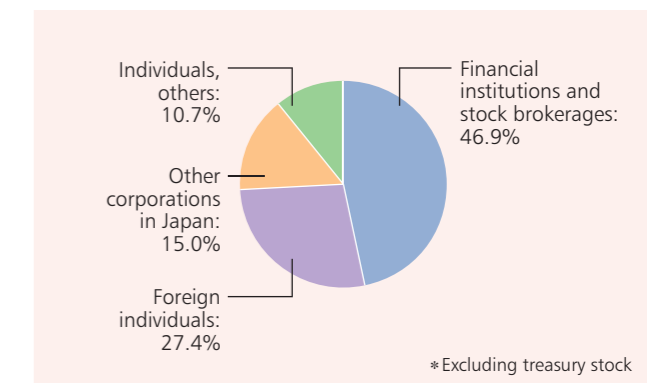
IR Activities

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

[Takuma website > IR information]
<http://www.takuma.co.jp/english/investor/index.html>



Shareholders Report



Composition of shareholders (as of March 31, 2017)

Directors and Executive Officers

(as of June 28, 2017)

Directors



(Back row, from the left)

Minoru Murata Outside Director (Audit & Supervisory Committee Member)	Hiromichi Satake Outside Director (Audit & Supervisory Committee Member)	Koji Tanaka Director Executive Officer	Tsuyohito Nishiyama Director Executive Officer
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Osamu Iwahashi Outside Director (Audit & Supervisory Committee Member)	Yasushi Enomoto Director (Audit & Supervisory Committee Member)	Hideki Takeguchi Director Executive Officer
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(Front row, from the left)

Kengo Numata Director Senior Managing Executive Officer	Takaaki Kato Representative Director President and Chief Executive Officer	Hiroaki Nanjo Director Managing Executive Officer
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Executive Officers



Takashi Manabe
Managing
Executive Officer



Ryoji Tani
Executive Officer



Norito Uchiyama
Executive Officer



Masahiko Izumi
Executive Officer



Yoshiki Kita
Executive Officer



Mitsuaki Adachi
Executive Officer



Akira Taguchi
Executive Officer



Hidetoshi Tomita
Executive Officer

Human Rights and Labor Practices

Respect for Human Rights and the Abolition of Discrimination

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

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

Working with Our Employees

Approaches toward employees

Our company sets “establishing a work environment allowing each employee to challenge their goals, as well as getting on with their work through appropriate assessment” as its basic policy. Specifying the following three approaches as critical items, we introduce various systems for each.

1 Increase employee motivation by ensuring transparency as well as satisfaction with HR assessments

● Objective management system

We utilize an objective management system in which work objectives are set at the beginning of the fiscal year and the degree to which they are achieved is evaluated at the end of the fiscal year. The objectives, which are based on company policies, are decided through meetings and interviews with superiors to include the work tasks that each individual is to undertake over the year and the roles they are expected to fill.

● Work group transfer system

We have created a work group transfer system to facilitate movement from clerical and labor positions to the main career track so that motivated and skilled employees can pursue success regardless of their gender or academic background. We also provide opportunities for employees to be promoted to management positions.

● In-house commendation system

Every year on the anniversary of the company’s founding on June 10, we recognize employees with the following awards:

- Takuma Prize*
- Invention and idea commendations
- Safety and Health Award in Construction Division
- Qualifications acquisition commendations
- Takuma Technical Review Outstanding Paper Award
- Years-of-service commendations

* The Takuma Prize is awarded to employees who have demonstrated outstanding achievements in their work or in their efforts on behalf of society outside of work, including lifesaving, disaster prevention, and volunteer service.



2 Provide capacity building assistance to employees

● Junior employee exhibition

As a part of the education of our junior staff, ten-year company employees give presentations that reflect on their experiences and indicate the future growth that they are looking for, and second-year employees hold technological exhibitions in order to improve their ability to make presentations.



● Technical training sessions

We hold technical training sessions to provide opportunities for employees to increase their technical knowledge. These events range from inviting outside researchers or university professors to give lectures to having employees in technical positions give presentations on issues on which they are currently working.

● English education support

We periodically administer the TOEIC test at the company to help employees improve their language skills. Employees who earn a high score are eligible to receive a bonus from the company.

● Support for self-study

Takuma encourages employees to acquire various licenses and certifications as part of the skill development process, for example by reimbursing them for the cost of testing needed to earn official certifications and licenses that are necessary for operational reasons and offering incentives for successful completion of such tests. We also provide information about a range of distance learning and e-learning opportunities.

● Grade-specific educational programs

- New employee training
- General employee training
- Line manager training

3 Improve the work environment, facilitating employees’ efforts to address business tasks without anxiety

● Work-life balance

Takuma offers the following programs in order to help employees harmonize their jobs and private lives, balance their work and child-raising responsibilities, and make the most of their skills and abilities:

- Paid time off in half-day increments
- Childcare leave
- Nursing care leave
- Discretionary work
- Flextime*
- Telework

* The Flextime program has been expanded to cover employees raising children up to the end of third grade in order to make it easier for them to balance the competing demands of work and raising children.

● Employee health management

Takuma carries out the following health management measures:

- Improvement program for lifestyle-related diseases
- Lifestyle-related disease prevention checkups
- Mental health measures
- Health consultations
- Dissemination of health information (in-house newsletter and website)
- Wellness Fair (cosponsored with the Health Insurance Union and cafeteria operator)



● Labor-management relations

The labor union is an organization which conducts periodic deliberations and collective negotiations in terms of annual salary, working hours and other working conditions and establishing a stable employee-employer relationship.

● Initiatives to create a workplace environment where employees can more easily take time off

We are working to create a workplace environment where employees can more easily take time off by planning their desired vacation dates, making those plans known to their coworkers, sharing associated information, and offering each other support.

● Initiatives to promote the participation of female employees in the workplace

In March 2016, Takuma adopted an action plan with the goal of doubling to 20 the number of female employees in core and general management positions by March 31, 2021, and we are pursuing the following initiatives to achieve that goal:

- Female employees hold talks to paint a picture of what it’s like for women to work at Takuma, and there is information about those talks on the website.

[Takuma top page > New-graduate hiring information > Takuma jobs and employees > Talks by female employees]
<http://www.takuma.co.jp/recruit/newgraduates/work/talk.html>
 (content in Japanese)



- We hold company information sessions for female students, and we provide opportunities for students to talk directly with female employees of Takuma.

● Other enhancements to workplace environments

- Measures to counter sexual/power harassment
- Listening to opinions within the company*

* To enhance ideal working conditions for employees, our company absorbs a wide range of views from employees by placing an “opinion box,” as well as communication via e-mail and telephone concerning their working environments.

● Cafeteria plan

We offer a “cafeteria plan” as an employee benefit program as part of our effort to meet the full range of diverse employee needs. Employees can choose from a menu of programs including support for skill development, child-raising and nursing care, and health maintenance and promotion. The company then reimburses them for the cost of using those services, subject to an annual cap. The selection of programs is reviewed on an ongoing basis.

Efforts for Occupational Safety and Health

Occupational safety and health initiatives

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

We have adopted the following safety and health objectives for FY2017: for construction sites, eliminating accidents that result in work stoppages (of four or more days); for branches, pursuing a thorough program of safety and health education, ensuring adherence to safety inspection guidelines, and achieving at least 90% of the objectives set forth in the safety patrol plan; and for the Safety and Health Cooperative Association, strengthening collaboration with partner companies. We will work to revitalize safety and health activities throughout the company by carrying out that role.

Instead of resting on our laurels, we will redouble our safety and health activities going forward with a focus on each and every employee so as to ensure that all workers are aware of the vital importance of Takuma's philosophy of respecting people, which forms the foundation of our safety and health policies.

Safety and health activities and their results

1. Safety inspection system

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

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

- FY2016
Number of safety inspections done: 159
(Initial inspection pass rate: 93%)



A safety inspection

2. Safety patrols and field education

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

By focusing on the early discovery and elimination of risk in safety patrols and on the improvement of safety awareness among workers through communication skills in field education, these activities help ensure the safety of Takuma's workplaces.

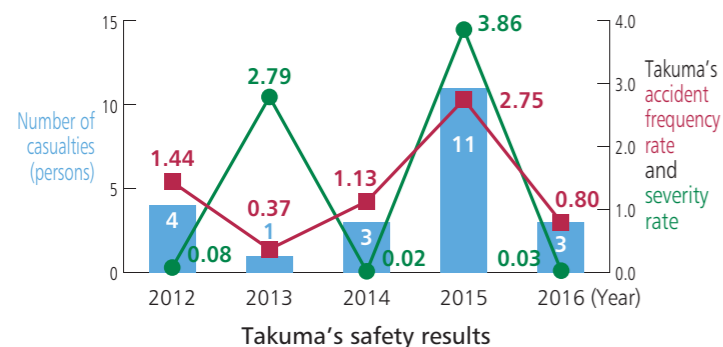
- Number of safety patrols implemented in FY2016
By Safety and Health Committee (members, advisors): 51
By Safety Control Department: 342
By construction division: 310



Safety patrols and field education

Takuma's safety results in recent years

Despite a tight labor market in the construction industry nationwide, business continued to be brisk in 2016. We saw our safety track record improve from the dip in performance that occurred in 2015 as a variety of safety and health activities began gradually to bear fruit. Nonetheless, we will not rest on these accomplishments, but rather will work to ensure even more thorough risk management, to strengthen and enhance our safety and health management system, and to redouble our resolve to eliminate occupational accidents.



Year	Accident frequency rate	Accident severity rate
2012	0.83	0.05
2013	1.25	0.23
2014	0.91	0.07
2015	0.92	0.21
2016	0.64	0.11

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

Safety and health education (education for construction site representatives)

We continuously provide specialized safety and health education at branches and worksites to increase the levels of safety awareness and knowledge of our employees and partner companies. As indicated below, more than 14,000 trainees have passed the completion exam. We are involved in a variety of initiatives to put in place mechanisms for preventing accidents, including by assigning workers with extensive knowledge in areas such as safety-related laws and ordinances to individual construction sites.

- April, 2004 to March, 2017
Cumulative number of trainees: 30,743
Number of trainees passing the completion exam: 14,639



Education for construction site representatives

Message from a partner company



Mr. Takeshi Ito
Site Manager
Kizugawa Office
Kansai Branch, West Japan
Regional Headquarters
Nishimatsu Construction
Co., Ltd.

Thanks to Takuma's education for construction site representatives, we learned that the mission of such representatives is to ensure safety and health at companies by raising the level of safety in order to create a healthy workplace environment in accordance with Takuma's commitment to respecting life and health to create a healthy workplace environment. Our site foremen have also received that education, and all of our branch companies now understand the importance of SSAs, although they were a little confused at first. It is clear now that the lesson is the same as what our predecessors used to teach, that preparation is 80% of the job, and indeed those measures provide a useful way to ensure safety in advance. I think that good communication among foremen and an understanding that safety is a priority that must be pursued actively are bringing optimism and motivation to the workplace environment.

Furthermore, Takuma's site safety patrols have provided education and guidance on how to enhance safety equipment so that it can withstand human error while raising employees' safety awareness so that such errors will not occur. We're extremely grateful that those inspections have also served to cultivate autonomy on the part of workers and enabled worksites as a whole to think seriously about safety.

(From a Takuma construction site representative)

Because Takuma chooses the primary contractor when it's the prime contractor but not secondary or subsequent contractors, we've adopted a system in which we have construction site representatives pass on our approach to safety and health to foremen (safety and health managers). If this education leads site workers to recollect what Takuma says about safety and health issues and therefore empowers them to nip hazards in the bud, we will consider it to have been successful.

Your company was confused about SSAs at the start of work at the site, and you asked many questions before you finally became convinced of the effectiveness of that approach. However, I'm extremely grateful that now you create samples yourselves and explain the system to other companies. You've proposed and organized foremen's meetings, and your belief that site personnel, particularly foremen, must play the lead role in safety and environmental issues is apparent. I can understand why our safety patrols always praise the Kizugawa construction site for its clean and organized appearance.

In closing, let me mention that I find many aspects of your safety management system interesting and look forward to managing sites with you again in the future while learning from one another.



Tatsuya Kawamura
Site Manager
Kizugawa Construction Site
Takuma Co., Ltd.

The Environment

Basic Environmental Policy

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

Environmental Philosophy

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

Operational Guidelines

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

Environmental Management

■ The situation concerning the acquisition of ISO 14001

Our Harima Factory has acquired ISO 14001 certification and has been implementing environmental management activities based on an environmental management system established to comply with international standards. Our group companies Nippon Thermoener Co., Ltd., Takuma Technos Co., Ltd., and Dan-Takuma Technologies Inc. have also acquired ISO 14001 certification.



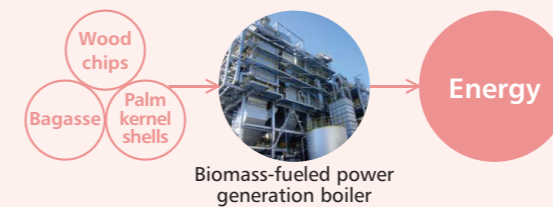
Takuma's CO₂ Reduction Technologies

We convert waste/biomass into energy and reduce CO₂!



Reducing CO₂ with biomass power generation boilers

A classic example of biomass power generation can be found in sugar factories. Factories that make sugar produce large quantities of residue from sugarcane, the raw material used to make sugar. Sugarcane is crushed into a pulp, and sugar is extracted in a mill. The remaining fiber is called bagasse and can be used as boiler fuel. The steam produced is used as the plant's heat source, and any remaining steam is used to generate electricity that is utilized to operate the plant and, if any remains, sold to the electric power company. The amount of power generated at sugar factories has grown greatly, with examples of single plant that generates 50,000 kW.



What is biomass?

Biomass is any recyclable organic material derived from a living organism, but does not include fossil fuels, such as oil and coal. For example, even though CO₂ is emitted if wood waste products are incinerated, when trees grow again, they absorb CO₂ to offset the emissions from incineration, so there is no increase in CO₂ in the atmosphere. By using the heat produced by incinerating biomass to generate power, the amount of power generated using fossil fuels can be reduced, and this contributes to decreasing CO₂.

CO₂ reduction from waste incineration plants

Garbage, or waste, is an important source of energy. About 500 kW** of power can be generated from one ton of garbage. In Europe and the Americas, waste incineration plants are often called Energy from Waste (EfW) plants, and recovering energy from garbage has become the norm. Waste must be seen as a "resource," so Takuma is seeking to be the best in the world with our technologies to convert waste into energy and reduce CO₂.

**Presumes waste with a calorific value of 8,800 kJ per kg and a power generation efficiency of 20%



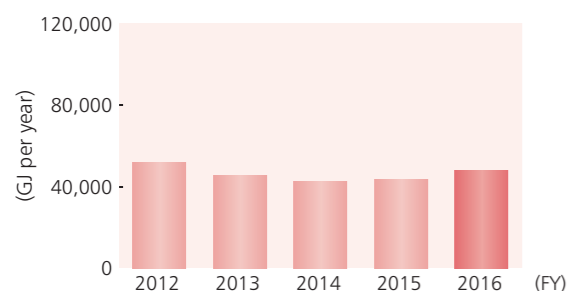
The Environment

Environmental Reporting

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

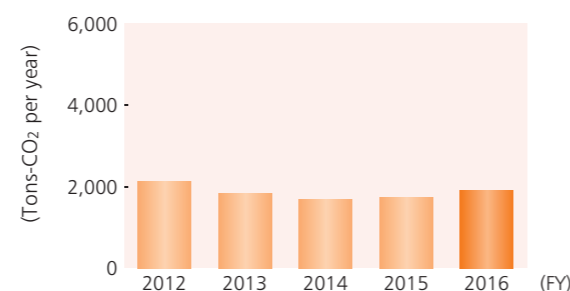
Environmental data (non-consolidated)

● Total energy consumption



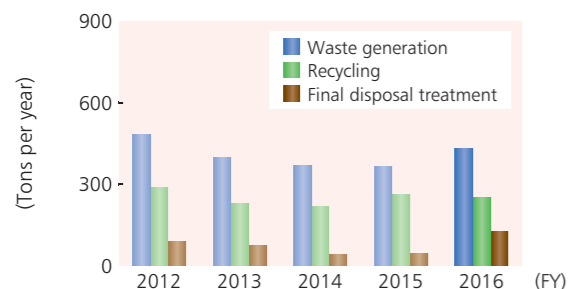
The total energy consumption of the fuel and the electricity consumed at Takuma during FY2016 rose slightly compared to FY2015 levels. We will continue to promote energy savings from here on out.

● Greenhouse gas emissions



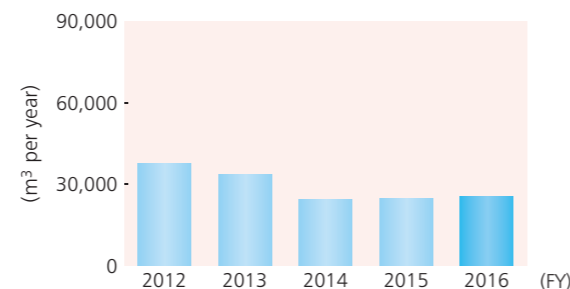
The greenhouse gas emissions created by our company are limited to carbon dioxide (CO₂). The amount of CO₂ emissions in FY2016 rose slightly compared to FY2015 levels. We will continue striving to reduce CO₂ emissions.

● Waste generation



Our company sells recyclables and reusables from the waste generated through its business activities to scrap dealers, while outsourcing the treatment of non-recyclables and non-reusables to haulers, processors and final disposal dealers, in accordance with the Industrial Waste Control Manifest system.

● Water usage



Takuma's water consumption during FY2016 held steady at FY2015 levels. Going forward, we will continue to work to lower our water use.

PRTR target substance emissions

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

● Dichloromethane (CAS No. 75-09-2)

FY	2012	2013	2014	2015	2016
Emissions (tons per year)	0	0	0.3	0.4	0.4

● Xylene (CAS No. 1330-20-7)

FY	2012	2013	2014	2015	2016
Emissions (tons per year)	1.8	1.4	3.4	2.2	2.9

● Toluene (CAS No. 108-88-3)

FY	2012	2013	2014	2015	2016
Emissions (tons per year)	0.05	0.08	0.08	0.26	0.09

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

Environmental accounting

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

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

● Environmental conservation cost

According to the "Environmental Accounting Guidelines," environmental conservation costs measure on a monetary basis investments and expenditures on preventing, controlling, or avoiding environmental impacts, eliminating their effects, recovering from associated damage, and initiatives to aid in the same.

Item	Investment (thousand JPY)	Costs (thousand JPY)
Business area costs		
Pollution prevention costs	1,610	17,518
Global environmental conservation costs	4,754	23,968
Resource recycling costs	—	12,524
Management activity costs	—	46,386
Research and development costs	36,866	1,675,842
Social activity costs	—	3,377
Total	43,230	1,779,615

● Environmental conservation effect

According to the "Environmental Accounting Guidelines," environmental conservation effects measure on a material basis the effects of preventing, controlling, or avoiding environmental impacts, eliminating their effects, recovering from associated damage, and initiatives to aid in the same.

Item	FY2015	FY2016
(1) Environmental conservation effect concerning resources input for business activities		
Total energy input (GJ)	92,458	101,684
Water resources input (m ³)	44,342	50,584
(2) Environmental conservation effect concerning environmental loads and wastes created by business activities		
Greenhouse gas emission volume (tons-CO ₂)	3,883	4,337
Waste generation (tons)	834	976
Final disposal volume (tons)	77	163
Total drainage volume (m ³)	42,482	48,299
BOD emissions (kg)	2,273	2,720
COD emissions (kg)	2,443	2,898
T-N emissions (kg)	626	698
T-P emissions (kg)	111	119

Environmental efficiency

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

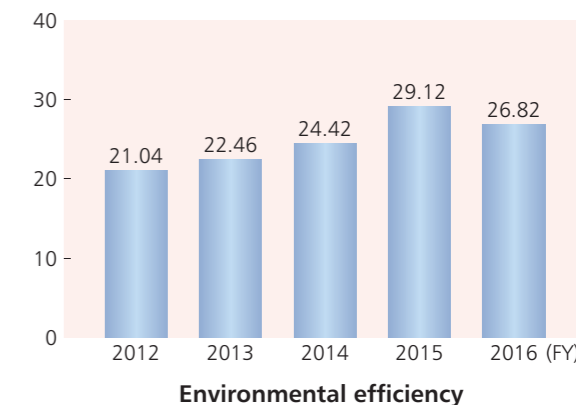
At the Takuma Group, we calculate environmental efficiency as the ratio of consolidated net sales to greenhouse gas emissions. In FY2016, this value declined compared to FY2015.

The Takuma Group's definition of environmental efficiency

$$\frac{\text{Consolidated net sales (million JPY)}}{\text{Greenhouse gas emissions (tons-CO}_2\text{)}}$$

Scope of data collected

- Period covered:
April 1, 2016, to March 31, 2017
- Companies targeted
[12 domestic companies]
 - Takuma Co., Ltd. (Head Office, other offices including overseas sites and the Harima Factory)
 - NIPPON THERMOENER CO., LTD.
 - Takuma Technos Co., Ltd.
 - Hokkaido Sanitary Maintenance Co., Ltd.
 - Takuma Technos Hokkaido Co., Ltd.
 - SUNPLANT Co., Ltd.
 - Takuma Engineering Co., Ltd.
 - Takuma System Control Co., Ltd.
 - Dan-Takuma Technologies Inc.
 - Kyoritsu Setsubi Co., Ltd.
 - Kankyo Sol-Tech Co., Ltd.
 - Takuma Plant Service Co., Ltd.
- [2 overseas subsidiaries]
 - Taiden Environtech Co., Ltd.
 - Siam Takuma Co., Ltd.



Fair Business Practices

Compliance/CSR Promotion Education

Takuma offers compliance and CSR promotion education through the Compliance & CSR Promotion Organization (see page 46), which was established in order to spread awareness of compliance and CSR issues among employees.

During FY2016, we implemented education focusing on compliance and CSR promotion in four separate stages (see below) in keeping with our policy of pursuing a sustained and thorough program of improving compliance and CSR awareness and risk management based on a consideration of internal conditions and the characteristics of Group companies in response to social requirements and expectations in accordance with our priorities of cultivating a robust corporate culture, accommodating environmental change, and practicing risk management as set forth in the Compliance & CSR Promotion Division's medium-term plan under the 11th Medium-Term Management Plan.

1st term: Insider trading

We offered education to prevent insider trading, addressing such topics as the definition of insider trading, penalties imposed in response to violations, example violations, and Takuma's rules on the subject.

3rd term: Overview of security export controls; measures to prevent maternity harassment, paternity harassment, and care harassment

We offered an educational program addressing security export controls, including their purpose, examples of violations and associated penalties, and internal export control-related operations and associated procedures.

We also offered education about maternity, paternity, and care harassment in response to the announcement of revisions to Japan's Act on Securing, Etc. of Equal Opportunity and Treatment between Men and Women in Employment and the Act on Childcare Leave, Caregiver Leave, and Other Measures for the Welfare of Workers Caring for Children or Other Family Members. In addition to the specific provisions of the revisions in question, the program addressed topics such as problematic behavior and Takuma's approach to dealing with related issues.

2nd term: Corporate scandals

This program introduced recent corporate scandals, many of which have been coming to light recently; explained the importance of compliance, mechanisms that lead to scandals, and measures for preventing them; and raised awareness in order to prevent them.

4th term: Business continuity planning (BCP); Forward-looking CSR activities: CSR issues and action programs

We offered education about business continuity planning (BCP) based on the results of the FY2016 CSR awareness survey that was conducted during the third term.

We also offered education about forward-looking CSR activities and conducted a self-assessment of our implementation of FY2016 action programs as planned by each department.

● CSR lectures for management-level employees

In November 2016, we invited attorney Izumi Sato, who is an expert on environmental issues, to give a lecture for management-level employees entitled "Takuma's Environmental Business, Compliance, and Risk Management."

In her talk, which was extremely useful for participants as they prepared to chart the future course of Takuma's environmental business, Ms. Sato addressed current trends with regard to environmental issues, revisions to environment-related laws and regulations in Japan, examples of instances in which those laws and ordinances have been violated, and the future direction of the environmental business.



Compliance Measures

● Initiatives to ensure compliance with the Antimonopoly Act

Towards ensuring permanent compliance with the Antimonopoly Act, Takuma enacted "Regulations Concerning Management of the Pledge of Antimonopoly Act Compliance," which provides for the submission of a written oath in regard to observing the Antimonopoly Act.

"Rules on Controlling Contact with Competitors' Sales Departments, Etc.," defines the procedure for an employee to contact the sales department, etc., of a competitor and specifies that an application should be made to and an approval should be obtained from the affiliated division or center manager in advance to ensure fair business contact.

● Holding training sessions about the Antimonopoly Act

We hold regular training sessions about the Antimonopoly

Act to deepen participants' understanding of the act and to ascertain the latest information about it.

● Introducing a Legislation Alert Service

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

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

CSR Awareness Survey

As a means of understanding the level of awareness of compliance and CSR and the level of permeation of education that promotes these priorities, and employing that data as reference for the integrated activities carried out during each fiscal year and for the following fiscal year's action plan, we have conducted the "CSR Awareness Survey" every year since FY2008 with the end goal of utilizing that information for future compliance and CSR promotion activities. The survey has included Group companies since FY2013.

We actively use survey results in our activities, for example by offering additional education in areas that received lower scores than in the previous survey.

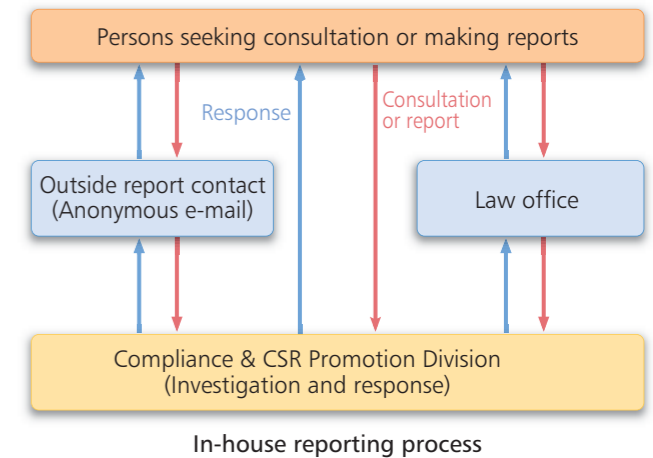
We will continue to offer this survey and use its results to improve compliance and CSR promotion education on an ongoing basis.

In-house Reporting System

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

Reporting contacts are set up at our Compliance & CSR Promotion Division and at an outside law office, as well as a dedicated outside report contact for anonymous e-mail reporting. Our "In-house Reporting Code" and the Takuma Group Code of Conduct further declare that no informant shall be subjected to disadvantageous treatment simply due to his or her having filed a report.

Furthermore, in order for this system to be correctly understood and utilized, we distribute a card to all employees with information on the reporting contacts and regularly publicize the system.



Material Procurement Policy

Takuma carries out procurement activity in accordance with its Material Procurement Policy.

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

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

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

Takuma procurement procedures and required items are posted on the following website.

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

Material Procurement Policy

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

Consumer Issues

Activities Involving Product Quality

In addition to defining our Quality Policy (see below), registering for "ISO 9001: Management Systems" certification (Registration No.: JQA1952), and improving product quality based on our quality management system, we carried out concrete activities to enhance customer satisfaction. The present status for ISO 9001 certification includes having switched to ISO 9001:2000 in FY2002 and to ISO 9001:2008 in FY2010, as well as a transition to ISO 9001:2015 that we plan to complete in FY2017.

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

Quality Policy

Manufacturing products that result in customer satisfaction

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

Based on that Quality Policy and the three priority items described below, Takuma is working to improve the quality of its products and services through such measures as improving organizational operations, improving individual employees' capabilities, carrying out internal quality audits, and reviewing quality control and processes.

Priority items

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

Customer satisfaction survey

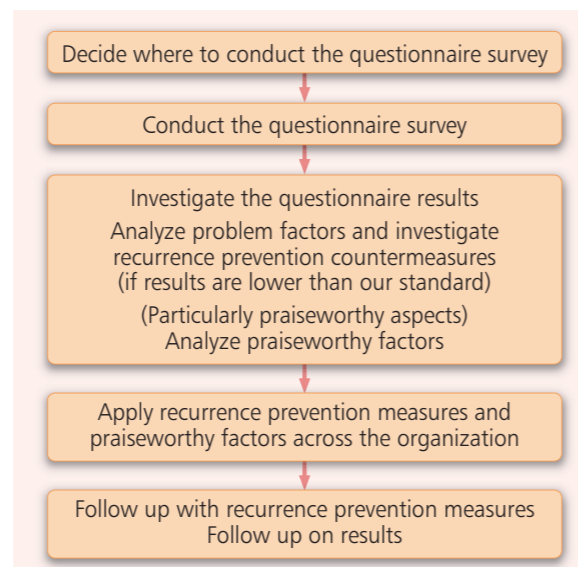
We have conducted a customer satisfaction survey each year since FY2007 to obtain unfiltered customer feedback concerning delivered products and the level of service provided by Takuma coordinators. We use that information to improve quality.

The figure to the right illustrates how the survey is administered.

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

Next, the committee calculates a score for each item based on the survey results as well as a report and explanation from the responsible department. The committee then analyzes the resulting data.

If we find a problem, for example an item receiving an evaluation score of less than 70 or a score of 1 (dissatisfied) or 2 (rather dissatisfied) on a 4-point scale, the committee analyzes the cause of the problem and studies measures to prevent recurrence based on interviews with the department in question. We also evaluate aspects of our products and services that receive especially high praise from customers and work to further enhance customer satisfaction by combining problem areas and praiseworthy areas and applying them horizontally across involved departments at the company.

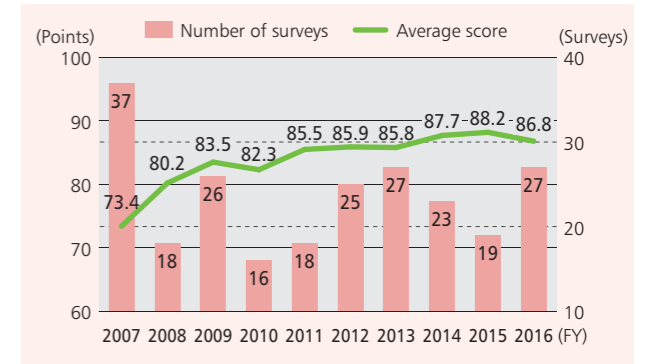


Customer satisfaction survey process

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

Since the second year, the average score for these questionnaires has been 80 points or higher, as shown in the table to the right. We believe that the rising trend for scores indicates that our initiatives are functioning effectively.

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



Number of questionnaire surveys and average score

Message from a customer



Mr. Kyoji Takahashi
Executive Managing Director & Factory Manager
Sanyo Paper MFG. Co., Ltd.

We began studying the possibility of having Takuma build a biomass power plant for us at the start of 2014 as part of our environmentally responsible fuel conversion business. We began civil and foundation work for the project in 2015 and then began construction of the plant itself in 2016. The new plant began operation in January 2017. In this way, the project lasted about three years.

In studying construction of a biomass power plant, we identified requirements such as the following after touring numerous such facilities and ultimately determined that a Takuma progressive stoker furnace would best meet our needs:

1. That site requirements be satisfied
2. That the facility operate in a stable manner since it will also be used to supply heat to production equipment
3. That the facility be capable of using various types of fuel

After starting this study process, we held numerous meetings to flesh out the various constraints, and we were impressed with how Takuma's sales coordinators and technical coordinators were able to draw on their extensive experience to offer a fast, precise response based on knowledge and information about past projects. I think the quality of that response is apparent in the stability of the facility.

In addition, Takuma was able to complete the removal of plant equipment according to plan despite space constraints. The fact that the new facility is operating in such a stable manner is a testament to the high level of technical skill that Takuma's construction site representatives and supervising engineers brought to the project.

(From the sales manager)

First of all, I'd like to thank you for choosing a Takuma progressive, water-cooled stoker furnace.

Although the construction process presented a variety of challenges, it is thanks to your cooperation as well as the cooperation of everyone else who was involved that we were able to complete the project without any accidents, and I'd like to express my gratitude for that.

We look forward to working hard to ensure that the facility generates power for the feed-in tariff program in a way that inspires peace of mind while working with maintenance department personnel and taking into account the wishes you indicated on our customer satisfaction survey.



Kentaro Araki
Manager, Section 1
Plant Sales Department 2
Energy Plant Division
Takuma Co., Ltd.

Participation in the Community

● Group company activities

● Anan High Trust Co., Ltd.

Group company Anan High Trust is striving to open itself to the surrounding community through a series of initiatives that include cleanup activities in the area around its facilities, environmental learning sessions and workplace tours held at its on-site management education center, and a variety of other events.



● Kashihara High Trust Co., Ltd.

Activities by Group company Kashihara High Trust include cleaning and beautifying nearby roads, weeding in the surrounding area, conducting patrols for illegal dumping, manning a booth at local business meetings, and cooperating with locally held events.



* Activities by Group companies Kurume High Trust Co., Ltd., Hokutan High Trust Co., Ltd., and Suwako High Trust Co., Ltd. are introduced in the "Striving to Coexist with Local Communities" feature on pages 17 to 22.

Contribution to Society

● Contribution to society

● Takuma Group coordinated cleanup activities

The Group participated in an initiative to clean up the area around its worksites to contribute to the local community and beautify the surrounding environment. Each year, the entire Group participates on a volunteer basis. During FY2016, a total of 534 employees participated in two cleanup initiatives, one in May and June and the other in September. The activities provided an opportunity for employees to think afresh about waste-related issues and their connection to the community. Going forward, the Takuma Group will continue this initiative.



● Participation in the "Osaka Marathon 'Cleanup' Campaign"

In October 2016, volunteers from Takuma's Plant Service Department (Osaka) participated in the "Osaka Marathon 'Cleanup' Campaign," a cleanup activity that is held every year in Osaka City.

The activity, which brought together organizational, group, and individual volunteers to beautify public spaces such as roads, promenades, parks, and station plazas throughout the city, is held every year as part of a tie-up with the Osaka Marathon.



● Blood donation campaign

Takuma supports blood donation activities through the Japanese Red Cross Society. Our Head Office and Harima Factory held spring and autumn blood drives, and President Kato participated. During FY2016, a total of 177 employees took part in the campaign. Harima Factory has cooperated with the Japanese Red Cross Society's blood drives for many years, earning it a letter of appreciation from the organization's Hyogo Branch. Donors can simultaneously register as bone marrow donors, and this year nine employees did so. We plan to continue this activity in the future.



● WFP fundraising activities

Takuma serves on the Board of Trustees of the Japan Association for the World Food Programme, the official supporting partner of the World Food Programme in Japan.

Each year, we display WFP posters at the entrances to company buildings and in cafeterias during a campaign that lasts from June through August. The campaign serves both to increase employee interest in the world's food problems and to collect donations to address them. According to the UN WFP, about 800 million people suffer from hunger worldwide. Through the Japan Association for the World Food Programme, we will continue to raise funds to help people suffering from food scarcity.



● Contributions to NPOs

● Purchasing UNICEF Christmas cards

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

● Donating calendars to a charity calendar market

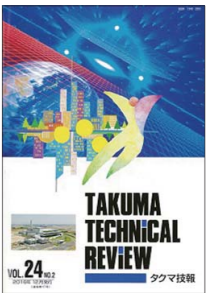
Takuma donates unused calendars to a calendar market sponsored by the NPO "Nippon Volunteer Network Active in Disasters." In FY2016, we donated more than 100 calendars. The proceeds are used to provide aid for victims of natural disasters and other crises.

● Publications

● Publication of the Takuma Technical Review

We publish the *Takuma Technical Review* twice a year to introduce technologies that Takuma has developed. Contents in FY2016 included a report on research into sewage sludge incinerator, a report on the operation of biomass boiler power generation facilities, a report on the operation of waste incineration facilities, a report on a survey of overseas recycling facilities, and introductions to new products. Abstracts are available on Takuma's website.

[Takuma top page > Technical Information > *Technical Review*]
<http://www.takuma.co.jp/english/gijutu/gihou.html>



● Publication of Air Pollution Prevention Technology

The Takuma Environmental Technology Society, which consists of Takuma employees who are experts in the field, published *Air Pollution Prevention Technology* in April 2016. The book presents its subject matter using plain language and extensive pictures and diagrams so that it will be accessible to general readers with an interest in preventing pollution while simultaneously serving as a reference for engineers and students in related fields.



● Group company activities

● Tour of Kankyo Sol-Tech Co., Ltd. [Kankyo Sol-Tech Co., Ltd.]

In November 2016, Takuma Group company, Kankyo Sol-Tech Co., Ltd., hosted a tour by 35 students of the Osaka Institute of Technology together with the Shirokita Club*. In addition to introducing the company, the students learned about instruments used in environmental analysis and the processes by which such analysis is carried out. For most of the visitors, it was their first time to see an analytical laboratory, and they reacted with great interest.

* Shirokita Club: A group of business executives consisting of graduates of Josho Gakuen, which consists of the Osaka Institute of Technology, Setsunan University, Hiroshima International University, etc.

