

Consumer Issues

Activities Involving Product Quality

In 1997, in addition to defining our Quality Policy of “Manufacturing products that result in customer satisfaction,” registering for “ISO 9001: Management Systems” certification (Registration No.: JQA 1952), 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 then to ISO 9001:2008 in FY2010.

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 up to delivery (sales, design, procurement, manufacture, construction, and management).

Based on that Quality Policy, Takuma is pursuing a variety of measures in each sales, design, procurement, manufacture, construction, and management process towards improving the quality of our products and services.

● Improving organizational operations

As measures for heightening the quality of the organization as a whole, we establish quality objectives in each section and department at the beginning of the fiscal year and regularly report (twice per year) the status of achievements to the QM committee (quality management review).

● Improving individual employees’ capabilities

We create a “Work (Technical Capability) Achievement Checksheet” in order to improve the work capability of the personnel required for each process. In addition to allowing us to assess current skill levels of individual employees on a regular basis, this system is used to review targets.

● Internal quality audit

We raise the accuracy of each job through standardization of the work procedure within each process, confirm the operating status of the quality management system by carrying out internal quality audits in each section and department, and enhance work content as necessary.

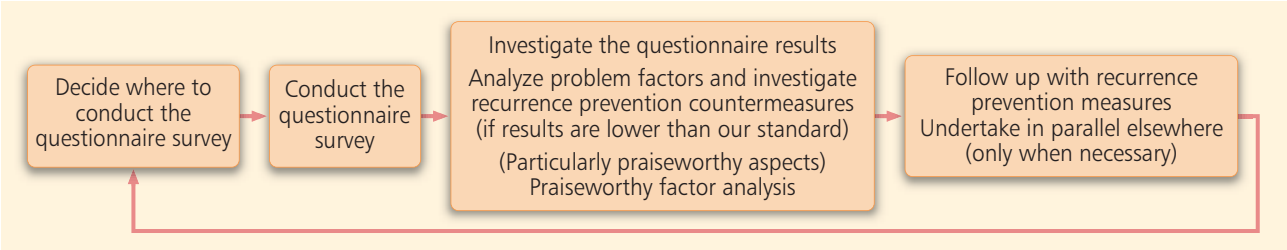
These audits are carried out on a regular basis by employees who have been certified as internal audit members by completing internal quality audit member training seminars that are taught by lecturers from outside organizations. These seminars enable those personnel to acquire knowledge ranging from fundamental knowledge about ISO 9001 to specific methods for implementing internal audits.

● Review of quality control and processes

Quality is an important aspect of producing excellent products. When a non-compliant product is discovered, we implement the measures (remedies) provided in the corresponding manual (standard). Even in processes that did not go so far as to produce a non-compliant product, a review is carried out on processes that might have caused the issue as a preventive measure. In order to also prevent procurement of noncompliant products, we provide further education (instruction) for all suppliers.

● Customer satisfaction survey

We created the Customer Satisfaction Survey Committee in FY2007 and have been conducting customer satisfaction surveys since as an initiative to improve quality by asking customers how they feel about delivered products and Takuma staff and using their feedback to improve quality.



Customer satisfaction surveys

FY2007: 73.4 points (37 plants)
↓
FY2016: 86.8 points (27 plants)

Average evaluation scores from questionnaire surveys (out of a possible 100 points)

Corporate Governance

Corporate Governance

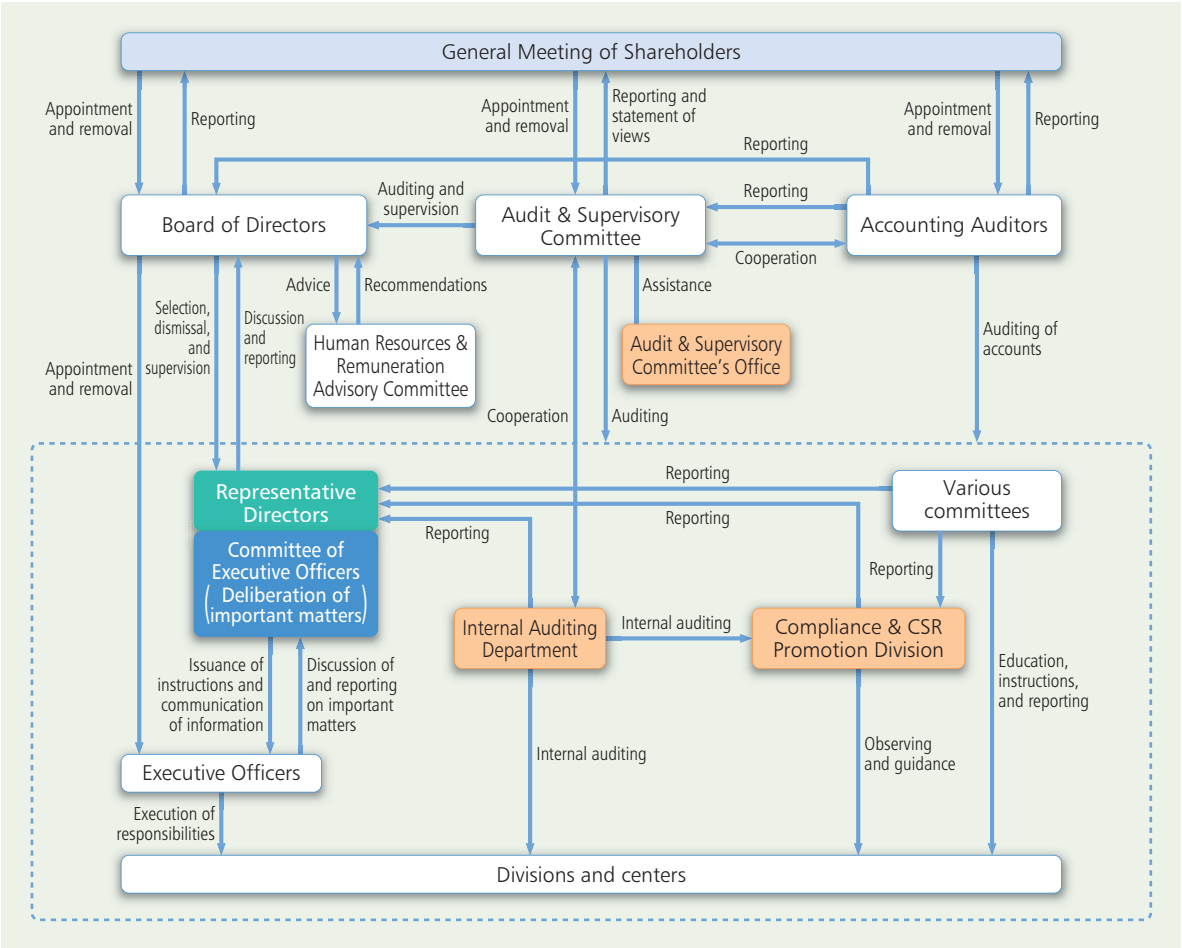
As of June 28, 2017, the Board of Directors was comprised of six directors (excluding directors who are members of the Audit & Supervisory Committee) and four directors (of whom three were outside directors). The Board of Directors meets regularly once a month as a rule and whenever else it is necessary 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.



Corporate governance structure


(As of June 28, 2017)

Corporate Governance


Directors, Audit & Supervisory Committee Members, Executive Officers

Directors

★ President and Representative Director




Takaaki Kato★
Chief Executive Officer




Kengo Numata
Senior Managing Executive Officer




Hiroaki Nanjo
Managing Executive Officer



Tsuyohito Nishiyama
Executive Officer



Hideki Takeguchi
Executive Officer



Koji Tanaka
Executive Officer

Directors (Audit & Supervisory Committee Members)

* Outside



Yasushi Enomoto



Hiromichi Satake*



Osamu Iwahashi*



Minoru Murata*

Managing Executive Officer

Takashi Manabe

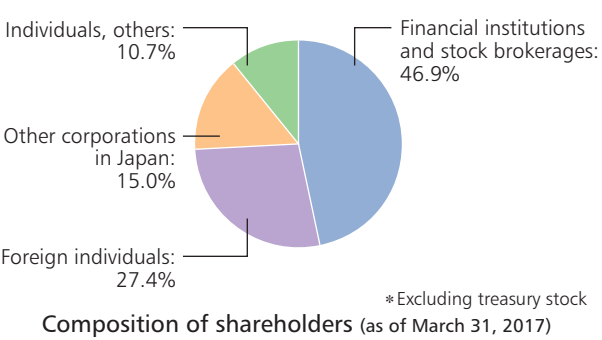
Executive Officers

Ryoji Tani
Norito Uchiyama
Masahiko Izumi
Yoshiki Kita

Mitsuaki Adachi
Akira Taguchi
Hidetoshi Tomita

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>



Stock Information

- 1. Total number of authorized shares: 321,840,000
- 2. Total number of outstanding shares: 83,000,000
- 3. Total number of shareholders: 4,307 (as of March 31, 2017)
- 4. Major shareholders (top 10) (as of March 31, 2017)

| Shareholder | Number of shares | Stake |
|---|------------------|-------|
| The Master Trust Bank of Japan, Ltd. (Trust Account) | 8,708,300 | 10.5% |
| Japan Trustee Services Bank, Ltd. (Trust Account) | 5,660,100 | 6.8% |
| Mizuho Trust & Banking Co., Ltd. (Retirement Benefits Trust, Mizuho Bank, Ltd. Acoount) Trust & Custody Services Bank, Ltd. (Re-entrustment) | 4,022,000 | 4.8% |
| Nippon Life Insurance Company | 3,593,282 | 4.3% |
| STATE STREET BANK AND TRUST COMPANY | 2,005,320 | 2.4% |
| TAKUMA CO., LTD. Kyoeikai | 1,727,238 | 2.1% |
| Sumitomo Mitsui Banking Corporation | 1,621,875 | 2.0% |
| NIPPON TOCHI-TATEMONO Co., Ltd. | 1,305,000 | 1.6% |
| Japan Trustee Services Bank, Ltd. (Trust Account 9) | 1,294,700 | 1.6% |
| GOLDMAN SACHS INTERNATIONAL | 1,258,557 | 1.5% |

5. Dividend Policy
Takuma returns profits to investors in line with a comprehensive assessment of business performance and other factors based on a policy of maintaining stable dividends while working to enhance the quality of its business. Our overriding goal is to remain competitive in an increasingly challenging marketplace.
Two dividends are paid each fiscal year: an interim dividend offered by resolution of the Board of Directors and a year-end dividend offered by resolution of the annual meeting of shareholders.
In keeping with this policy, the year-end dividend for the consolidated fiscal year under review was 7 yen per share, which, combined with the interim dividend, brought the annual dividend to 13 yen per share.
We plan to continue to build internal reserves to strengthen our financial foundation and to use funds to increase corporate value through capital investment, R&D investment, and other avenues in order to lay the groundwork for the future growth and expansion of our businesses.

Corporate Governance

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

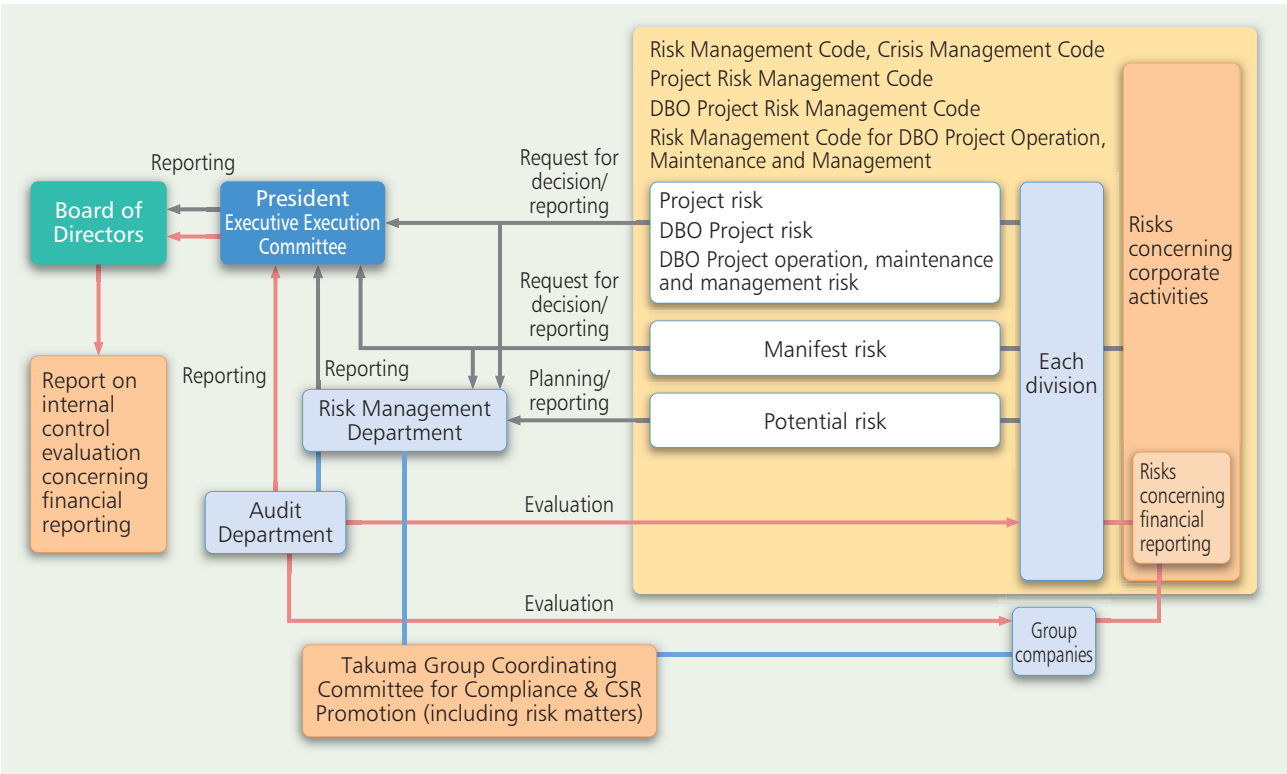
Basic purpose of risk management

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.

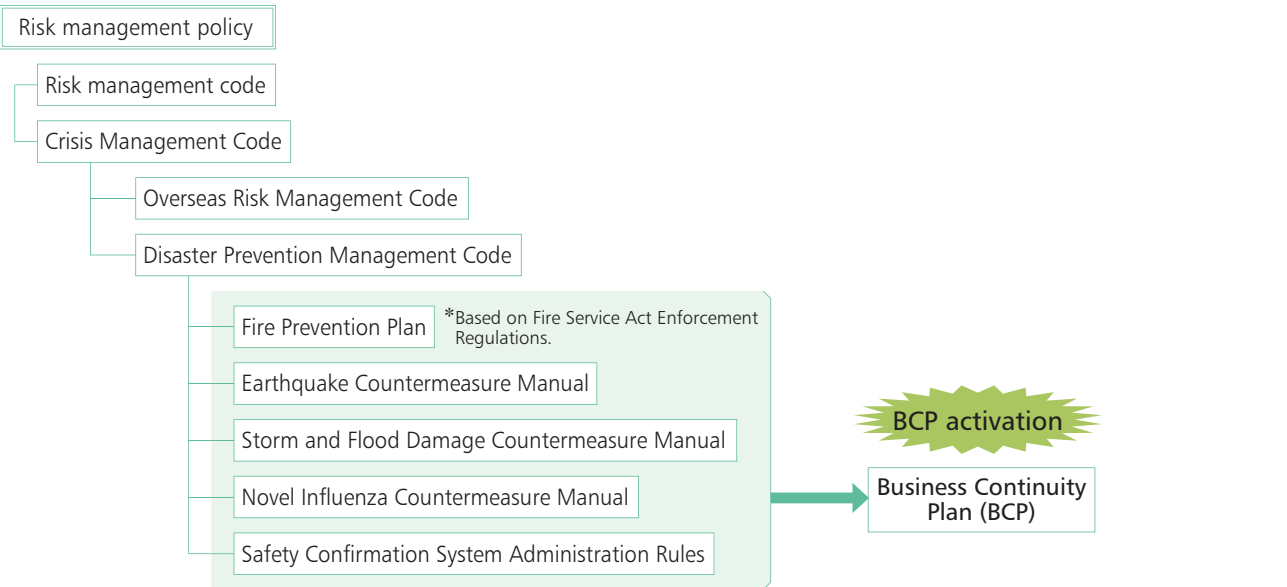


Business Continuity Plan (BCP)

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



Disaster prevention and earthquake resistance features of the Takuma Building

The current Takuma Building was completed in December 1995.

To increase the earthquake resistance of the building, which was designed to serve as the company’s head office, engineers placed unbonded braces on key walls and used a concrete-filled tube (CFT) structure, which was entering into widespread use at the time as a successor to the reinforced concrete (RC), steel-reinforced concrete (SRC), and steel (S) architectural structures.

The building also incorporates a number of equipment systems, including a rooftop generator designed to provide power for use in the event of a natural disaster or other emergency (see photograph*). The system can be used to power the building’s fire suppression system pumps, smoke exhaust fans, and emergency elevators, among other equipment. Based on numerous reports of generators with water-cooled engines failing in the event of the Great Hanshin-Awaji Earthquake when their source of cooling water was cut off, we chose a system with an air-cooled engine.



Emergency rooftop generator for providing emergency power*

Participation in the Community

Disaster Preparedness Agreement Signed

Takuma has entered into an “Agreement on Use as a Temporary Evacuation Center in Case of Tsunamis, Etc.,” a Disaster Preparedness Agreement, with Amagasaki City.

Our corporate Head Office is located in Amagasaki where, based on lessons learned from of the Great East Japan Earthquake, they are advancing the establishment of temporary evacuation areas in preparation for disasters, such as those that may be generated by tsunamis from earthquakes in the Tonankai and Nankai areas that are anticipated in the near future, as well as those from flooding caused by typhoons, heavy rain, and high tides.

To that end, we concluded a Disaster Preparedness Agreement with that city defining our Head Office as a temporary evacuation center and enabling the local populace free access whenever there is a possibility of one of the above disasters occurring. Our corporate Head Office is thus designated by Amagasaki City as a “Temporary Evacuation Center in Case of Tsunamis, Etc.”



Yotteko-mura, Arai

Takuma offers the “Takuma Club” recreation facility located in our Harima Factory free of charge as the village office for “Yotteko-mura, Arai,” which was launched in Takasago City’s Arai district with support from Hyogo Prefecture’s “Kenmin Koryu Hiroba” (Civic Exchange Plaza) project. “Yotteko” means “come on over” in Banshu (southwestern part of Hyogo Prefecture) dialect, and “Yotteko-mura” is being used as a new local community venue in which anyone can participate at any time.



Contribution to Society

Takuma strives to contribute to society through activities such as the following:

● 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.



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 the 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.

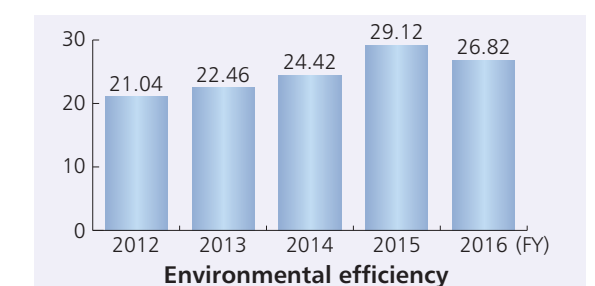
Environmental efficiency

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.

The Takuma Group’s definition of environmental efficiency

Consolidated net sales (million JPY)
Greenhouse gas emissions (tons-CO₂)



The Environment

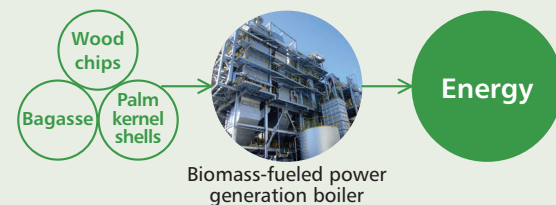
Takuma's CO₂ Reduction Technologies

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%



Financial Information