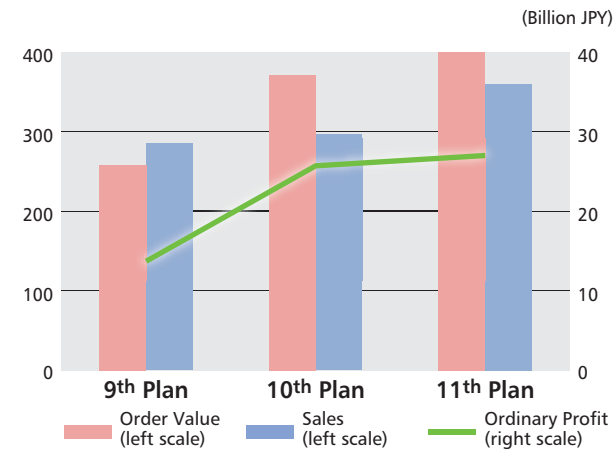


3 Financial Targets (Consolidated)

We are currently striving to build structures capable of consistently earning an ordinary profit of JPY 10 billion even as the business environment undergoes a process of significant change in keeping with our corporate vision of "aiming to maintain our role of being an indispensable presence in society as a leading company in the field of renewable energy utilization and environmental protection" and our target of achieving ordinary profit of JPY 10 billion in FY2020.

To facilitate the achievement of the goals outlined in this plan, we will undertake initiatives to realize sustained growth in accordance with the policies while seeking to steadily improve our business in terms of both quantity and quality. To that end, we have established the financial targets described below.



	9th Medium-Term Management Plan results				10th Medium-Term Management Plan results				11th Medium-Term Management Plan targets
	2009	2010	2011	Total	2012	2013	2014	Total	FY2015 – FY2017
Order Value	70.5	97.0	90.4	257.9	109.2	148.0	113.7	371.0	400 Billion JPY (3-year cumulative total)
Sales	95.1	89.1	101.0	285.3	96.3	96.3	103.8	296.5	360 Billion JPY (3-year cumulative total)
Ordinary Profit	2.0	4.4	7.3	13.7	7.1	9.4	9.1	25.7	27 Billion JPY (3-year cumulative total)

4 Core Business Units and Emphasis of Future Activities

Municipal Solid Waste Treatment Plant Business

Business Environment

- As facilities age, there is ongoing robust demand for renewal and service life elongation.
- DBO project volume is growing, and there is also growth in O&M services for existing facilities.

Emphasis of Future Activities

- Develop the foundation of the business and enhance our operational capabilities.
- Further strengthen initiatives to prolong the service life of facilities.

Boiler Plant Business (Japan)

Business Environment

- Demand for biomass power plants remains steady.
- The number of plants targeted for maintenance is increasing as facilities are completed and transferred to customers.

Emphasis of Future Activities

- Secure more orders for biomass power plants (secure market position).
- Enhance maintenance service and capabilities.

Waste Treatment Plant Business (Overseas)

Business Environment

- Plans to build Energy from Waste plants are underway in various regions worldwide against the backdrop of ongoing urbanization and increasing environmental awareness.

Emphasis of Future Activities

- Develop schemes for entering the market that are suited to each country and region.
- Develop structures to facilitate market entry.

Water Treatment Plant Business

Business Environment

- There is a growing need to recover energy from sewage sludge.
- Renewal demand and service life elongation demand are increasing as facilities age.

Emphasis of Future Activities

- Secure our position in the market for tapping the energy potential of sewage sludge.
- Expand our share in the advanced-treatment sand filtration market.

Boiler Plant Business (Overseas)

Business Environment

- Demand for biomass power plants in Thailand and surrounding countries remains robust.

Emphasis of Future Activities

- Maintain and enhance functionality for carrying out overseas projects, including enhancement of the functions of our local subsidiary (Siam Takuma).
- Enhance price competitiveness and differentiated products.

Package Boiler Business

Business Environment

- The domestic market has matured, and it is not reasonable to expect a significant recovery of demand.
- The need for boilers is increasing overseas, particularly in developing nations.

Emphasis of Future Activities

- Expand our overseas business.
- Enhance our technologies and production capacity.

Corporate Profile

Corporate Information

The Takuma Group Network

Business Summary

Corporate Information

Company outline

Name: TAKUMA CO., LTD.
 Head office location: 2-2-33 Kinrakuji-cho, Amagasaki, Hyogo 660-0806, Japan
 TEL +81-6-6483-2609 FAX +81-6-6483-2751 (operator)
 Representative Director: Takaaki Kato, President and CEO
 Established: June 10, 1938
 Capital: JPY 13,367,457,968 (as of March 31, 2017)
 Main business areas: The design, construction and superintendence of a wide variety of boilers, plant machinery, pollution prevention plants, environmental equipment plants, and heating and cooling equipment and feed-water / drainage sanitation equipment and facilities
 The design, construction and superintendence of civil, architecture and other works
 Number of employees (non-consolidated): 824 (as of March 31, 2017)
 Number of employees (consolidated): 3,447 (as of March 31, 2017)

Permits and registrations

Head Office, branch offices and other business offices

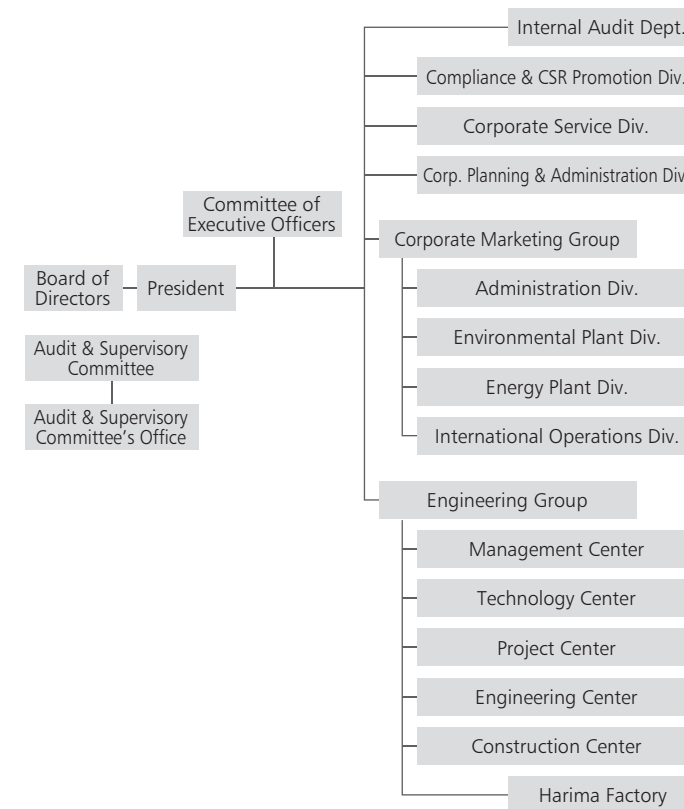
Construction license (Minister of Land, Infrastructure, Transport and Tourism license, Special 27-6129)
 Construction consultant registration (Minister of Land, Infrastructure, Transport and Tourism registration, Construction 26-10202)
 First-class architect office registration (01A02903)
 ISO 9001 quality management system certification

Harima Factory

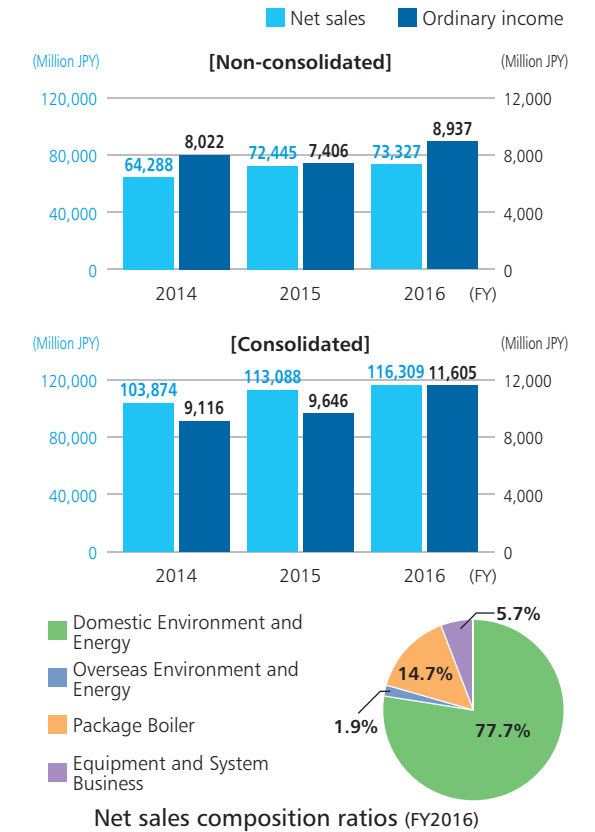
ISO 9001 quality management system certification
 ISO 14001 environmental management systems certification
 Manufacture of thermal equipment for power generation (Ministry of Economy, Trade and Industry)
 Permission to manufacture boilers and pressure vessels, permission to manufacture cranes (Ministry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



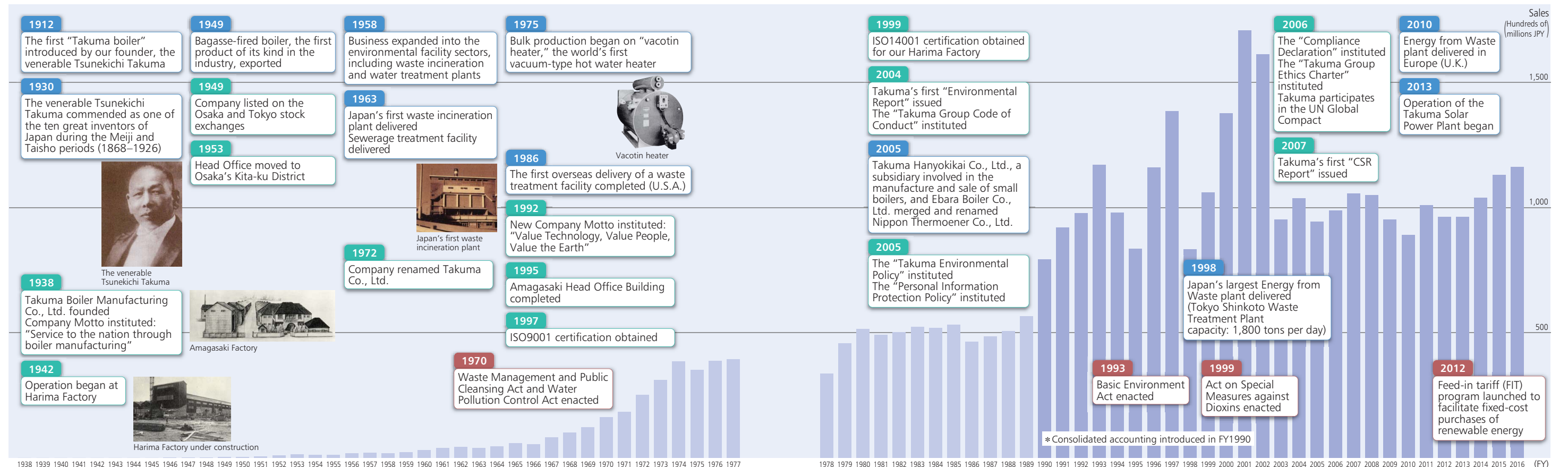
Corporate structure (as of June 28, 2017)



Balance sheet overview and net sales composition ratios



The History of Takuma



The Takuma Group Network

(as of April 1, 2017)



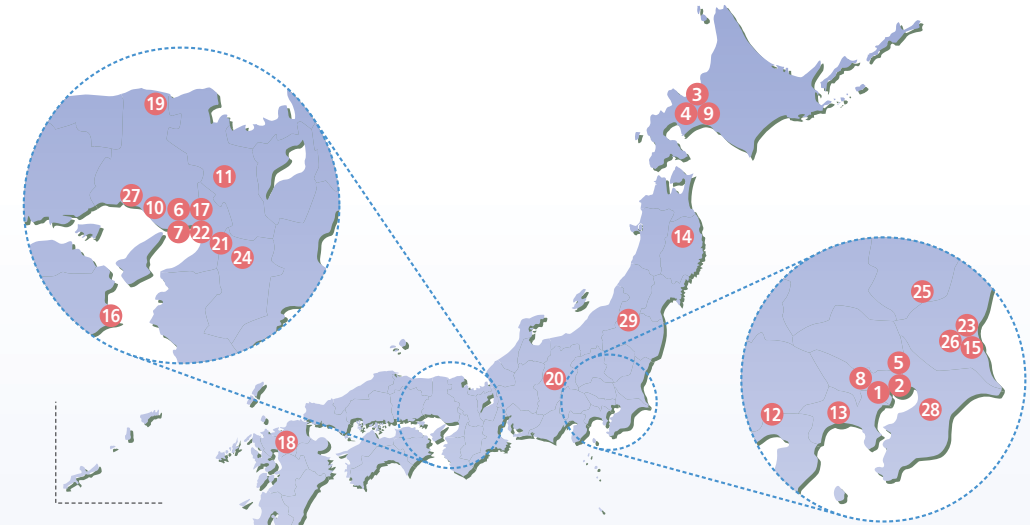
Takuma's business offices

- 1 Head Office**
2-2-33 Kinrakuji-cho, Amagasaki, Hyogo
660-0806, Japan
TEL +81-6-6483-2609 FAX +81-6-6483-2751
<http://www.takuma.co.jp>
- 2 Osaka Office**
Daiken Bldg., 2-3-20 Tsukamoto, Yodogawa-ku,
Osaka 532-0026, Japan
TEL +81-6-6100-3301 FAX +81-6-6100-3302
- 3 Tokyo Branch**
Nomura Higashi-nihonbashi Bldg., 1-1-7 Higashi-
nihonbashi, Chuo-ku, Tokyo 103-0004, Japan
TEL +81-3-5822-7800 FAX +81-3-5822-7888
- 4 Hokkaido Branch**
Daigo Bldg., 5-11, Ohdori Nishi, Chuo-ku,
Sapporo, Hokkaido 060-0042, Japan
TEL +81-11-221-4106 FAX +81-11-241-0523
- 5 Tohoku Branch**
NMF Sendai Aoba-dori Bldg., 2-1-2 Ichibancho,
Aoba-ku, Sendai, Miyagi 980-0811, Japan
TEL +81-22-222-3042 FAX +81-22-225-6759

- 6 Chubu Branch**
Daitokai Bldg., 3-22-8, Meieki, Nakamura-ku,
Nagoya, Aichi 450-0002, Japan
TEL +81-52-571-5211 FAX +81-52-581-3005
- 7 Kyushu Branch**
Yakuin Business Garden, 1-1-1 Yakuin, Chuo-ku,
Fukuoka 810-0022, Japan
TEL +81-92-717-2828 FAX +81-92-717-2830
- 8 Okinawa Branch**
Commons Bldg., 1-11-12 Mashiki, Ginowan,
Okinawa 901-2224, Japan
TEL +81-98-898-6650 FAX +81-98-898-6657
- 9 Harima Factory**
1-2-1 Shinhama, Arai-cho, Takasago, Hyogo
676-8540, Japan
TEL +81-79-443-6511 FAX +81-79-443-6599
- 10 Taipei Branch**
7F., No.16, Lane 35, Jihu Rd., Neihu District,
Taipei 114-92, Taiwan
TEL +886-2-8752-3838 FAX +886-2-2656-0584

Overseas group companies

- 1 Taiden Environtech Co., Ltd. (Taiwan)**
Maintenance of waste treatment and other
facilities
7F., No. 16, Lane 35, Jihu Rd., Neihu District,
Taipei 114-92, Taiwan
TEL +886-2-2659-7137 FAX +886-2-2656-0584
- 2 Siam Takuma Co., Ltd. (Thailand)**
Sale of energy and environment-related plants,
sales of parts for the same plants and after-sales
service
77/53 Sinn Sathorn Tower, 15th Floor,
Krungdhonburi Road, Klongtong, Klongsarn,
Bangkok 10600, Thailand
TEL +66-2-4385616 FAX +66-2-4400114



Group companies in Japan

- 1 Nippon Thermoener Co., Ltd.**
Manufacture and sale of a wide range of boilers and
related equipment
Shirokanedai Bldg., 3-2-10 Shirokanedai,
Minato-ku, Tokyo 108-0071, Japan
TEL +81-3-6408-8251 FAX +81-3-6408-8278
<http://www.n-thermo.co.jp/>
- 2 Takuma Technos Co., Ltd.**
Maintenance, management and operation of waste
treatment facilities, water treatment facilities and
other facilities, as well as the design, installation and
management of various types of boilers, environmental
equipment and other equipment
10th Chuo Bldg., 1-5-6 Nihonbashi, Chuo-ku,
Tokyo 103-0023, Japan
TEL +81-3-3231-2911 FAX +81-3-3231-2917
<http://www.takumatechnos.co.jp/>
- 3 Hokkaido Sanitary Maintenance Co., Ltd.**
Operation and maintenance of sewage treatment facilities
Daigo Bldg., 5-11, Ohdori Nishi, Chuo-ku,
Sapporo, Hokkaido 060-0042, Japan
TEL +81-11-221-8398 FAX +81-11-221-8542
- 4 Takuma Technos Hokkaido Co., Ltd.**
Operation and maintenance of waste treatment facilities
Daigo Bldg., 5-11, Ohdori Nishi, Chuo-ku,
Sapporo, Hokkaido 060-0042, Japan
TEL +81-11-221-4128 FAX +81-11-221-1030
- 5 Sun Plant Co., Ltd.**
Design, construction and superintendence of
air-conditioning equipment, feed-water/drainage
sanitation equipment, and electrical equipment
Nomura Higashi-nihonbashi Bldg., 1-1-7 Higashi-
nihonbashi, Chuo-ku, Tokyo 103-0004, Japan
TEL +81-3-5825-0921 FAX +81-3-5825-1631
<http://www.sunplant.co.jp/>
- 6 Takuma Engineering Co., Ltd.**
Design of environmental equipment plants and energy plants
Takuma Bldg., 2-2-33 Kinrakuji-cho, Amagasaki,
Hyogo 660-0806, Japan
TEL +81-6-6487-4820 FAX +81-6-6487-4829
<http://www.takuma-eng.co.jp/>
- 7 Takuma System Control Co., Ltd.**
Design of electrical instrumentation equipment, including
environmental equipment plants and energy plants
Takuma Bldg., 2-2-33 Kinrakuji-cho, Amagasaki,
Hyogo 660-0806, Japan
TEL +81-6-6487-4830 FAX +81-6-6487-4839
<http://www.takuma-sc.jp/>
- 8 Dan-Takuma Technologies Inc.**
Manufacture and sale of clean equipment, cleaning
equipment, chemical filters, clean rooms, drying
equipment and thermal chambers
3-12-16 Iwadokita, Komae, Tokyo 201-0004, Japan
TEL +81-3-3488-1111 FAX +81-3-3488-1118
<http://www.dan-net.com/>
- 9 Kyoritsu Setsubi Co., Ltd.**
Design, construction and superintendence of waste
treatment facilities, mechanical equipment of sewage
treatment facilities, and boiler plants for general industries
5-1-38 Yurigahara, Kita-ku, Sapporo, Hokkaido
002-8081, Japan
TEL +81-11-770-2811 FAX +81-11-770-2822
- 10 Kankyo Sol-Tech Co., Ltd.**
Analyzing and measurement for environment-related issues,
including water quality, exhaust gas and soil pollution
1-2-1 Shinhama, Arai-cho, Takasago, Hyogo
676-0008, Japan
TEL +81-79-443-6508 FAX +81-79-443-6510
<http://www.k-soltech.co.jp/>
- 11 Campo Recycle Plaza Co., Ltd.**
Municipal solid waste and industrial waste treatment services
1 Takayanishitani, Sonobe-cho, Nantan, Kyoto
622-0032, Japan
TEL +81-771-68-3636 FAX +81-771-68-3639
<http://www.c-rp.co.jp/>
- 12 Nagaizumi High Trust Co., Ltd.**
Facility upgrading, operation and maintenance of
municipal solid waste final disposal sites
374-12 Higashino, Nagaizumi-cho, Suntou-gun,
Shizuoka 411-0931, Japan
TEL +81-55-989-2268 FAX +81-55-987-9935
<http://www.nagaizumi-ht.jp/>
- 13 Fujisawa High Trust Co., Ltd.**
Operation and maintenance management of municipal
solid waste treatment facilities
2168 Ishikawa, Fujisawa, Kanagawa 252-0815, Japan
TEL +81-466-45-5411 FAX +81-466-45-5454
- 14 Iwate-Kenpoku Clean Co., Ltd.**
Municipal solid and industrial waste treatment services
48-34, Dai 20 Chiwari, Esashika, Kunohe-mura,
Kunohe-gun, Iwate 028-6505, Japan
TEL +81-195-42-4085 FAX +81-195-42-4550
<http://www.iwate2cln.co.jp/>
- 15 Hitachinaka-Tokai High Trust Co., Ltd.**
Operation and maintenance management of municipal
solid waste treatment facilities
103-2 Shinkocho, Hitachinaka, Ibaraki 312-0005, Japan
TEL +81-29-265-5371 FAX +81-29-265-5372
<http://hitachinaka-tokai-ht.com/>
- 16 Anan High Trust Co., Ltd.**
Operation and maintenance management of municipal
solid waste treatment facilities
1-5 Kokatsu, Tachibana-cho, Anan, Tokushima
779-1631, Japan
TEL +81-884-49-5823 FAX +81-884-49-5824
<http://www.ecopark-anan.com/>
- 17 Takuma Energy Co., Ltd.**
Power retail business
Takuma Bldg., 2-2-33 Kinrakuji-cho, Amagasaki,
Hyogo 660-0806, Japan
TEL +81-6-6487-4870 FAX +81-6-6483-2794
- 18 Kurume High Trust Co., Ltd.**
Operation and maintenance management of a
municipal solid waste treatment facilities
2225 Hacchojima, Miyanojin-machi, Kurume,
Fukuoka 839-0805, Japan
TEL +81-942-27-7490 FAX +81-942-27-7491
<http://www.kurume-ht.com/>
- 19 Hokutan High Trust Co., Ltd.**
Final disposal and maintenance management of a
municipal solid waste treatment facilities
943 Booka, Takeno-machi, Toyooka, Hyogo
669-6331, Japan
TEL +81-796-21-9111 FAX +81-796-21-9112
<http://www.hokutan-ht.com/>
- 20 Suwako High Trust Co., Ltd.**
Operation and maintenance management of a
municipal solid waste treatment facilities
4769-14 Uchiyama, Okaya, Nagano 394-0055,
Japan
TEL +81-266-78-1590 FAX +81-266-78-1591
<http://www.suwako-ht.jp/>
- 21 Energy Mate Co., Ltd.**
Sale of cogeneration systems and systems for the
generation equipment of the same and total service
for onsite energy systems for consumer use
Midosuji Daiwa Bldg., 3-6-8 Kyutaromachi,
Chuo-ku, Osaka 541-0056, Japan
TEL +81-6-6241-6200 FAX +81-6-6241-6210
<http://www.energy-mate.co.jp/>
- 22 Takuma Plant Service Co., Ltd.**
Maintenance of a wide variety of boilers and
environmental facilities
2-2-27 Kinrakuji-cho, Amagasaki, Hyogo
660-0806, Japan
TEL +81-6-6488-8434 FAX +81-6-6488-0300
<http://www.takuma-ps.com/index.html>
- 23 Biopower Katsuta Co., Ltd.**
Wood biomass power generation business
1974-1 Koya, Hitachinaka, Ibaraki 312-0002,
Japan
TEL +81-29-270-3341 FAX +81-29-270-3343
- 24 Kashiwara High Trust Co., Ltd.**
Operation and maintenance management of municipal
solid waste treatment facilities
1038-2 Kawanishi-cho, Kashiwara, Nara
634-0826, Japan
TEL +81-744-26-6227 FAX +81-744-26-6228
- 25 Tochigi High Trust Co., Ltd.**
Industrial waste treatment services
18-3 Kinugaoka, Moka, Tochigi 321-4367, Japan
TEL +81-285-83-3966 FAX +81-285-83-6500
<http://www.t-hitrust.co.jp/>
- 26 Katsuta Co., Ltd.**
Industrial waste and municipal solid waste treatment
services
1968-2 Koya, Hitachinaka, Ibaraki 312-0002, Japan
TEL +81-29-270-3711 FAX +81-29-270-3712
<http://www.eco-katsuta.com/>
- 27 R.B.N. Co., Ltd.**
Municipal solid waste, including waste home
appliances and office automation equipment, and
industrial waste treatment services
3059-20 Nakajima, Shikama-ku, Himeji, Hyogo
672-8035, Japan
TEL +81-79-243-1200 FAX +81-79-243-1202
- 28 Ichihara New Energy Co., Ltd.**
Industrial and municipal solid waste treatment services
733 Mandano, Ichihara, Chiba 290-0549, Japan
TEL +81-436-50-8300 FAX +81-436-50-8400
<http://www.ichihara-new.com/>
- 29 Ecos Yonezawa Co., Ltd.**
Final disposal of industrial waste
7028-1 Yanazawa, Yonezawa, Yamagata
992-0077, Japan
TEL +81-238-39-4050 FAX +81-238-39-4051
<http://www.ecos-y.co.jp/>

Business Summary

Environmental and energy business

Municipal solid waste treatment plants

We support the realization of a recycling-oriented society using advanced waste treatment technologies that meet the needs of local communities.

- Energy from Waste plant
- Pyrolysis gasification and melting plant
- Resource recycling and collection plant
- Bulky garbage crushing plant
- Incineration ash and fly ash melting plant
- Waste to solid fuel conversion plant
- Transition and intermediate processing plant
- Raw fuel (biogas) recovery plant
- Various types of pollution prevention equipment



Energy from Waste plant



Bulky garbage crushing plant

Industrial waste treatment plants

Using advanced incineration technologies, we can even treat toxic substances suitably and we are supporting the environmental protection efforts of industry.

- Industrial waste treatment plant



Industrial waste treatment plant



Plant that generates power from industrial waste and provides heat to a plantation

Energy plants

Takuma's core technologies are utilized in various types of boilers, starting with biomass boilers, as well as total systems.

- Biomass boiler
- Fossil fuel boiler
- Waste heat boiler
- Power plant



Biomass power generation boiler



Waste heat boiler

Water treatment plants

We are working to purify wastewater with a holistic perspective through a "dialogue with water."

- Sewage and wastewater treatment plant
- Various types of advanced sewage treatment plant
- Sludge treatment plant
- Sewage sludge-fueled power plant
- Plant to process water that infiltrates final disposal sites



Upflow moving-bed filtration system



Sewage sludge-fueled power plant

Package boiler

General-purpose boilers

As the convergence of Takuma's combustion technologies, our boilers are a reliable brand that has earned the support of a wide range of industries.

- Once-through boiler (Eqos, Super Eqos)
- Vacuum-type water heater (Vacotin heater)
- Package water-tube boiler
- Smoke tube boiler (RE boiler)
- Heat-transfer oil boiler (thermoheater)
- Radiation heating equipment (strip heater)
- Various equipment for ships

Note: These products are handled by Nippon Thermoener Co., Ltd., which is one of our group companies.



Vacotin heater



Thermoheater



Super Eqos



RE boiler

Equipment and systems business

Air-conditioning equipment and clean systems

We provide comfortable, clean environments to customers in the semiconductor industry as well as many locations such as universities, research institutions, and hospitals.

- Building equipment
- Air-conditioning equipment
- Cleaning and drying devices
- Clean room
- Clean devices
- Chemical filters



Chemical filters



Clean oven



Clean booths

Plant construction process

This page introduces how our plant business, which is one of our core areas of operations, functions.

1 Sales activities

The mission of sales is to facilitate communication with customers, promote Takuma's products and services, and acquire information about potential customers' new plant construction plans as quickly as possible. Then sales personnel work with internal planning and design departments as well as cost estimation departments to create proposals that will satisfy those customers.



2 Planning and design

We develop a basic plan for each plant that will satisfy the customer's needs. For local governments, we propose a basic plan for the plant that conforms to the purchase specifications that the ordering agency has provided. The purchase specifications indicate the conditions and level of performance required by the local government, for example in terms of the amount and type of waste it wishes to process, site conditions, and waste-fueled power generation capacity. Engineering coordinators spec out incinerators and waste heat boilers along with other systems in order to satisfy those conditions and performance requirements and determine how the equipment will be laid out at the facility.



3 Cost estimation

We calculate the costs associated with all equipment and systems that will be installed at the plant up until the facility's completion based on the basic plan and finalize a quotation to submit to the customer.

Order receipt

We propose the plan developed through the collaboration of sales, planning and design, and cost estimation coordinators to the customer. For local governments, this proposal is submitted during the bidding process. If our proposal outshines other companies' proposals and satisfies the customer, we will receive an order for the project.

4 Plan implementation and detailed design

Once we have received an order, we transition to detailed design work to facilitate the construction of the plant. We conduct a detailed study of equipment specifications and layout based on the plan and design and then proceed to finalize associated details. At this stage, specialists from a variety of fields, including combustion technology, exhaust gas treatment, and electrical control systems, work together to create the detailed design.



5 Manufacture and procurement

We manufacture equipment and systems whose specifications have been finalized at our factories using a strict quality control system and place orders with a variety of specialized equipment manufacturers.

6 Construction work and commissioning

We commence the civil and foundation work, construct all plant buildings, install equipment and systems, and manage the project until the plant is fully operational. Key considerations include efficient site operations, thorough schedule and cost management, and management of safety and quality at the site.



Acceptance

During the commissioning work, it is confirmed the constructed plant is capable of safe operation. Once the performance test is completed successfully, the acceptance of the plant can be made.

7 After-sales service

Once the plant has been handed over to the customer, we provide periodical inspections and maintenance to prevent problems and keep the plant operating safely over the long term. In addition to inspecting and repairing systems for which inspections are legally mandated, we inspect and repair equipment deterioration and damage that accumulates over time. In addition, we complete large-scale renovation work in response to changes in applicable laws and customer needs.

CSR Report 2017

Feature: Striving to Coexist with Local Communities

Business Development

CSR Initiatives

- CSR Activities for the Future
- Corporate Governance
- Human Rights and Labor Practices
- The Environment
- Fair Business Practices
- Consumer Issues
- Participation in the Community
- Contribution to Society

Financial Data