Message from **Top Management**

Contributing to

the sustainable

development of society by providing new value the world needs

Assessing change in the business environment and boosting our ability to grow

I'm Hiroaki Nanjo, and I became President and CEO of Takuma in April.

The Takuma Group, which has adopted the goals 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 of achieving ordinary profit of JPY 10 billion in FY2020, has embraced a vision of building structures capable of consistently earning an ordinary profit of at least JPY 10 billion even as the business environment undergoes a process of significant change. As the final stage in our direct to achieve that vision, we are working to implement the 12th Medium-Term Management Plan (FY2018 to FY2020). That effort includes a variety of business activities undertaken as part of the Plan, which outlines a three-year period during which we have sought to boost our corporate capabilities to facilitate the achievement of our vision and consistent growth afterwards based on a sure assessment of how the business environment is likely to change in the future.

Continuing to be a company that plays an essential role in society

I'd like to take advantage of this opportunity to describe my basic approach to management as I take on these new responsibilities.

First, I believe in the importance of respecting our Management Principles. The Takuma and Takuma Group Management Principles state, "Takuma will strive for social contribution, corporate value enhancement, long-term corporate development and the satisfaction of all stakeholders by providing goods and services that are needed and recognized as valuable in society." That impetus can also be found in our founding spirit of "Service to the nation through boiler manufacturing*," and it means contributing to the world through the goods and services that we create. It also informs corporate social responsibility (CSR), which we have currently embraced as a key issue in the company's management. Companies must build and maintain good relationships with a variety of stakeholders, including customers, business partners, employees, shareholders, and investors. Such relationships cannot be realized in a day. The first step is for the company to conduct itself in a way that inspires trust on the part of stakeholders.

Through endless effort to provide new value after conducting ourselves in line with the dictates of legal compliance, impartiality, ethical values, and social mores while ensuring transparency in decision-making and fulfilling the obligations of accountability, we must build and maintain good relationships; only then will society acknowledge the value of Takuma's continued existence. I believe that management is founded on corporate governance, compliance, and risk management.

Second, I embrace the practice of seeing things from both a short-term and a medium-/long-term perspective. As the business environment continues to undergo significant change, we are called upon to deal with those changes in an appropriate manner and to generate results as we do so. Additionally, as a publicly held company, we are required to increase management efficiency and to improve our performance. However, merely pursuing short-term profits in the context of an effort to achieve long-term development of the business while satisfying all stakeholders is unlikely to lead to sustained growth. We must cultivate a medium- and long-term perspective and incorporate it into our management while reliably dealing with the immediate opportunities and issues that present themselves to us. In particular, the Group's products—Energy from Waste plants, water treatment plants, and energy plants-are key parts of society's underlying infrastructure, and as such they operate for 20 to 30 years after being delivered to the customer. We will continue to work to manufacture optimal products through careful attention to all phases of the life cycle, from design to construction and maintenance, in order to ensure that customers can utilize these facilities for as long, and in as effective a manner, as possible. At the same time, ESG investment is attracting attention as a means of boosting corporate value over the long term. We will contribute to society by focusing even more closely on developing and supplying products and services that make contributions to the environmental priorities of reducing environmental impacts and lowering greenhouse gas emissions.

Third, I am committed to carrying on a good corporate culture that allows all employees to pursue their jobs with enthusiasm and ambition while enjoying personal growth. Takuma has created a culture that encourages such growth by allowing relatively inexperienced employees to take on job responsibilities so that they can gain motivation and experience a sense of accomplishment while being mentored by supervisors and older colleagues. I look forward to continuing to develop an environment that allows each Takuma employee to approach his or her job with a desire to improve, to take full advantage of his or her skills and abilities, to grow through the company's activities, and to enjoy a sense of motivation and happiness.



Message from Top Management

Accommodating customers' diversifying needs through new initiatives such as the O&M* business

Currently, Takuma's principal businesses include the Solid Waste Treatment Plant Business; the Energy Plant Business, which includes our Package Boiler Business; and the Water Treatment Plant Business. These three core areas of operations have grown thanks to continuous effort over many years, and by cultivating trusting relationships with customers, they have earned us excellent market share. We are now embarking on a new initiative that will seek to develop an O&M business for energy plants, an area that shares our focus on maintenance, into a robust contributor to Takuma's bottom line by taking advantage of the experience we've gained in solid waste treatment plants. Continuous action will be needed in the future in order to accommodate customers' diversifying needs so that we can continue to grow. Through the creative efforts of all employees, we will show the way forward for each business so that we can achieve the goals of the 12th Medium-Term Management Plan and realize our medium- and long-term vision for the next stage in our history.

Helping solve social issues from the world's standard perspective

Takuma has been a signatory to the United Nations Global Compact* since 2006, and we support its 10 fundamental principles in the 4 areas of human rights, labour. environment, and anti-corruption. We will work to develop our business while understanding and respecting these globally shared principles. In addition, concerning the implementation of the Sustainable Development Goals (SDGs) adopted by the United Nations and the provisions of the Paris Agreement adopted at COP21, the Group is helping resolve social issues with technologies for reducing emissions of greenhouse gases like carbon dioxide through such means as high-efficiency generation of electricity using waste and biomass.

July 2019

Hiroaki Nanjo President and CEO Takuma Co., Ltd.

* United Nations Global Compact:



The Takuma Group has joined the United Nations Global Compact (UNGC), which is a voluntary effort to create a global framework for implementing sustainable growth by having companies and groups exercise responsible and creative leadership while acting as good members of society.

Company Motto

Value Technology, Value People, Value the Earth

Management Principles

satisfaction of all stakeholders by providing goods and services that are needed and recognized as valuable in society.

The founding spirit of Takuma was "Service to the nation through boiler manufacturing," which in present-day language means "contribution to society by supplying goods and services that we yield." This spirit can also be applied to the concept of Corporate Social Responsibility (CSR) that in recent years has become a vital issue for corporate management. The management principles of the Takuma group companies are all based on the said founding spirit.

Takuma Group Ethics Charter

Takuma and the Takuma Group companies believe that it is essential for the sound development of the group that all of the directors and employees remain aware of our social responsibilities and the circumstances surrounding us as well as act in response to social ethics complying with applicable related laws and ordinances. Bearing the above in mind, we have established and will promote this ethics charter as our code of conduct, aiming to realize our management principles.

- good corporate citizens.
- and committing ourselves to fair, transparent and free competition, as well as conducting lawful business activities.
- security of civil society.
- 4. We shall respect fundamental human rights and never practice discrimination.
- confidence from our customers.
- activities on a timely and equitable basis.
- 7. We shall strive to protect corporate properties as well as information, while never using either for improprieties or any unjustifiable purpose other than normal business operations.

Takuma Group Code of Conduct

Harmony with society

- 1. Coexistence with the global environment
- 2. Coexistence with international society
- 3. Practice of social contribution activities

Practice of compliance with laws and ordinances as as sound economic activities

- 4. Free competition and fair trade
- 5. Relationship with politics and public
- administration
- 6. Policies concerning business entertainment and gift-giving
- 7. Prohibition of involvement in anti-social activit
- 8. Appropriate export and import transactions

Respect for basic human rights

- 9. Prohibition of discriminatory actions 10. Respect for individuality, personal quality, and
- privacy 11. Safe work environment

- * Service to the nation through boiler manufacturing: It was the Company Motto of Takuma, then Takuma Boiler Manufacturing Co., Ltd., founded by Mr. Tsunekichi Takuma, one of the ten great inventors of Japan during the Meiji and Taisho periods (1868-1926).
- * O&M: Operation & Maintenance

Takuma will strive for social contribution, corporate value enhancement, long-term corporate development and the

1. We shall strive for proactive social contribution while establishing a harmonious coexistence with the global environment as

2. We shall act in good faith in accordance with sound business custom, while complying with applicable laws and regulations 3. We shall never have any relationship with antisocial forces or organizations, which may pose a threat to the social order and

5. We shall strive to provide high quality products and services, based on our advanced technologies, to attain high acclaim and

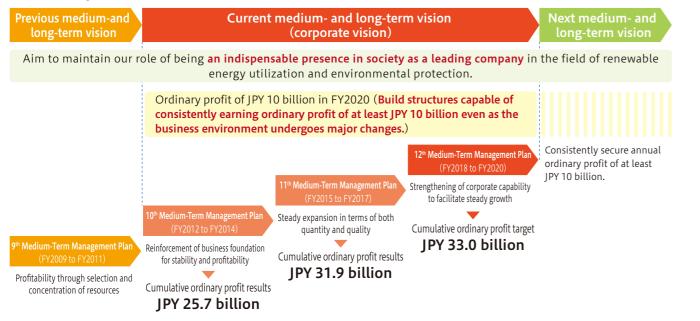
6. We shall strive to disclose corporate information to shareholders and investors through investor relations (IR) and other

	Practice of customer satisfaction					
	12.	Safety of products and services as well as ensuring reliability				
	13.	Policies concerning advertising				
well	Making appropriate disclosure of information					
		Transmission of corporate information				
	15.	Ensuring reliability of financial reporting				
	16.	Prohibition of insider trading				
nd	Protection of corporate properties and information					
	17.	Management and proper use of corporate				
ties		properties				
	18.	Handling of confidential information				
		Intellectual property protection				

Takuma Group 12th Medium-Term Management Plan - An Overview (FY 2018 to 2020)

1.Positioning of the 12th Medium-Term Management Plan

- The plan represents the final stage of the current medium- and long-term vision (corporate vision), for which FY2020 is the target year.
- During its three years, we will achieve the vision and boost our corporate capabilities to prepare for steady growth in the future in response to future changes that are forecasted to occur in the business environment.



2.Policies of the 12th Medium-Term Management Plan

OStrengthening and expanding our revenue foundation

Many of the Group's products are used for a long period of time, for example for 20 or 30 years from the time of delivery. Offering high-quality after-sales service in an ongoing manner so that customers can use those products more effectively and over a longer period of time contributes to both customers' and the Group's profits, helping to create a foundation for stable, long-term earnings.

We will work to further strengthen and expand our revenue foundation by continuing to provide high-quality solutions throughout the plant and product life cycle as we meet customers' diversifying needs in an individualized manner.

OAchieving sustained growth

Over the 80 years since the Group's founding, we have built a reputation as an essential part of society by providing products that are recognized for their value utilizing our technologies which are the core part of our company.

We will create customer value by continually developing unique technologies, services, and business models based on Takuma's strengths such as the technologies, track record, experience, and expertise that we've accumulated through our business activities to date. In addition, we will work to secure sustained growth by securing and creating competitive advantages as we respond quickly to changes in the business environment, such as evolving customer needs and emerging social issues.

OIncreasing productivity, for example by reforming business processes

The nature of the Group's businesses is undergoing major evolution as the business environment changes, for example due to changes in social structure such as the shrinking and aging of Japan's population and the emergence of more advanced and diverse customer needs as well as social issues.

We will strive to improve productivity, make effective use of human resources, and further increase the level of value we provide by fundamentally reviewing and rebuilding business processes that have become increasingly complex in order to accommodate these changes while focusing on businesses with higher added value (which will help us create and provide value).

Output Output Output Output Ou

We will work to hire and train the diverse workforce that will be essential as we develop the Group's businesses going forward. At the same time, we will strive to create an environment that keeps individual employees engaged in their work and able to make full use of their skills and abilities (by cultivating a healthy workplace culture, reforming individual awareness, and facilitating fulfilling workstyles).

GContinuing to pursue compliance management

The Group considers compliance to be a key foundation of its corporate activities, and we've worked to spread awareness and foster adoption of good practices by including compliance as a policy in the last several Medium-Term Management Plans.

Awareness of the importance of compliance has steadily taken root among our employees thanks to ongoing awareness-raising and educational activities, and we will continue to pursue such initiatives to ensure that the trust we've built up in our quality and integrity remains unshakable. In addition, we will work to further spread and improve compliance awareness throughout the Group by effectively implementing and utilizing mechanisms such as our internal reporting system and CSR awareness survey.

3.Financial Target

Target: 3-year cumulative consolidated ordinary profit of JPY 33 billion

The 12th Medium-Term Management Plan, which represents the final stage of our current medium- and long-term vision, establishes the above targets to guide our achievement of the vision's goal of consistently earning ordinary profit of JPY 10 billion while simultaneously directing the company to utilize all its resources to build a robust business and management foundation in response to future Sales (left scale)

Ordinary profit (right scale)

	10 th Medium-Term Management Plan results	11 th Medium-Term Management Plan results				12 th Medium-Term Management Plan	
	2012 to 2014	2015	2016	2017	Total	2018	FY2018 to FY2020
Order value	371.0	99.9	191.0	177.1	468.0	179.8	JPY 400 billion (approx.) (3-year cumulative total; reference value)
Sales	296.5	113.0	116.3	118.1	347.5	121.9	
Ordinary profit	25.7	9.6	11.6	10.6	31.9	12.3	Target: JPY 33 billion (3-year cumulative total)

4.Core Business Units and Emphasis of Future Activities

Municipal Solid Waste Treatment Plant Business

Business Environment

changes in the business environment.

- As facilities age, there is ongoing robust demand for renewal and service life elongation.
- Volume is growing for DBO projects as well as O&M services for existing facilities.

Emphasis of Future Activities

- Strengthen the profitability of our plant operation business. • Further strengthen initiatives to prolong the service life of
- facilities.

Boiler Plant Business (Japan)

Business Environment

- FIT demand remains robust.
- The number of plants targeted for maintenance is increasing as facilities are completed and transferred to customers.
- There is growing demand for plant operational management and O&M.

Emphasis of Future Activities

- Capture new orders for FIT biomass plants
- Strengthen our maintenance structures.
- Scale our waste management expertise horizontally to other businesses.

Waste Treatment Plant Business (Overseas)

Business Environment

• There is a growing need for proper waste management and energy utilization against a backdrop of growing urbanization, increase of waste volume, and diversification of waste characteristics.

Emphasis of Future Activities

Build structures to facilitate collaboration with partner companies.
Build schemes for entering new markets.

* DBO: Design Build Operate / PPP: Public Private Partnership / PFI: Private Finance Initiative / FIT: Feed-in Tariff



Water Treatment Plant Business

- Business Environment
- There is growing demand for sludge incineration plants that conserve and create energy.
- There is increasing use of PPP/PFI arrangements in the sewer business.
- Emphasis of Future Activities
- Strengthen the competitiveness of our sludge-fueled power system.
 Scale our waste management expertise horizontally to other businesses.

Boiler Plant Business (Overseas)

- Business Environment
- Demand for biomass power plants in Southeast Asia remains robust.
- Our flagship bagasse-fired boiler plants continue to experience intense competition.
- Emphasis of Future Activities
- Capture orders continually by creating competitive advantages.
 Strengthen the ability of our local subsidiary (SIAM TAKUMA) to carry out its business operations.

Package Boiler Business

- Business Environment
- We are continuing to see a certain level of demand in Japan, particularly in terms of renewal demand.
- The need for energy-conserving boilers is increasing overseas, particularly in developing nations.

Emphasis of Future Activities

Maintain and expand our domestic business
 Expand our overseas business.

5. Progress in Implementing the 12th Medium-Term Management Plan

In this section, members of Takuma's management team present progress in implementing the goals of the 12th Medium-Term Management Plan, which began in FY2018.



Kengo Numata Director & Executive Vice President Executive Manager, Corporate Planning & Administration Division

The central theme of this Medium-Term Management Plan is strengthening our corporate capability to facilitate steady growth. During FY2018, we worked to do just that in an effort to not only boost profitability, but also better earn the trust of a wide range of customers and other stakeholders, including by offering high-quality solutions that help resolve a variety of today's social issues. I think it was a good start for the first year of the Plan.

In FY2019 and beyond, we will continue to help build a sustainable society by strengthening our corporate capabilities through operations including our environmental plant, energy plant, and other businesses and by maintaining our role of being an indispensable presence in society as a leading company in the field of renewable energy utilization and environmental protection.

The Japanese Solid Waste Treatment Plant and Boiler Plant Businesses performed well during the first year of the Plan. Orders, sales, and operating income all exceeded the initial planned values as we enjoyed a smooth start in terms of quantitative performance.

Looking at the business environment, the transition in the Japanese market from manufacturing alone to a service business that uses products as tools is accelerating, and there is demand in the overseas market for products and services that can accommodate individual countries' different situations and needs.

In order to achieve steady growth, it is necessary for companies to bolster their capabilities to ensure they can adapt to changes in the tenor of the times. One of the key themes for this plan is strengthening and expanding the Japanese plant operation business and bringing new creativity to its development overseas. Our goal is to enhance our adaptability and create a foundation that will enable us to secure stable profits in the future by actively developing more appropriate structures based on revamped resource allocation, accumulating more skills, and offering a selection of products that meet the needs of the times.



Tsuvohito Nishiyama **Director & Senior Managing Executive Officer** Executive Manager, Corporate Marketing Group

Hideki Takeguchi **Director & Senior Managing Executive Officer** Executive Manager, Engineering Group

In order to build a society in which the global environment and natural environment are protected and conserved in an appropriate manner into the future, it will be necessary to utilize waste effectively as a resource and to expand production of renewable energy.

Our mission is 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. In keeping with that mission, our Engineering Group will continue to help build a sustainable society by providing plants that make significant inroads in the drive to protect the environment, develop a recycling-based society, and reduce CO₂ emissions through pioneering solid waste treatment that helps reduce environmental impacts, Energy from Waste projects that generate power from municipal waste and sewage sludge, and carbon-neutral biomass power generation.

Company Outline

Name:	TAKUMA CO., LTD.
Head office location:	2-2-33 Kinrakuji-cho, Amagasaki, Hy
	TEL +81-6-6483-2609 FAX +81-6-648
Representative Director:	Hiroaki Nanjo, President and CEO
Established:	June 10, 1938
Capital:	JPY 13,367,457,968 (as of March 31,
Main business areas:	The design, construction and superin
	prevention plants, environmental eq
	feed-water / drainage sanitation equ
	The design, construction and superin
Number of employees (n	non-consolidated): 852 (as of March

2019) intendence of a wide variety of boilers, plant machinery, pollution quipment plants, and heating and cooling equipment and uipment and facilities intendence of civil, architecture and other works 31, 2019) Number of employees (consolidated): 3,619 (as of March 31, 2019)

Permits and registrations

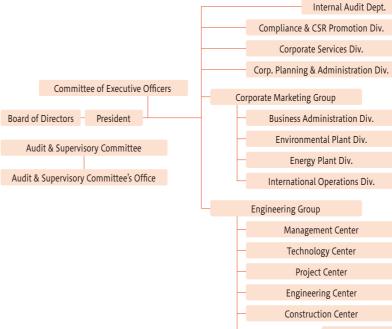
Head Office, branch offices and other business offices

- Construction license (Minister of Land, Infrastructure, Transport and Tourism license, Special 27-6129, Special 29-6129) Construction consultant registration (Minister of Land, Infrastructure, Transport and Tourism registration, Construction 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



lyogo 660-0806, Japan 483-2751 (operator)



IQA-1952 ISO 9001 certification Head Office. Osaka Office, Tokyo Branch, Chubu Branch. Kvushu Branch, Hokkaido Branch and Harima



JQA-EM0313 ISO 14001 certification Harima Factor

Harima Factory



Head Office



Harima Factory