

Supplementary Materials of Financial Results for Q2 FY2024

Takuma Co., Ltd. | November 8, 2024

TAKUMA

1. Overview of Q2 FY2024 (Ending 3/2025) Financial Results

2. Financial Forecast for FY2024 (Ending 3/2025)

3. Notice Regarding Reduction of Cross-shareholdings (Announced on November 8, 2024)

Appendix

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 - Company outline
 - 14th Medium-Term Management Plan;
Outline, Business Strategies, Strengthening the Management Foundation, Capital Policy
 - Situation by Segment
 - Terminology
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1. Overview of Q2 FY2024 (Ending 3/2025) Financial Results

2. Financial Forecast for FY2024 (Ending 3/2025)

3. Notice Regarding Reduction of Cross-shareholdings (Announced on November 8, 2024)

4. Appendix

Q2 Results

Orders received

¥162.0 billion

YoY **+¥89.2 billion**
+122.8%

Orders received were up significantly owing primarily to orders for municipal solid waste treatment plant DBO projects and a primary equipment improvement project.

Net sales

¥68.0 billion

YoY **+¥2.1 billion**
+3.3%

Net sales were up in all business segments.

Operating profit

¥4.5 billion

YoY **+¥1.8 billion**
+67.0%

Operating profit was up owing primarily to a change in the EPC project mix in the Domestic Environment and Energy Business.

FY2024 Forecast

¥230.0 billion

YoY **+¥69.4 billion**
+43.2%

Aiming for record-high orders received, mainly owing to orders for municipal solid waste treatment plant projects.

¥143.0 billion

YoY **(¥6.1 billion)**
(4.1%)

Net sales are expected to decrease due to lower sales in the Domestic Environment and Energy Business.

¥11.2 billion

YoY **+¥0.9 billion**
+9.5%

Operating profit will be up owing primarily to a change in the EPC project mix in the Domestic Environment and Energy Business.

* No changes from the initial forecasts announced on May 14, 2024.

Orders received were up owing to orders for a municipal solid waste treatment plant DBO projects and a primary equipment improvement project in the Domestic Environment and Energy Business.

Net sales were up in all business segments. Operating profit was up owing primarily to a change in the EPC project mix in the Domestic Environment and Energy Business and an elimination of costs for measures at a municipal solid waste treatment plant O&M project (after-sales services) recorded for FY2023.

Profit attributable to owners of parent was up significantly with the recording of a gain on sales of investment securities.

(Millions of yen)	Q2 FYE 3/2023 (FY2022)	Q2 FYE 3/2024 (FY2023)	Q2 FYE 3/2025 (FY2024)	YoY change
Orders received	65,152	72,714	162,013	+122.8%
Order backlog	444,622	478,009	576,561	+20.6%
Net sales	65,834	65,916	68,064	+3.3%
Operating profit	5,665	2,724	4,548	+67.0%
Operating margin	8.6%	4.1%	6.7%	+2.6pt
Ordinary profit	6,146	3,233	5,053	+56.3%
Profit attributable to owners of parent	4,296	1,927	4,114	+113.5%
Basic earnings per share (yen)	53.63	24.10	51.79	-

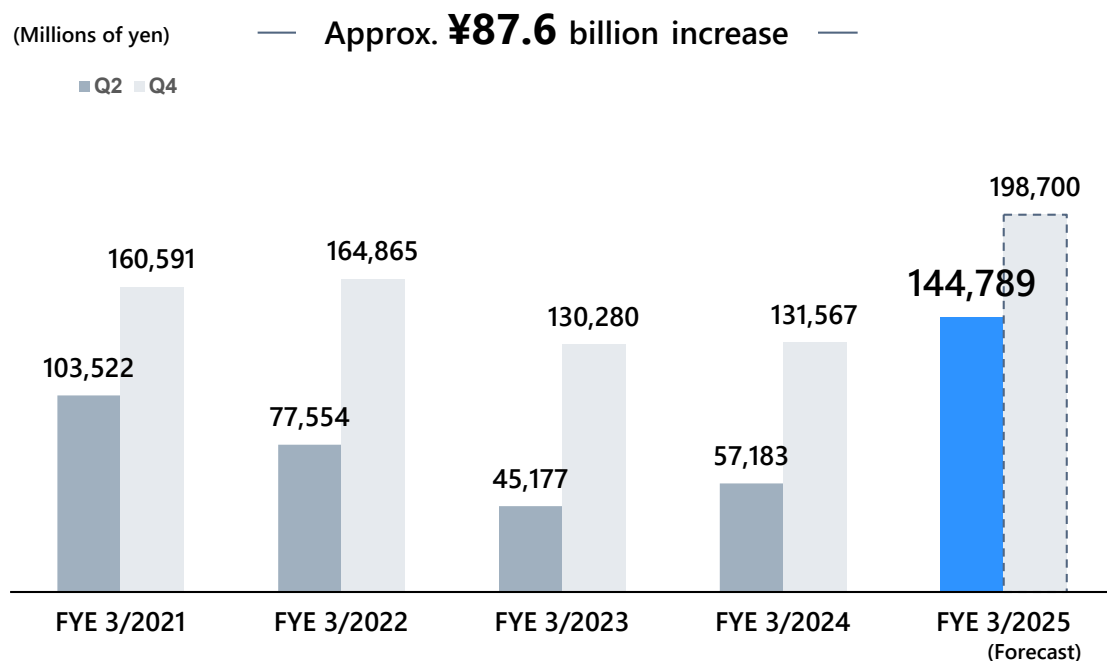
(Millions of yen)	Q2 FYE 3/2023 (FY2022)	Q2 FYE 3/2024 (FY2023)	Q2 FYE 3/2025 (FY2024)	YoY change
Orders received				
Total	65,152	72,714	162,013	+122.8%
Domestic Environment and Energy	45,177	57,183	144,789	+153.2%
Overseas Environment and Energy	1,093	1,793	1,337	(25.4%)
Package Boiler	10,016	10,449	11,313	+8.3%
Equipment and Systems	9,062	3,452	4,810	+39.3%
Net sales				
Total	65,834	65,916	68,064	+3.3%
Domestic Environment and Energy	54,378	52,194	52,625	+0.8%
Overseas Environment and Energy	612	1,003	1,454	+45.0%
Package Boiler	7,467	8,441	8,560	+1.4%
Equipment and Systems	3,572	4,471	5,657	+26.5%
Operating profit				
Total	5,665	2,724	4,548	+67.0%
Domestic Environment and Energy	6,476	3,096	4,838	+56.3%
Overseas Environment and Energy	(72)	32	177	+452.8%
Package Boiler	145	404	463	+14.5%
Equipment and Systems	298	414	358	(13.4%)

* Adjustments are omitted.

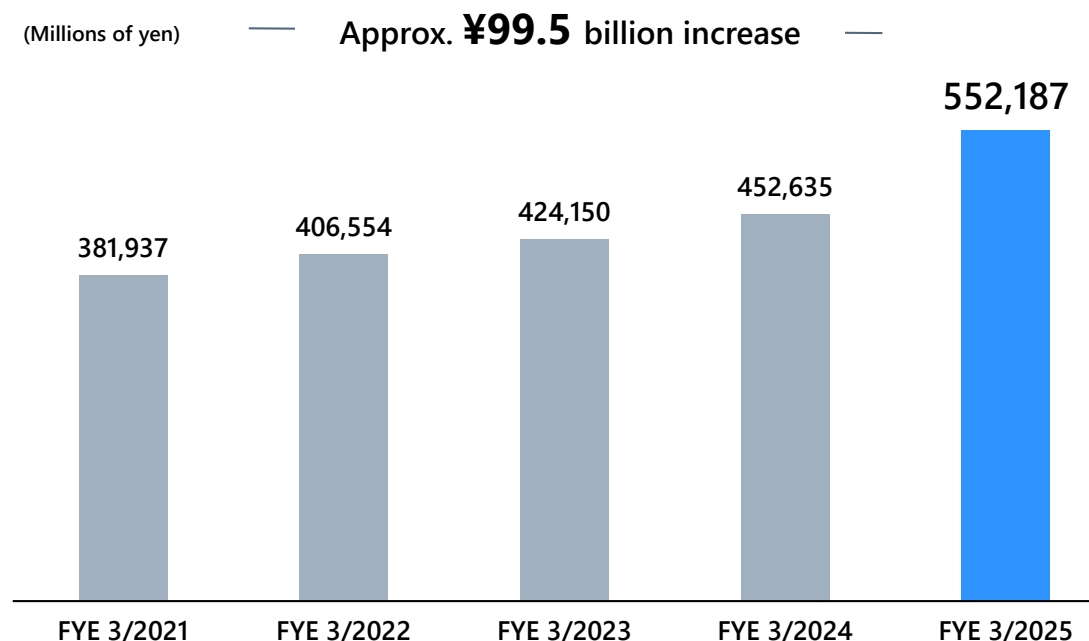
Orders received were up owing primarily to orders for a municipal solid waste treatment plant DBO projects and a primary equipment improvement project.

- Orders received: Up owing to orders for waste treatment plants (2 DBO projects, 1 primary equipment improvement project), 1 energy plant and 1 sludge incineration plant.
- The order backlog: Rising tendency owing to steady orders for long-term O&M (such as DBO and BTO projects).

Orders received



Order backlog (Q2)

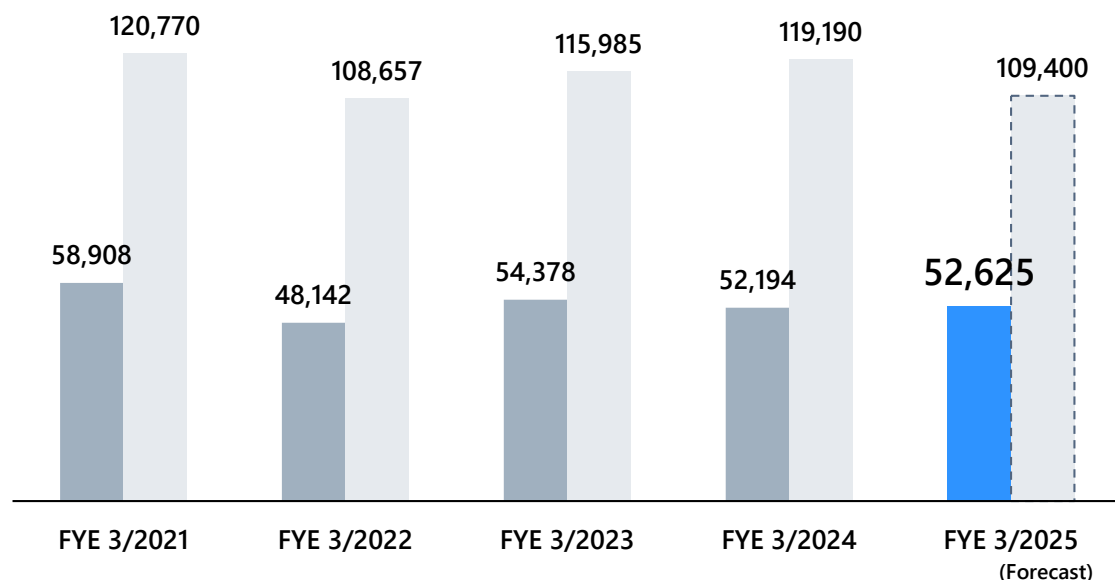


Net sales were up owing primarily to an increase in municipal solid waste treatment plants (after-sales service) and water treatment plants. Operating profit was up owing primarily to a change in the EPC project mix in the Domestic Environment and Energy Business and an elimination of costs for measures at a municipal solid waste treatment plant O&M project (after-sales services) recorded for FY2023.

Net sales

(Millions of yen) — Approx. **¥0.43 billion** increase —

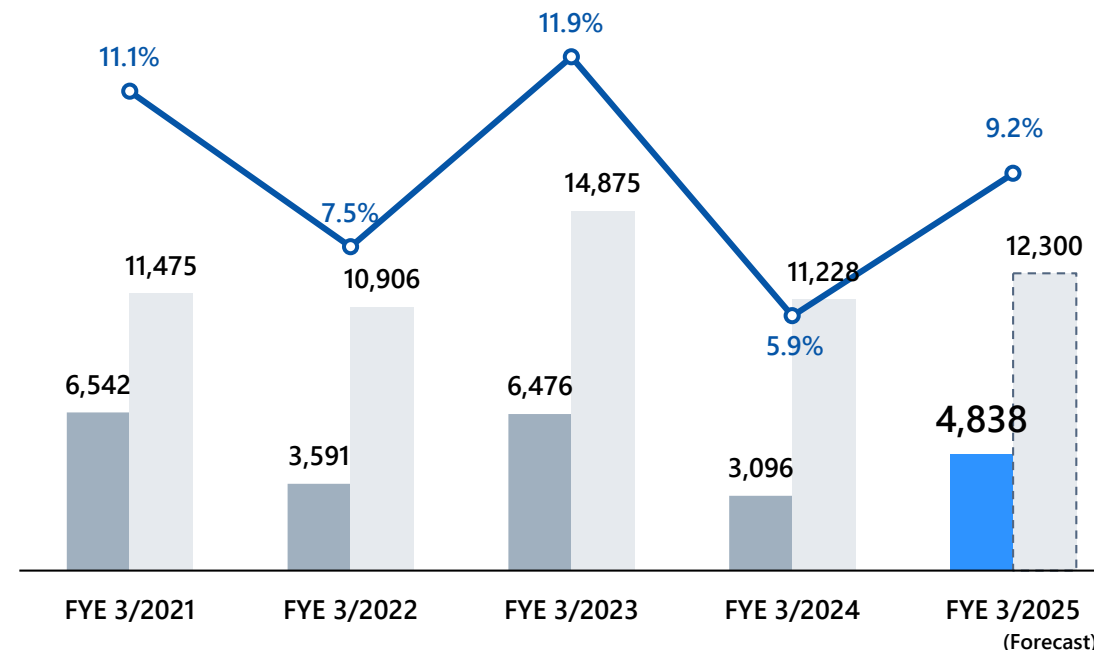
■ Q2 ■ Q4



Operating profit

(Millions of yen) — Approx. **¥1.7 billion** increase —

■ Q2 ■ Q4 —●— Q2 Operating Margin



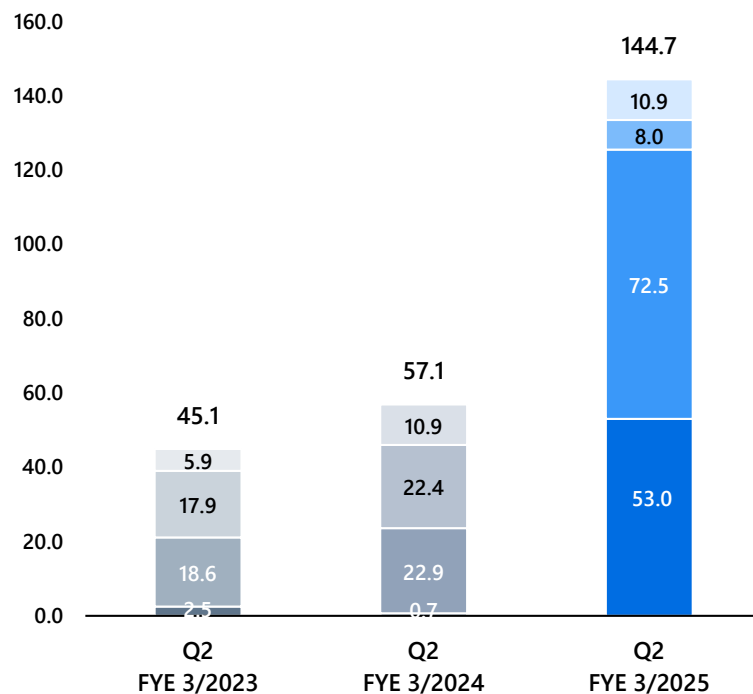
Orders received were up owing to an increase in municipal solid waste treatment plants (EPC and after-sales services).

Net sales were up owing to an increase in municipal solid waste treatment plants (after-sales services) and water treatment plants.

Orders received

- Water Treatment Plants, etc.
- Energy Plants (EPC and after-sales services)
- Municipal Solid Waste Treatment Plants (After-sales service)
- Municipal Solid Waste Treatment Plants (EPC)

(Billions of yen)

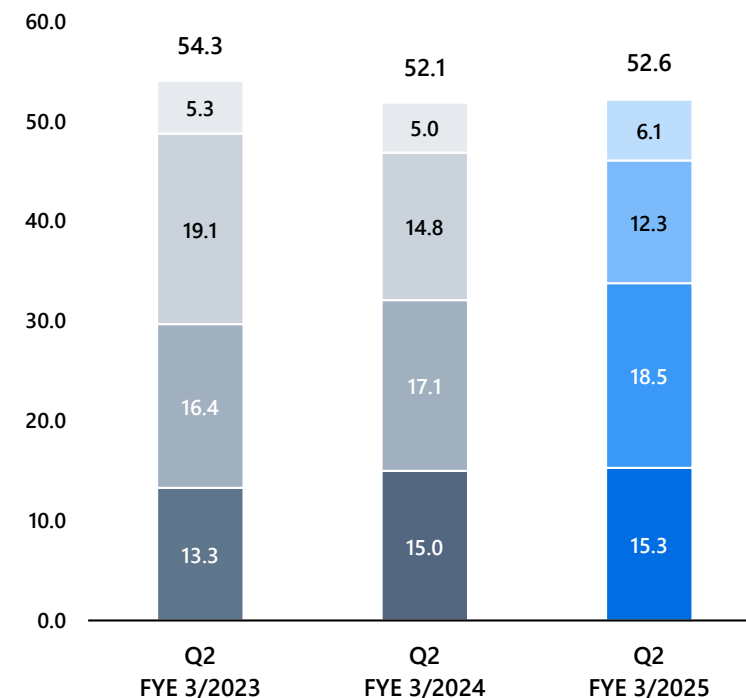


* Adjustments are omitted.

Net sales

- Water Treatment Plants, etc.
- Energy Plants (EPC and after-sales services)
- Municipal Solid Waste Treatment Plants (After-sales service)
- Municipal Solid Waste Treatment Plants (EPC)

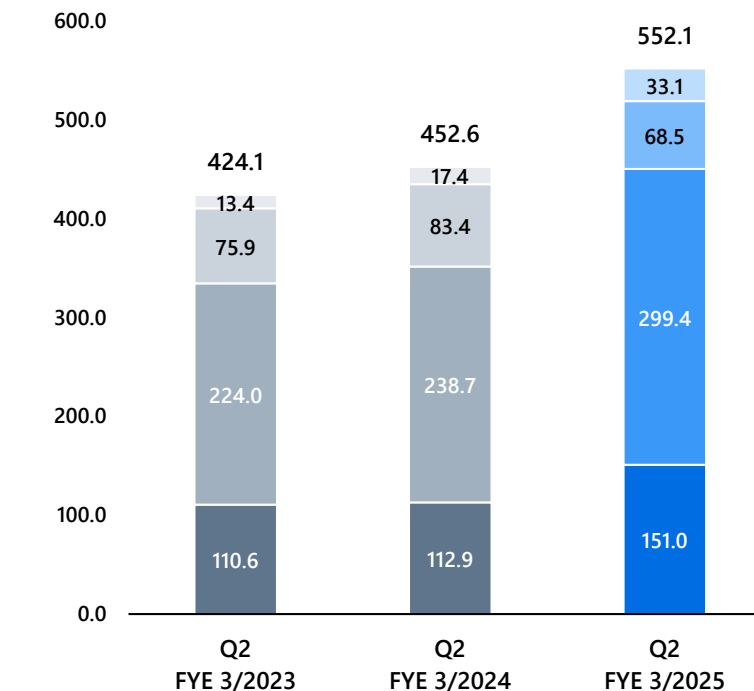
(Billions of yen)



Order backlog

- Water Treatment Plants, etc.
- Energy Plants (EPC and after-sales services)
- Municipal Solid Waste Treatment Plants (After-sales service)
- Municipal Solid Waste Treatment Plants (EPC)

(Billions of yen)



In Q1 and Q2 of FYE 3/2025, orders were received for waste treatment plants (2 DBO projects, 1 primary equipment improvement project), and 1 sludge incineration plant.

	Year		Delivered to:	Notes		Capacity	Scheduled Completion
Municipal solid waste treatment plants	FYE 3/2023	Q1	Senboku Environmental Improvement Facilities Association	EPC	Primary equipment improvement project	300 t/day	3/2024
		Q3	Okinoshima-cho	After-sales service	Long-term O&M	25 t/day	4/2023-3/2038 (15 years)
		Q4	Kohoku Wide Area Administrative Affairs Center	EPC & After-sales service	BTO	124 t/day	3/2030 (18 years of operations starting 4/2028*)
	FYE 3/2024	Q3	Ashikaga City	EPC & After-sales service	DBO	152 t/day	3/2028 (20 years of operations starting 4/2028)
		Q4	Sapporo City	EPC & After-sales service (Crushing facility)	DBO	140 t/5h	3/2028 (20 years of operations starting 4/2028)
	FYE 3/2025	Q1	Amagasaki City	EPC & After-sales service	DBO	447t/day	3/2031 (20 years of operations starting 4/2031)
			Clean Authority of TOKYO	EPC	Primary equipment improvement project	1,800t/day	1/2029
		Q2	Gyoda Hanyu Resources and Environment Association	EPC & After-sales service	DBO	126t/day	6/2028 (20 years of operations starting 7/2028)
Water treatment plants	FYE 3/2024	Q2	Ochiai Water Reclamation Center	EPC (Sand filtration system)	-	128units	2/2028
		Q3	Osaka Prefecture Chuo Mizu Mirai Center	EPC (sludge treatment plant) & After-sales service	DBM	sewage sludge incineration 100t/day	7/2027 (About 11 years of long-term maintenance starting 7/2027)
	FYE 3/2025	Q2	Kyoto City Water Supply and Sewerage Bureau	EPC (sludge incineration plant)	-	sewage sludge incineration 150t/day	3/2028

* Start of overall facility operations, including heat recovery facility

In Q1 and Q2 of FYE 3/2025, order was received for 1 biomass power plant.

	Year	Delivered to:	Notes		Capacity	Scheduled Completion	
Energy plants	FYE 3/2023	Q1	Sanyo-Onoda Green Energy Co.	EPC	Power generation business (Biomass, FIT)	1,990kW	6/2024
			Power Aid MIE LLC.	EPC	Power generation business (Biomass and others, Non-FIT)	1,990kW	Winter FYE 3/2025
		Q2	Yonezawa Bio Energy LLC.	EPC	Power generation business (Biomass, FIT)	7,100kW	11/2025
			Soga Biomass Power Generation Co.	EPC	Power generation business (Biomass, FIT)	1,990kW	11/2024
			Company A	EPC (Fuel conversion)	Self-consumption (Biomass and others, Non-FIT)	-	-
		Q3	Katsuta Co., Ltd.	EPC	Industrial waste treatment	150t/day	2/2026
		Q4	Regional power Co.	EPC	Power generation business (Biomass, Non-FIT)	9,990kW	8/2026
	FYE 3/2024	Q1	Furusato FIC Energy LLC.	EPC	Power generation business (Biomass, FIT)	1,990kW	1/2026
			Mogami Biomass Power Generation2 (KK)	EPC	Power generation business (Biomass, FIT)	7,100kW	10/2026
		Q2	Shin Tokai Paper Co., Ltd. Shimada Plant	EPC	Self-consumption (Biomass and others, Non-FIT)	-	1/2027
			Company B	EPC	Power generation business (Biomass, FIT)	7,100kW	-
			Green Power Tono (KK)	EPC	Power generation business (Biomass, FIT)	1,990kW	11/2026
		Q3	Tochigi High Trust Co., Ltd.	EPC	Industrial waste treatment	93.6t/day	2/2027
			Hachimantai Next Energy Co.	EPC	Power generation business (Biomass, FIT)	7,100kW	12/2026
		Q4	Company C	EPC	Power generation business (Biomass, FIT)	1,990kW	-
	FYE 3/2025	Q2	Company D	EPC	Power generation business (Biomass, FIP)	1,990kW	-

*Self-consumption: Steam (heat) and electricity produced by a plant installed within the factory are used within the factory without being supplied externally.

Domestic Environment and Energy Business

Quarterly trend in
Orders received /
Net sales (reference material)

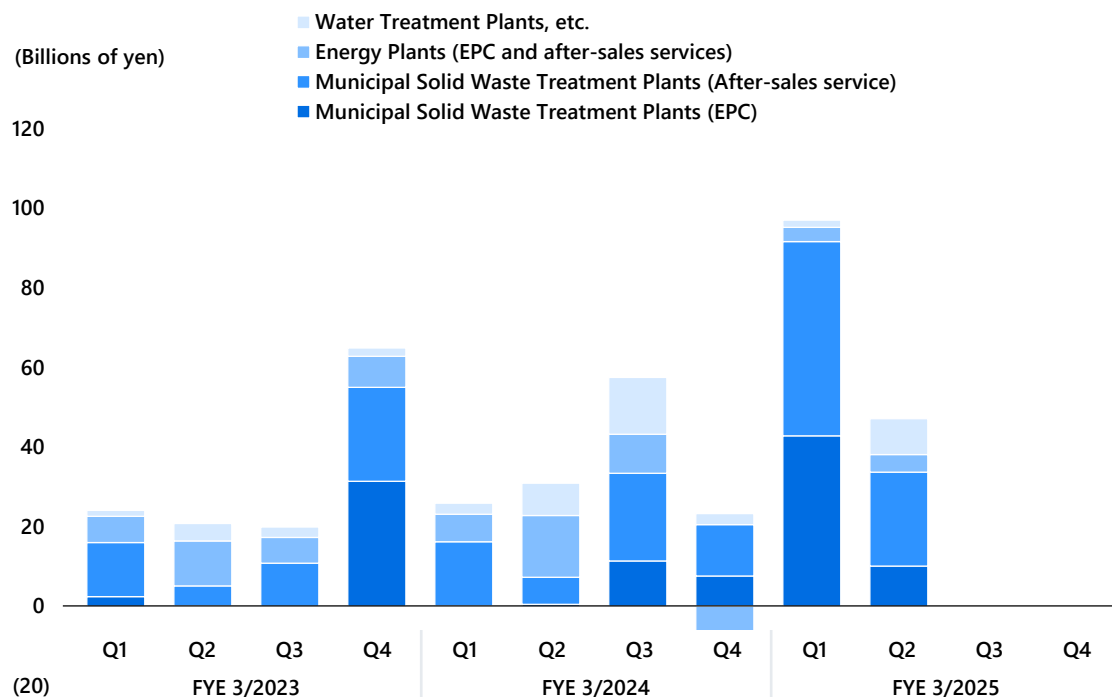
TAKUMA

Orders received vary significantly depending on the timing that projects are recorded.

Net sales tend to increase going into the fourth quarter.

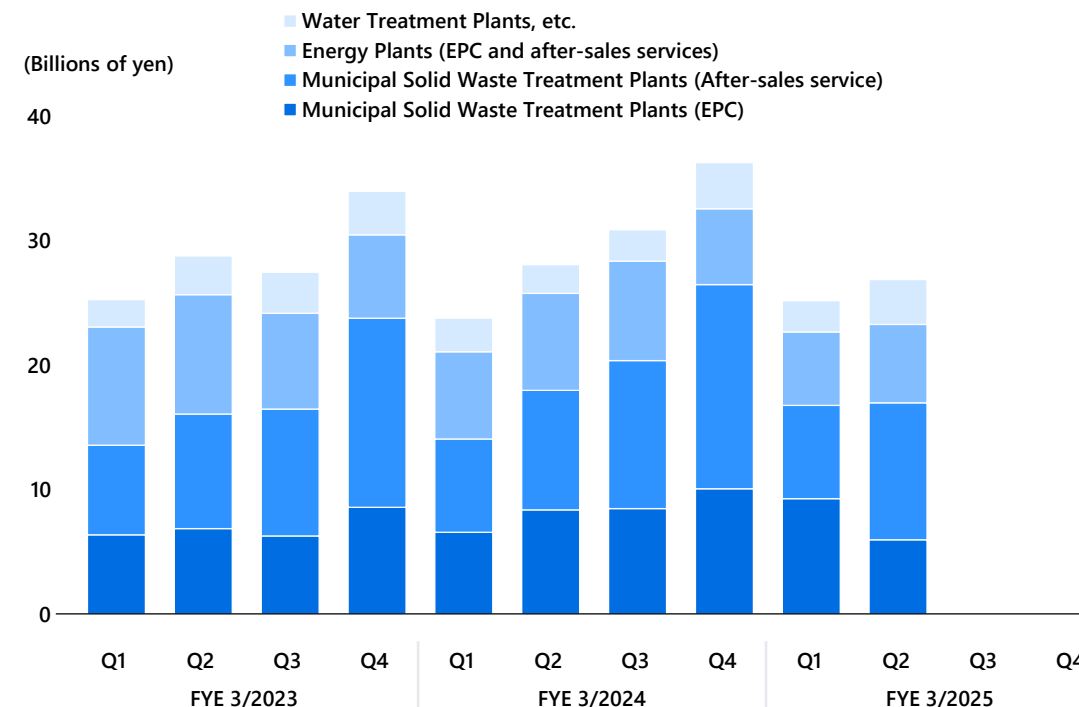
Orders received (quarterly)

The amount of each EPC project is large, so orders received tend to vary significantly depending on the timing of the contract.



Net sales (quarterly)

Although net sales vary depending on progress on construction of EPC projects for the period, municipal solid waste treatment plants (after-sales service) increases going into the fourth quarter, so overall net sales also tend to increase going into the fourth quarter.



Received order for DBO project for waste treatment plant from Gyoda Hanyu Resources and Environment Association

- Construction of new incineration facilities and material recycling promotion facilities
- 20 years of operation starting from July 2028
- Introduction of highly efficient waste power generation technology that reduces greenhouse gas emissions and advanced sorting technology that promotes resource recycling
- Contract amount: 37.6 billion JPY (excluding tax)

*total amount of orders received by the corporate group represented by Takuma



New waste treatment plant - completed image

Signed a business partnership agreement regarding solar power generation with Next Energy & Resources Co., Ltd.

- Our subsidiary Takuma Energy, which operates a retail electricity business, has entered into a business partnership agreement with Next Energy & Resources, which manufactures and sells solar power generation equipment
- Expanding competitiveness by making it possible to make proposals using solar power generation equipment to local governments that are working on decarbonization and local production and consumption of electricity



Solar Carport, a product of Next Energy & Resources

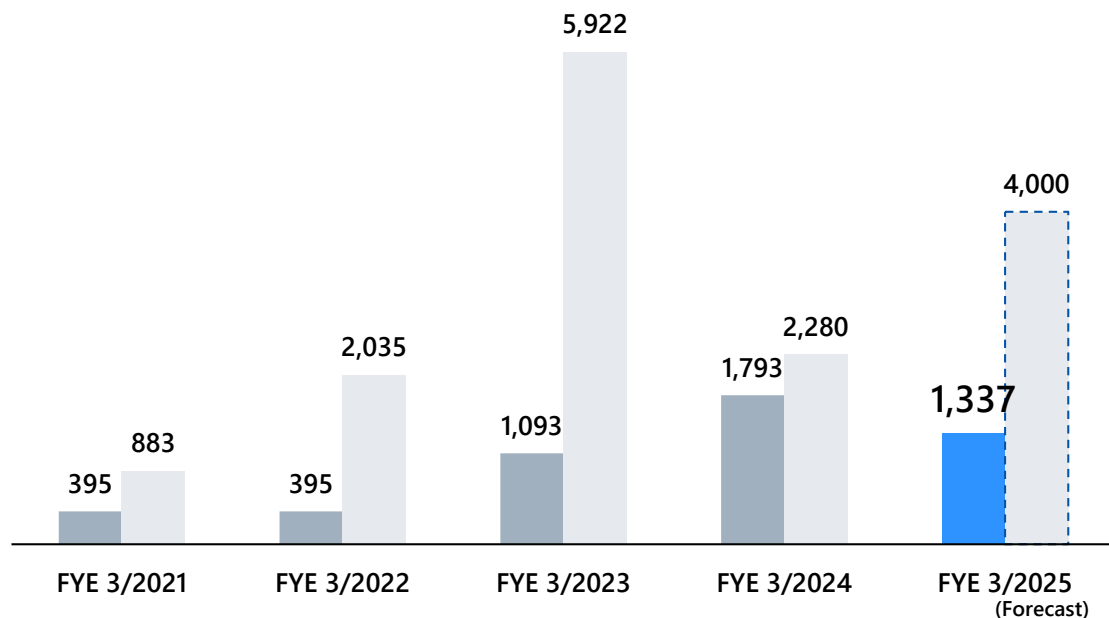
Orders received were down compared to FY2023, when we ordered an additional offer for new plant construction projects.

Orders received

(Millions of yen)

Approx. **¥0.45** billion decrease

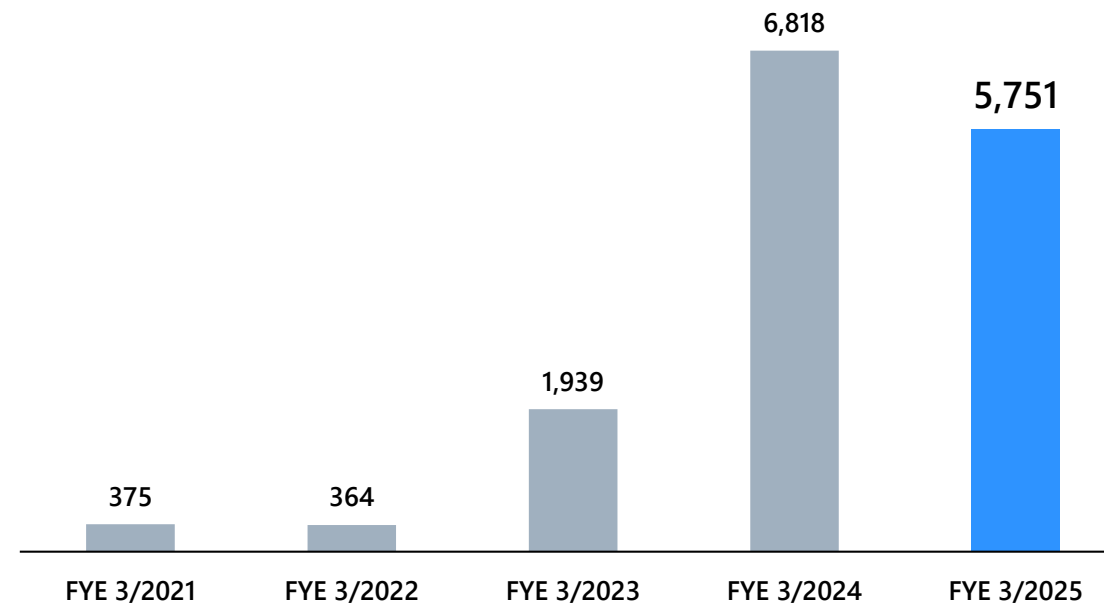
■ Q2 ■ Q4



Order backlog (Q2)

(Millions of yen)

Approx. **¥1.0** billion decrease

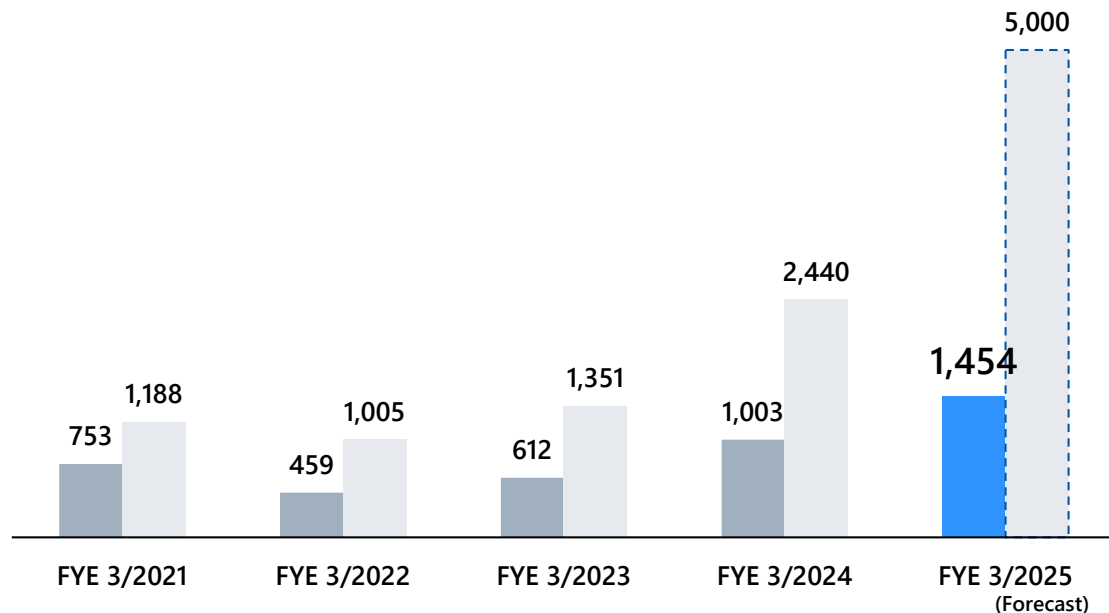


Net sales and operating profit were up owing to progress on new plant projects previously ordered.

Net sales

(Millions of yen) — Approx. **¥0.45** billion increase —

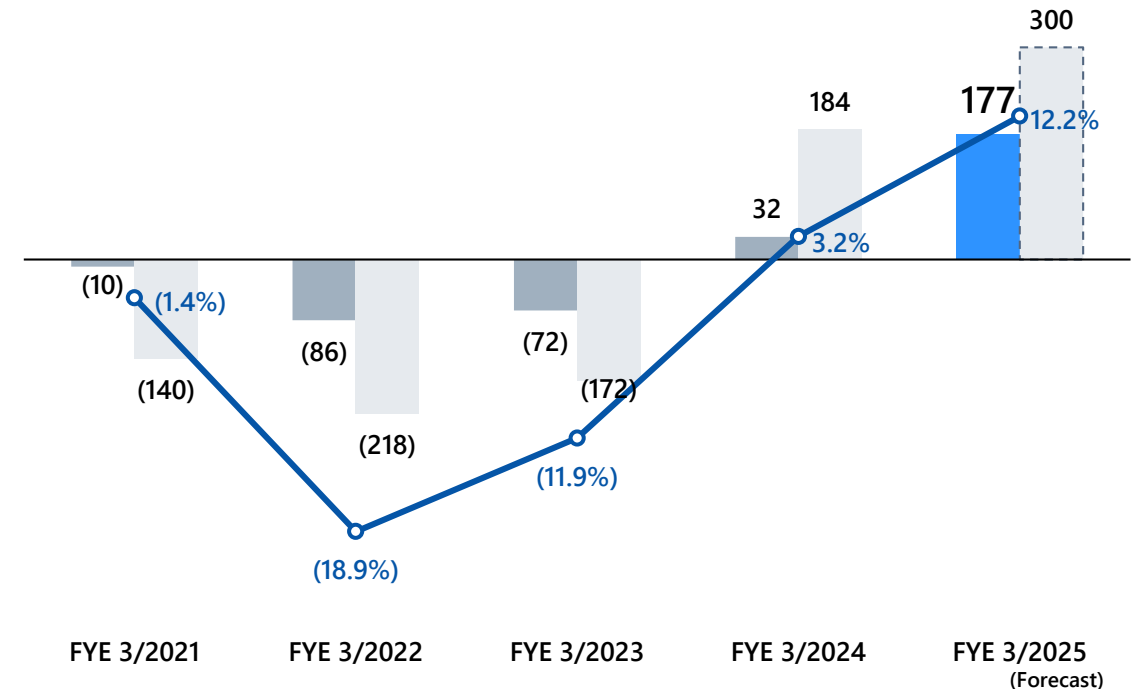
■ Q2 ■ Q4



Operating profit

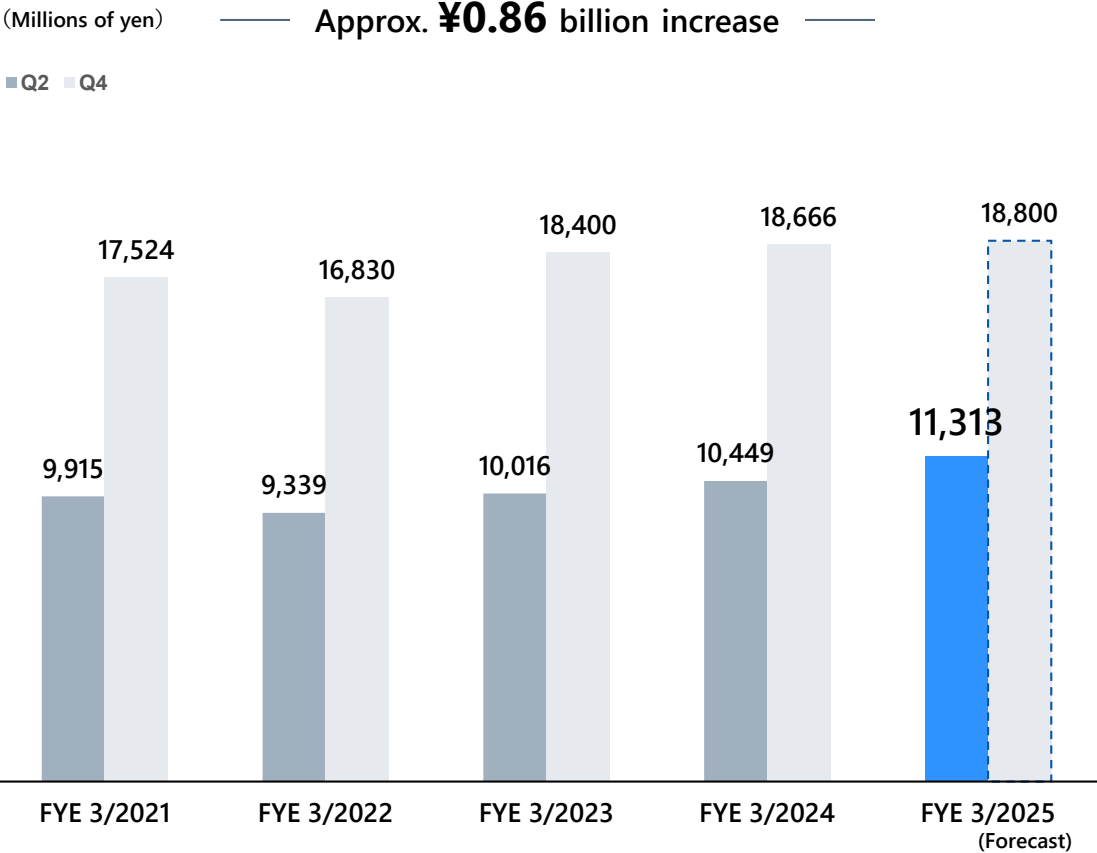
(Millions of yen) — Approx. **¥0.14** billion increase —

■ Q2 ■ Q4 ● Q2 Operating Margin

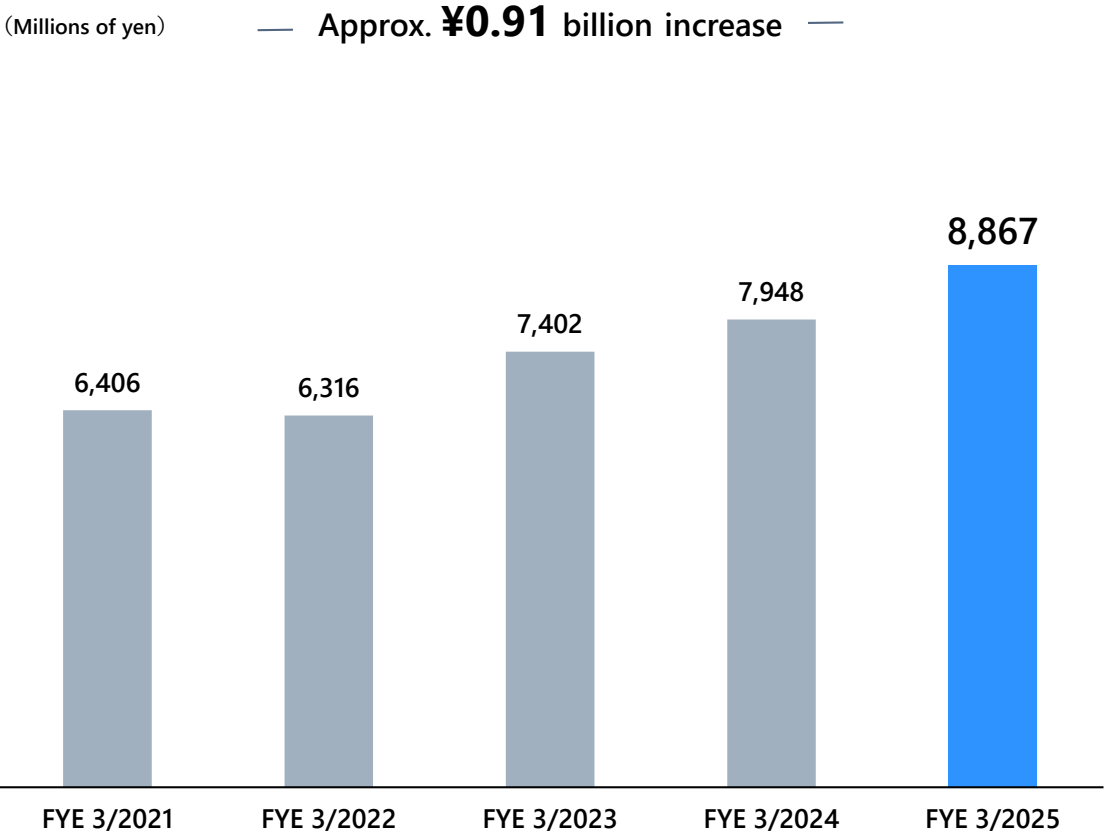


Orders received were up due to a continued moderate recovery in demand.

Orders received



Order backlog (Q2)



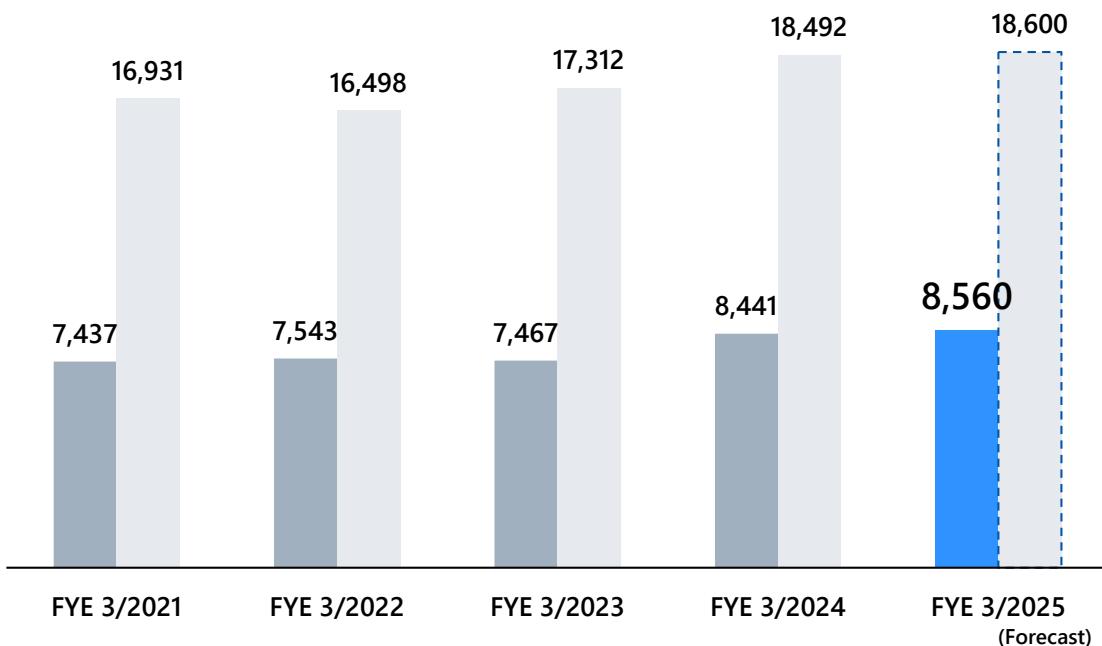
Net sales and operating profit were up owing to progress on projects previously ordered.

Net sales

(Millions of yen)

— Approx. **¥0.11** billion increase —

■ Q2 ■ Q4

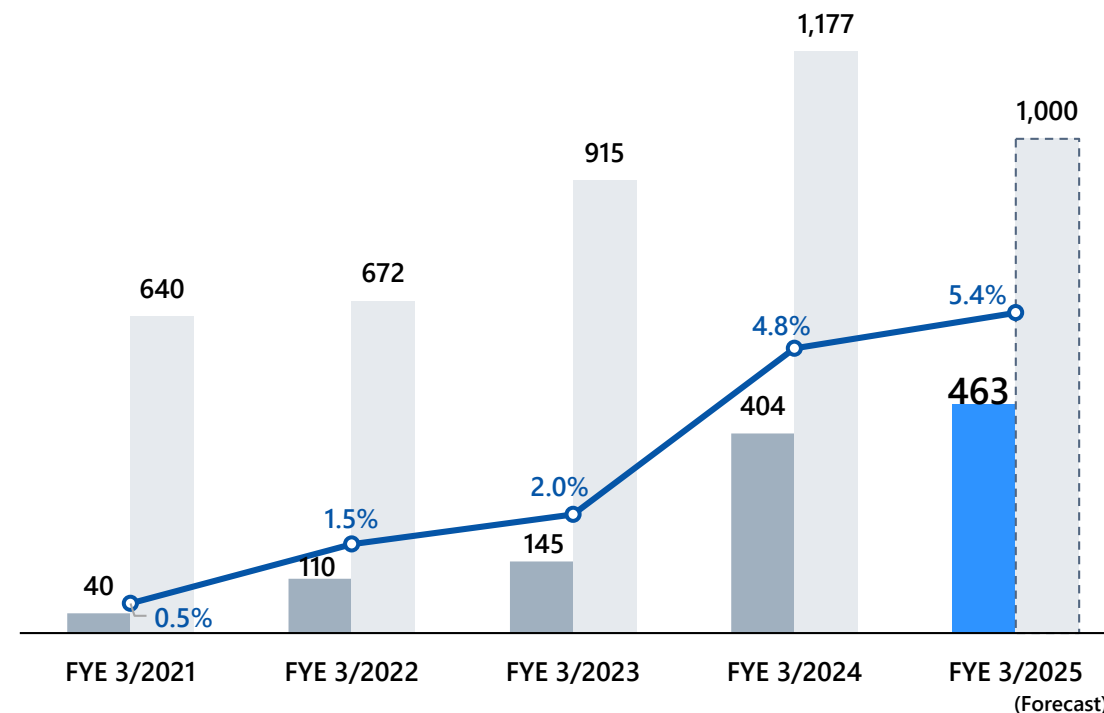


Operating profit

(Millions of yen)

— Approx. **¥0.05** billion increase —

■ Q2 ■ Q4 ● Q2 Operating Margin



Signed a stock transfer agreement to acquire shares of IHI Packaged Boiler Co., Ltd.

- IHI Packaged Boiler Co. will become a consolidated subsidiary of Takuma on April 1, 2025, based on the stock transfer agreement between Takuma and IHI
- IHI Packaged Boiler Co. and our subsidiary Nippon Thermoener are scheduled to merge on April 1, 2026, with the aim of leveraging synergies with Nippon Thermoener, which manufactures and sells general-purpose boilers
- By combining the product lineups and technological capabilities of both companies, which have high shares in the domestic general-purpose boiler market, Takuma group will establish a supply system for products and services with higher added value



Once-through boilers manufactured and sold by IHI Packaged Boiler Co.

Nippon Thermoener Co., Ltd. made two biomass boiler manufacturers into subsidiaries

- Nippon Thermoener has made Daiichi Sanki, which handles small biomass boilers, and Sanki Engineering into subsidiaries
- Responding to the expanding needs for low carbon and decarbonization by adding a boiler that makes livestock industry byproducts into fuel to the product lineup



Small biomass boiler manufactured by Daiichi Sanki

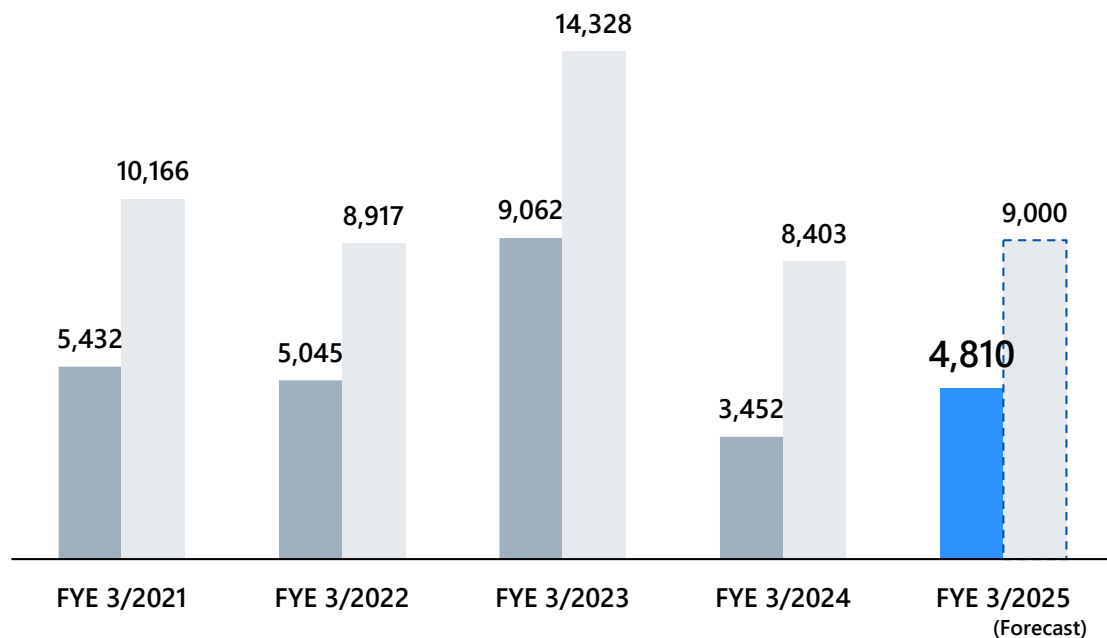
Orders received increased primarily from orders in the building equipment business.

Orders received

(Millions of yen)

Approx. **¥1.3 billion** increase

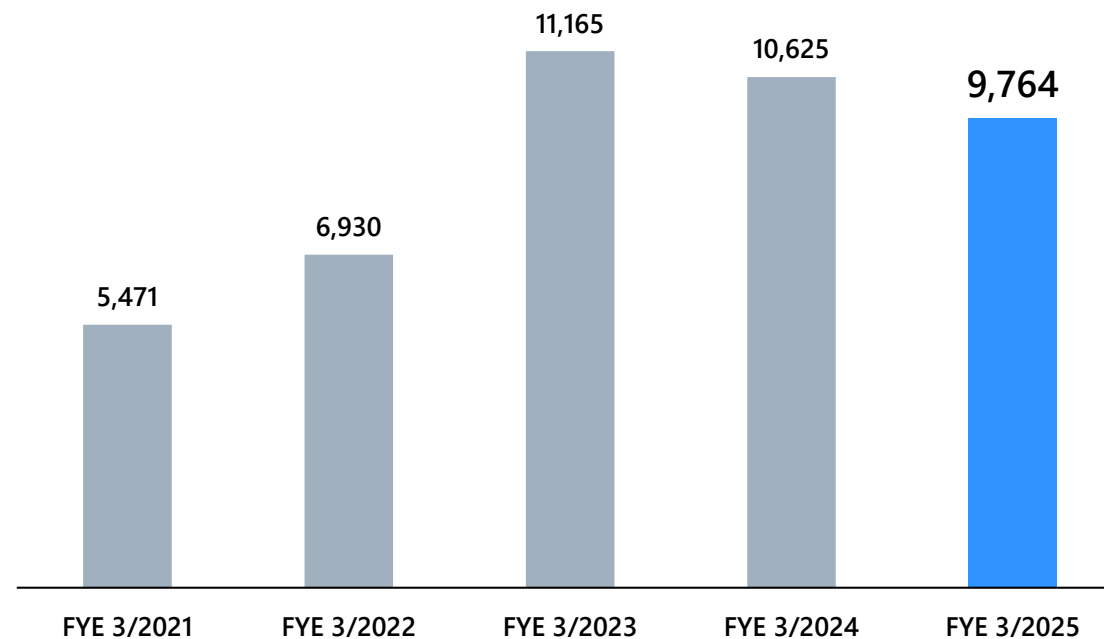
■ Q2 ■ Q4



Order backlog (Q2)

(Millions of yen)

Approx. **¥0.86 billion** decrease



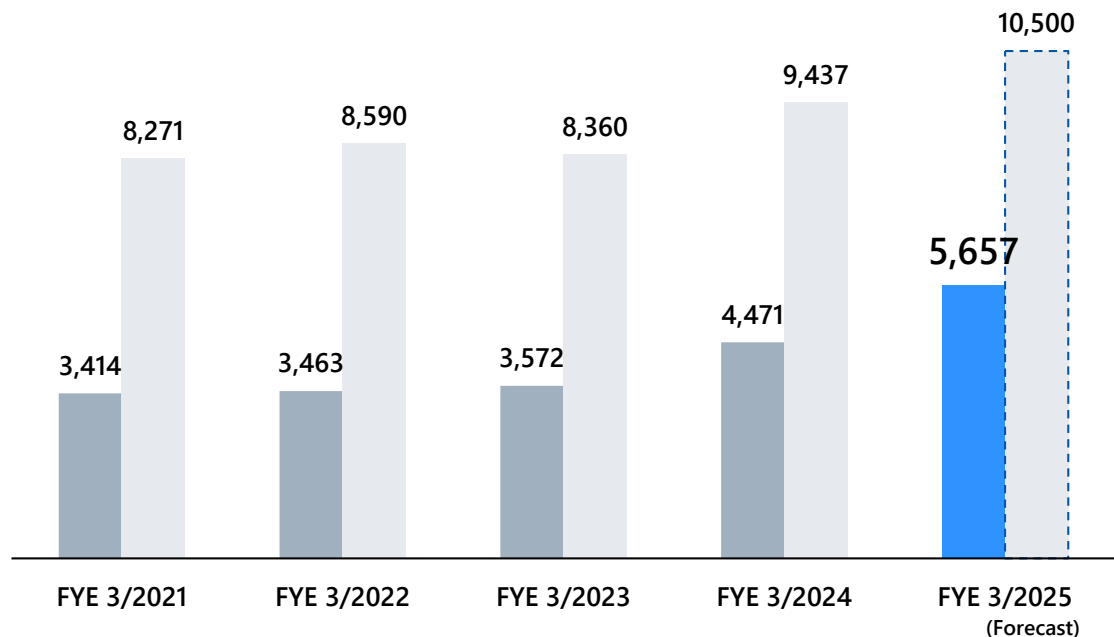
Net sales were up owing to progress on projects for which orders were already received, whereas operating profit was down due primarily to changes in the project mix.

Net sales

(Millions of yen)

Approx. **¥0.11** billion increase

■ Q2 ■ Q4

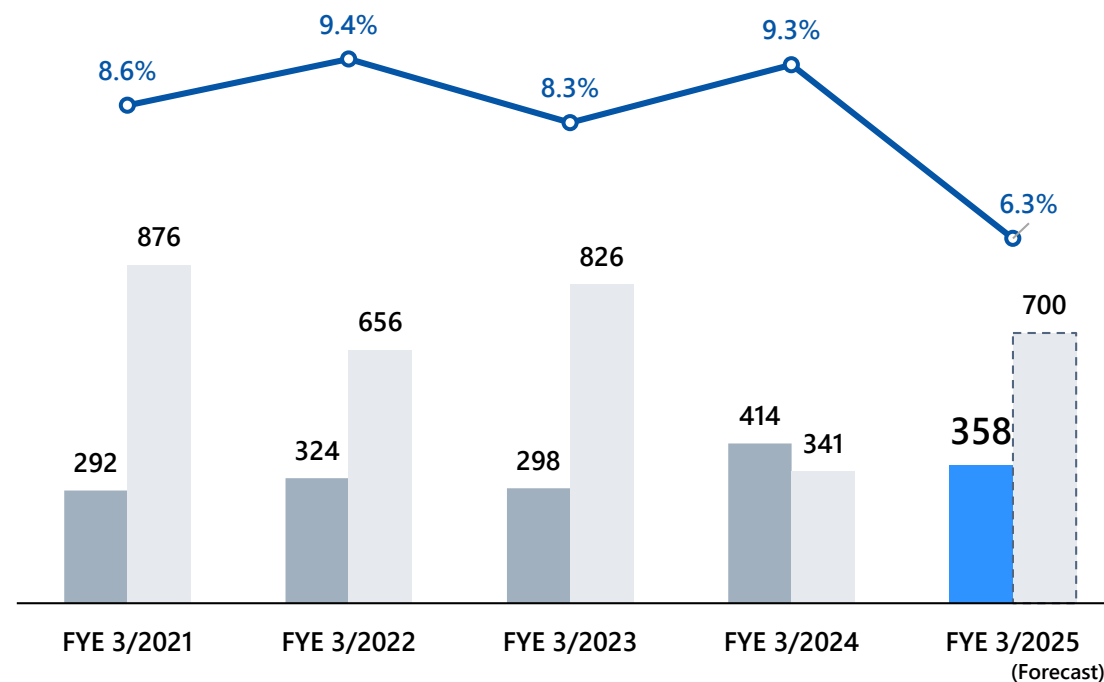


Operating profit

(Millions of yen)

Approx. **¥0.05** billion decrease

■ Q2 ■ Q4 — Q2 Operating Margin



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No changes from the initial forecasts announced on May 14, 2024. Aiming for record-high orders received of ¥230.0 billion.

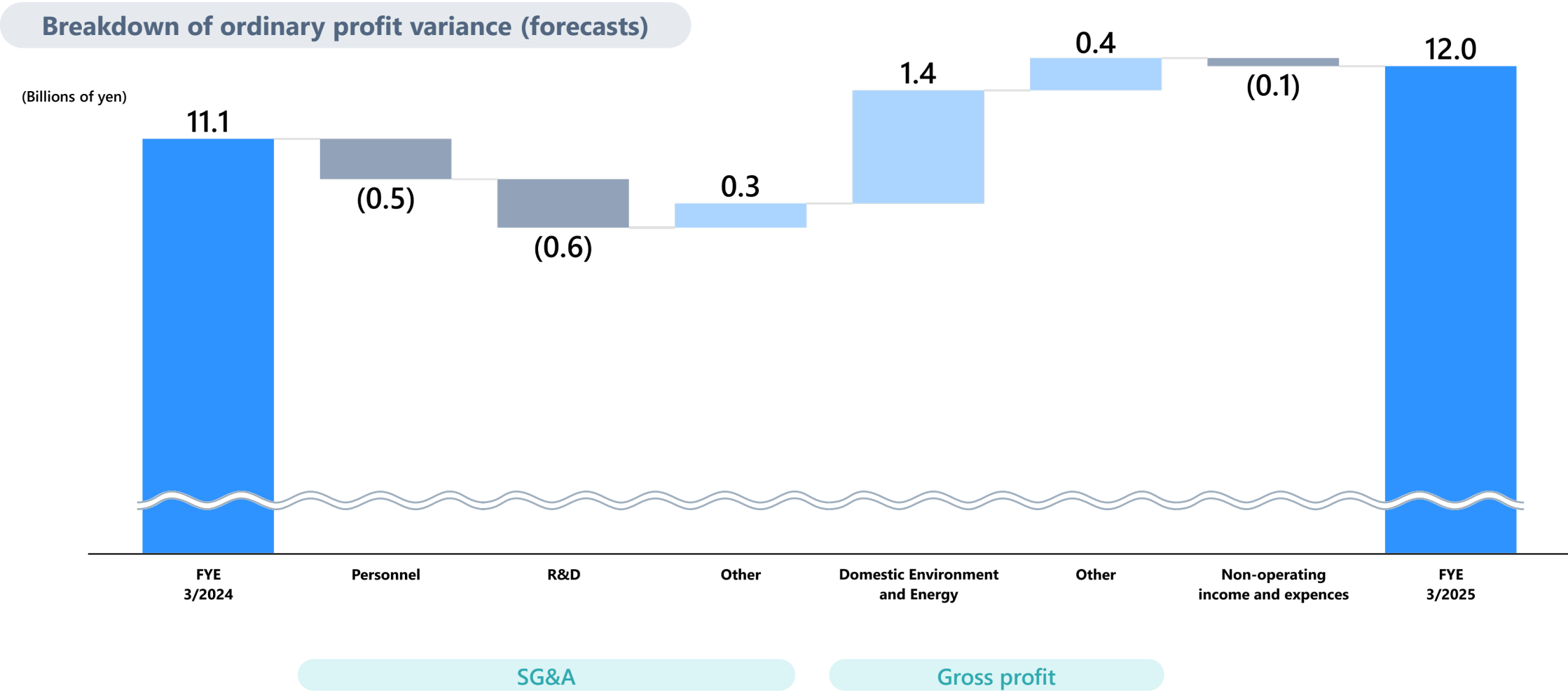
While sales are expected to be down, profit will be up owing mainly to changes in the EPC project mix.

- Orders received: Demand will be stable for renewal, and service life improvement of waste treatment plants and other projects, and we will go after these orders.
- Net sales: Down due to a decrease in sales in the Domestic Environment and Energy Business.
- Profit and loss: Profit up owing mainly to a change in the EPC project mix. → See “Profit Variance Analysis Forecast” on P.22

(Millions of yen)	FYE 3/2023 (FY2022)	FYE 3/2024 (FY2023)	FYE 3/2025(FY2024) Beginning of year forecast	YoY change
Orders received	168,558	160,568	230,000	+43.2%
Order backlog	471,211	482,612	569,612	+18.0%
Net sales	142,651	149,166	143,000	(4.1%)
Operating profit	13,813	10,229	11,200	+9.5%
Operating margin	9.7%	6.9%	7.8%	+0.9pt
Ordinary profit	14,684	11,166	12,000	+7.5%
Profit attributable to owners of parent	9,621	8,754	8,800	+0.5%
Basic earnings per share (yen)	120.22	109.43	111.80*	-

*The forecast of basic earnings per share takes into account the effect of the acquisition and disposal of treasury stock, decided at the Board of Directors meeting on May 14, 2024

Although we expect an increase in SG&A expenses such as personnel and R&D expenses, we also expect an increase in profit due to higher gross profit in the EPC Business and recurring revenue model businesses.



(Millions of yen)	FYE 3/2023 (FY2022)	FYE 3/2024 (FY2023)	FYE 3/2025 (FY2024) Beginning of year forecast	YoY change
Order received				
Total	168,558	160,568	230,000	+43.2%
Domestic Environment and Energy	130,280	131,567	198,700	+51.0%
Overseas Environment and Energy	5,922	2,280	4,000	+75.4%
Package Boiler	18,400	18,666	18,800	+0.7%
Equipment and Systems	14,328	8,403	9,000	+7.1%
Net sales				
Total	142,651	149,166	143,000	(4.1%)
Domestic Environment and Energy	115,985	119,190	109,400	(8.2%)
Overseas Environment and Energy	1,351	2,440	5,000	+104.9%
Package Boiler	17,312	18,492	18,600	+0.6%
Equipment and Systems	8,360	9,437	10,500	+11.3%
Operating profit				
Total	13,813	10,229	11,200	+9.5%
Domestic Environment and Energy	14,875	11,228	12,300	+9.5%
Overseas Environment and Energy	(172)	184	300	+62.5%
Package Boiler	915	1,177	1,000	(15.1%)
Equipment and Systems	826	341	700	+105.0%

* Adjustments are omitted.

Human Resources Investment, Capital Investment and R&D

Actively invest in further business expansion in the future.

- Human resources investment: Strengthen hiring and training of human resources, especially in Engineering, Construction and Maintenance divisions.
- Capital investment: Expected to decrease YoY as capital investment at the new Harima Factory was completed in FY2023 (ended 3/2024).
- Depreciation: Up due to operations at the new Harima Factory. Expected to gradually decrease going forward.
- Research and development expenses: We engaged in R&D, primarily in relation to decarbonization technology. Expenses are expected to increase compared to the previous year due to experiments and installation of testing equipment.

Human resources investment	FYE 3/2020	FYE 3/2021	FYE 3/2022	FYE 3/2023	FYE 3/2024	FYE 3/2025 (Forecast)
Number of employees (people, consolidated)	3,816	3,925	4,145	4,247	4,278	-
Number of employees (people, non-consolidated)	875	894	958	1,002	1,054	-
Hires (people, non-consolidated)	45	62	79	69	83	60-70

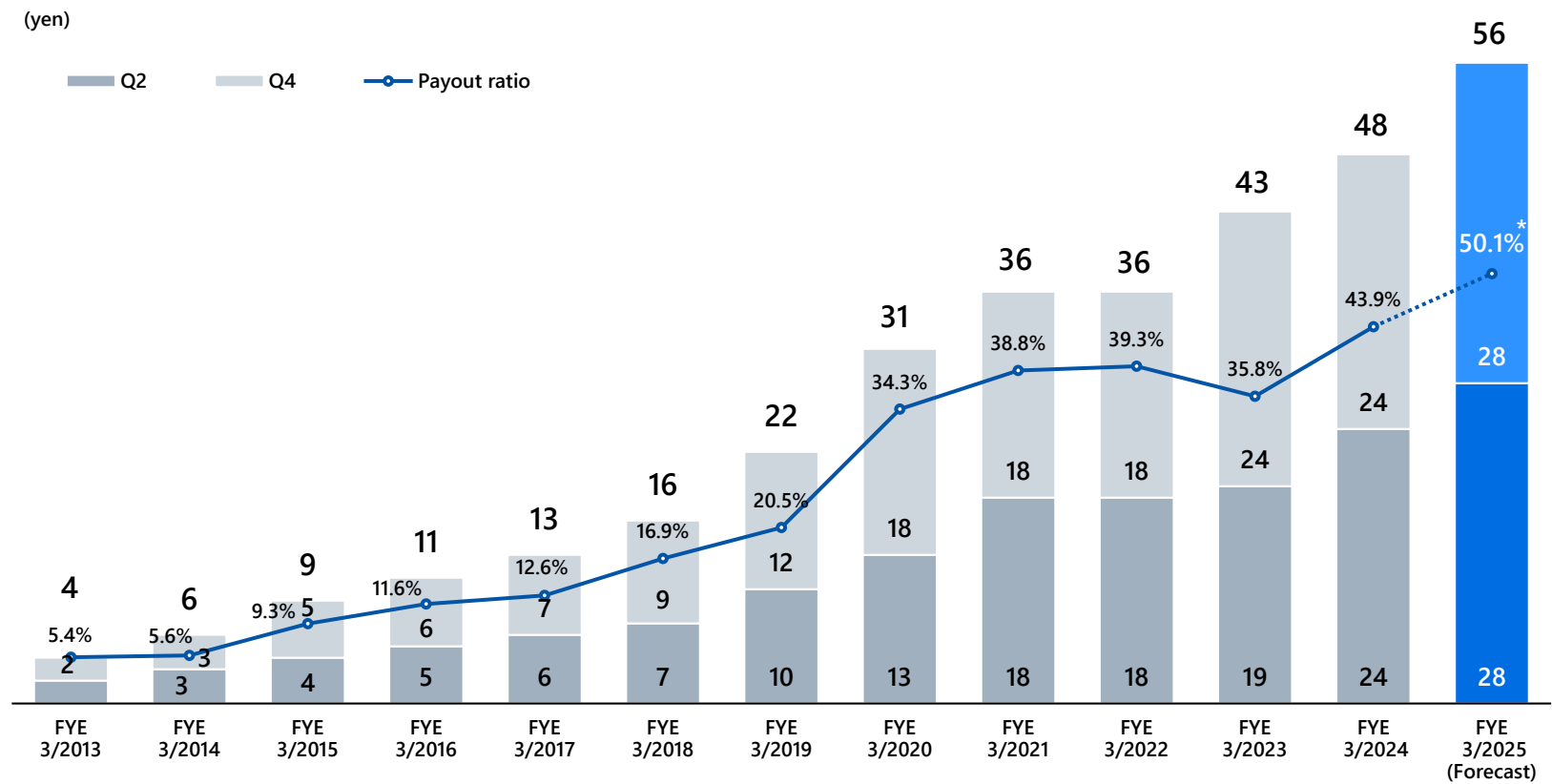
(Millions of yen)	FYE 3/2020	FYE 3/2021	FYE 3/2022	FYE 3/2023	FYE 3/2024	FYE 3/2025 (Forecast)
Capital investment	1,564	2,420	3,844	7,100	3,527	1,600
Depreciation	917	1,036	961	1,136	1,797	2,000
Research and development expenses	1,154	1,047	1,006	1,150	1,629	2,200

(Millions of yen)	FYE 3/2020	FYE 3/2021	FYE 3/2022	FYE 3/2023	FYE 3/2024	FYE 3/2025 (Forecast)
Selling, general and administrative expenses (consolidated)	16,261	16,326	16,254	17,741	19,309	-

Shareholder Return

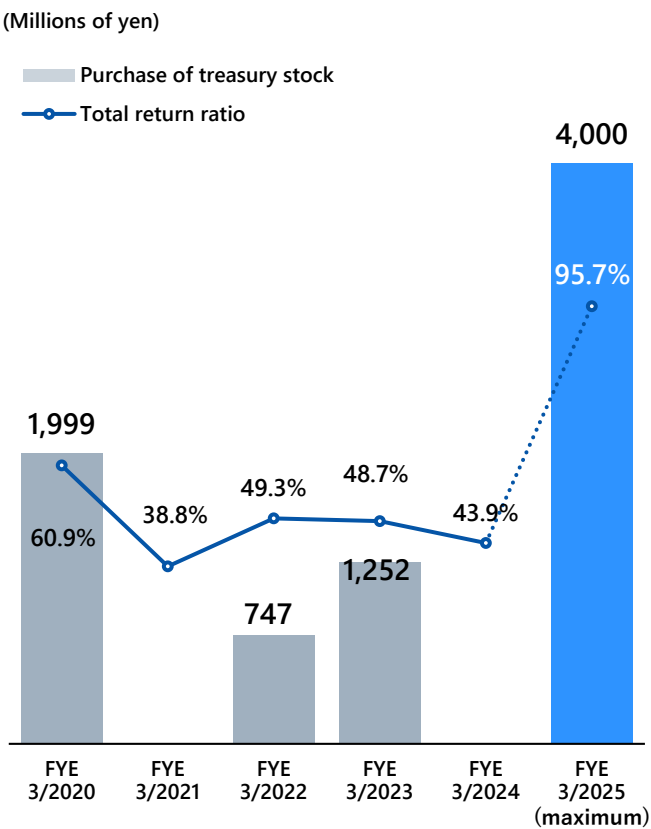
The annual dividend for FY2024 (ending 3/2025) is to be increased by 8 yen to ¥56 per share. The total return ratio is expected to be 95.7% through share repurchase of up to JPY 4 billion and cancellation of treasury shares.

Dividend per share and Payout ratio



*The forecast of payout ratio takes into account the effect of the acquisition and disposal of treasury stock, decided at the Board of Directors meeting on May 14, 2024

Purchase of treasury stock and Total return



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4. Appendix

Summary of the Document Announced on November 8, 2024

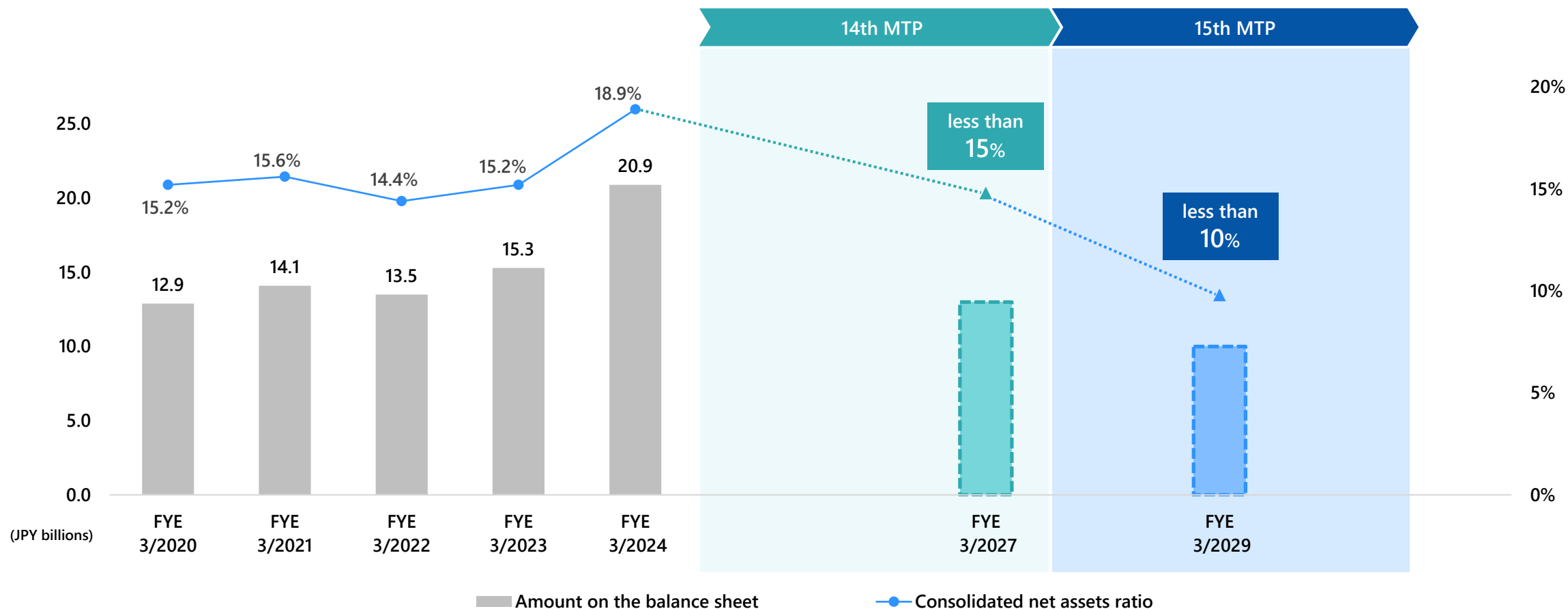
- Takuma has been engaging in dialogue with shareholders and investors with the aim of further enhancing its corporate value since announcing its 14th Medium-Term Management in May of this year. Takuma announces that [a policy to reduce cross-shareholdings has been decided as detailed below at today's meeting of the Board of Directors](#), as a result of ongoing discussions by the Board of Directors, taking into account the feedback received through these dialogues.
- In order to further accelerate its reduction effort, [Takuma will reduce its cross-shareholdings to less than 15% of its consolidated net assets \(selling approximately 7 billion yen worth of shares\) by the end of the fiscal year ending March 2027, which is the final year of the 14th MTP, and will further reduce them to less than 10% by the end of the fiscal year ending March 2029 \(selling further approximately 3 billion yen worth of shares\).](#)
- Takuma will work to improve the efficiency of its balance sheet, primarily by reducing cross-shareholdings, and use the cash generated to return profits to shareholders, such as dividends and purchases of treasury shares. As a result, [shareholder returns over the three-year period of the 14th MTP are expected to be a total of 33 billion yen, with a total return ratio of approximately 110%, including a dividend payout ratio of 50%.](#)
- As Takuma works to improve the efficiency of its balance sheet as mentioned above, and as the Company expects to realize gains on sales from the reduction of our cross-shareholdings, [the Company has revised its ROE target for the fiscal year ending March 2027 upward to 11% or more.](#)

➡ For details, please refer to [the linked document](#)

Strengthening the Policy to Reduce Cross-share Holdings

In order to further accelerate our reduction effort, we will **reduce our cross-shareholdings to less than 15% of its consolidated net assets (selling approximately 7 billion yen worth of shares) by the end of the fiscal year ending March 2027, and will further reduce them to less than 10% by the end of the fiscal year ending March 2029 (selling further approximately 3 billion yen worth of shares).**

Illustration: Reducing cross-shareholdings



Strengthening Shareholder Return Policy

We will work to improve the efficiency of our balance sheet, primarily by reducing cross-shareholdings, and use the cash generated to return profits to shareholders, such as dividends and purchases of treasury shares. As a result, **shareholder returns over the three-year period of the 14th MTP are expected to be a total of 33 billion yen, with a total return ratio of approximately 110%.**

Shareholder return policy

1

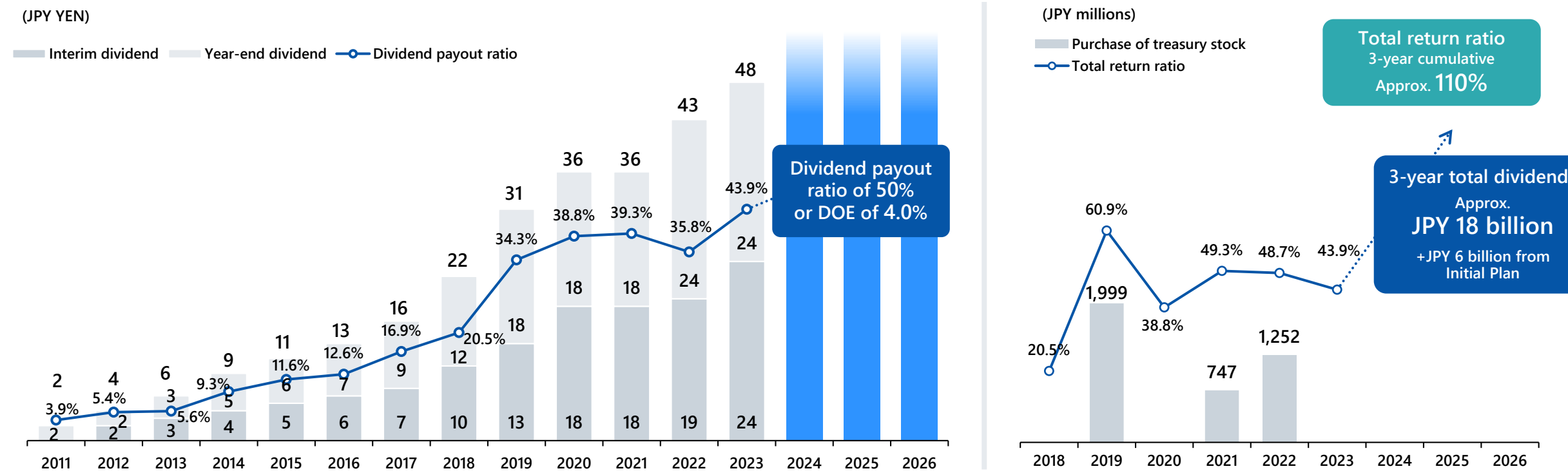
Enhancing shareholder returns and improving capital efficiency through stable dividends and share repurchase

2

Establish as a target amount whichever is higher calculated based on dividend payout ratio of 50% or dividend on equity (DOE) ratio of 4.0%

3

Share repurchase totaling approximately JPY 18 billion over three years to improve capital efficiency



Upward Revision of ROE Target

Working to improve the efficiency of our balance sheet as mentioned above, and expecting to realize gains on sales from the reduction of cross-shareholdings, we have revised our ROE target for the fiscal year ending March 2027 upward to 11% or more.

■:Main target

	13th MTP		14th Medium-Term Management Plan					Vision2030
(JPY billions)	(3-year total)		3-year total	FY2024	FY2025	FY2026		FY2031
Orders received	521.3		600.0↑	230.0	180.0	190.0		
Net sales	425.9		460.0	143.0	152.0	165.0		200.0
Operating profit	33.9		35.6	11.2	11.2	13.2		
Ordinary profit	36.4		38.0➡	12.0	12.0	14.0		20.0↑
ROE	8.3% (FY3/2024)		at least 11%↑ (FY3/2027)	8.0%	9.0%	11.0%		at least 12%↑ (FY3/2031)

ROE = Profit / Equity capital

Upward Revision
at November 8, 2024

1. Overview of Q2 FY2024 (Ending 3/2025) Financial Results

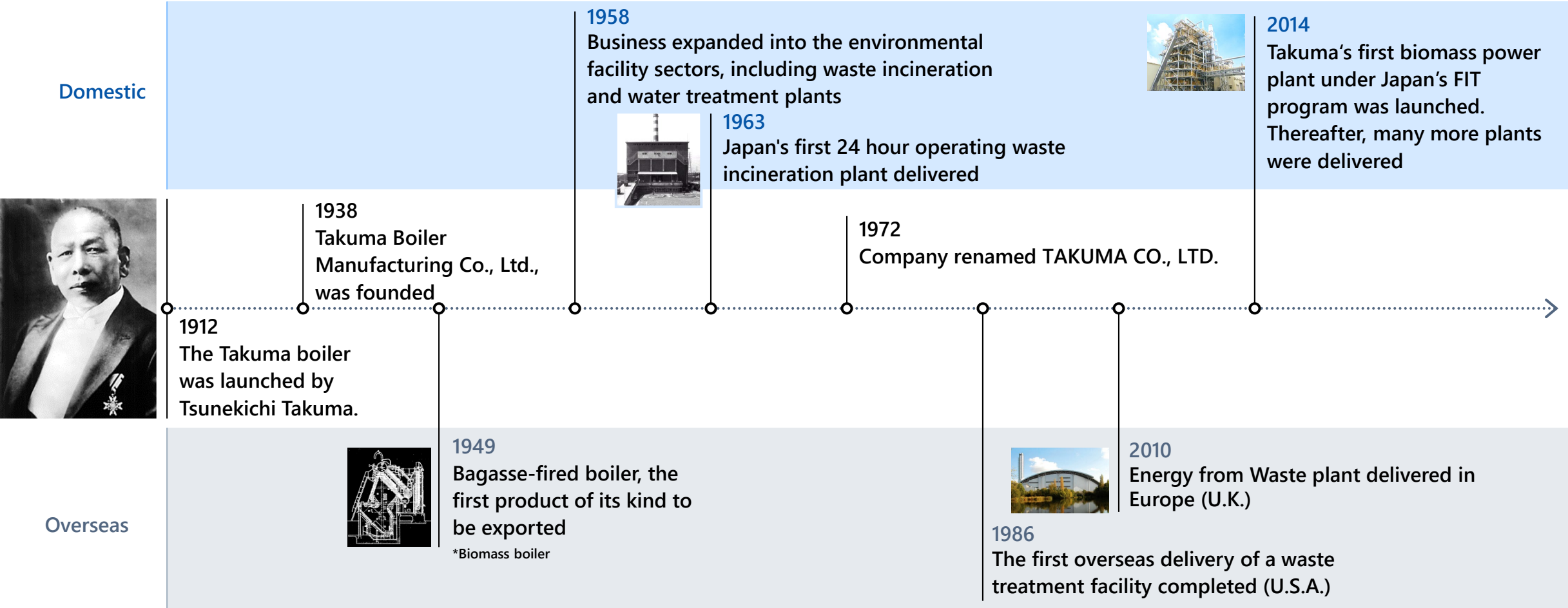
2. Financial Forecast for FY2024 (Ending 3/2025)

3. Notice Regarding Reduction of Cross-shareholdings (Announced on November 8, 2024)

Appendix

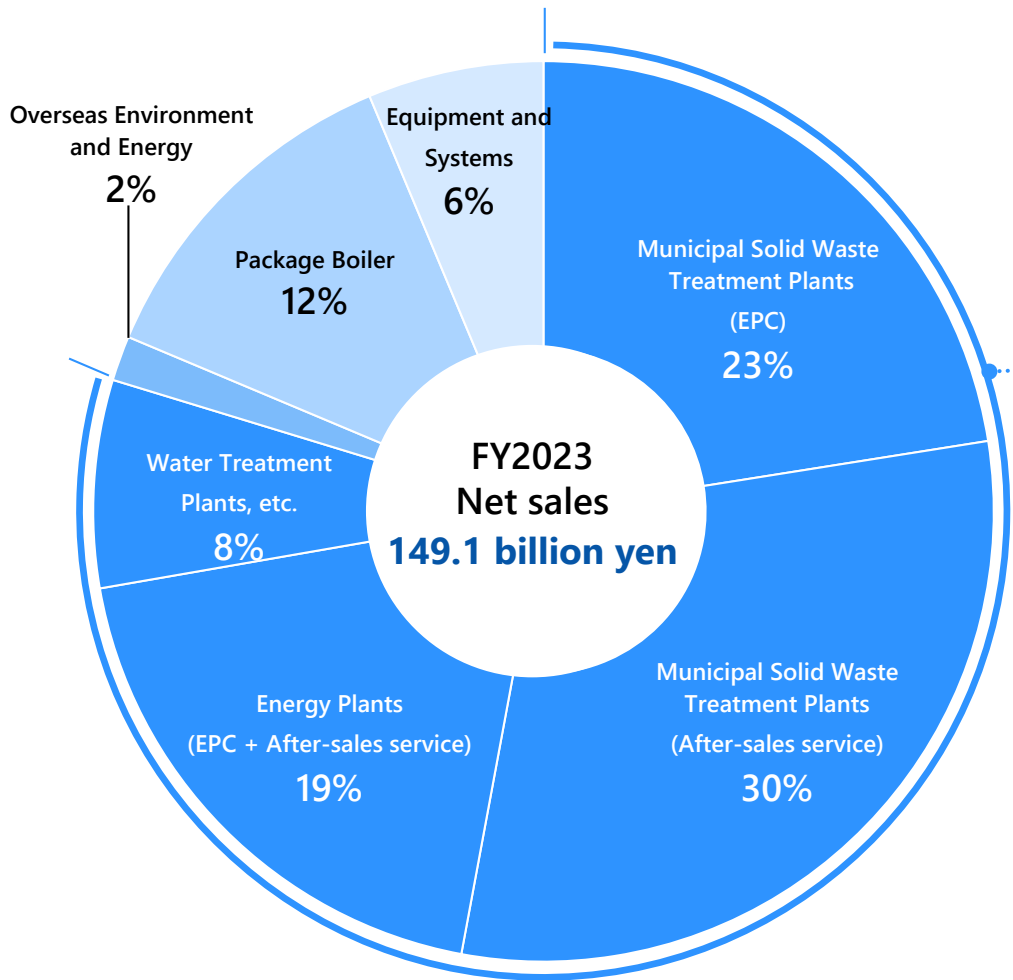
- 4.
- Company outline
 - 14th Medium-Term Management Plan;
Outline, Business Strategies, Strengthening the Management Foundation, Capital Policy
 - Situation by Segment
 - Terminology
-




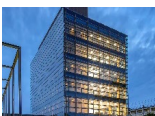



In 1912, we invented the first boiler in Japan using purely Japanese technology. While improving boiler technology, the company cultivated combustion and water treatment technologies and utilized them to enter the environmental field, such as waste incineration plants. Since then, we have provided technologies and services for solving customer and societal challenges, primarily in the fields of environment and energy.



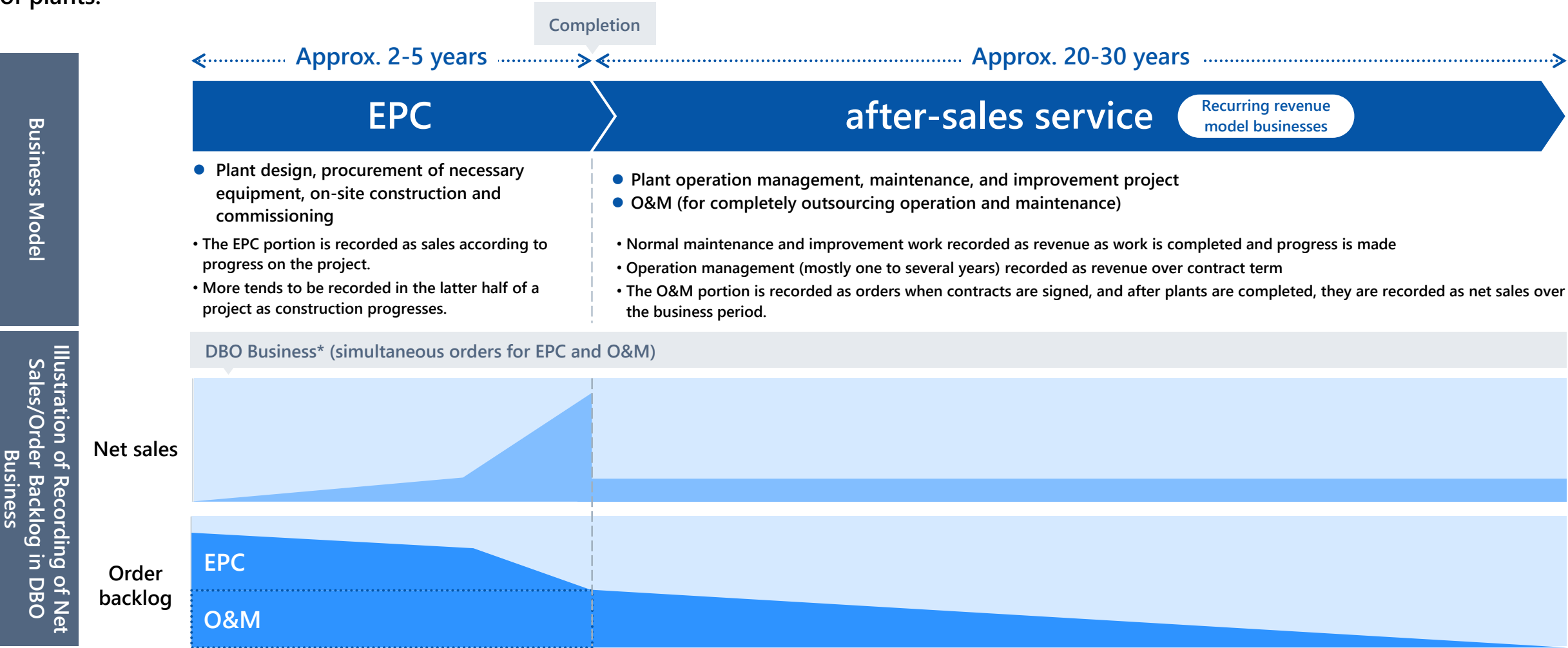
Business Segment

Our business is centered on engineering, procurement, and construction (EPC) and after-sales service of waste treatment facilities, biomass power plants, etc. based on the primary themes of “environment” and “energy”.



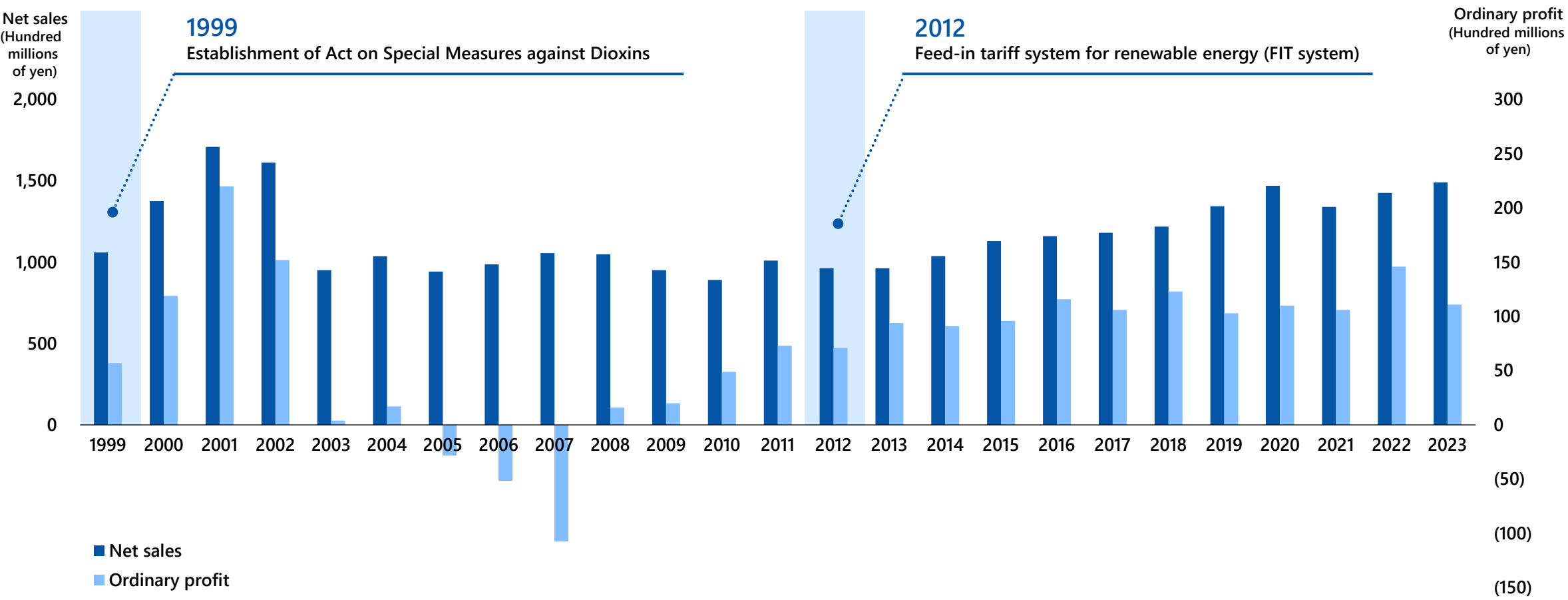
Business Segment	Key Businesses	
Domestic Environment and Energy	Municipal Solid Waste Treatment Plant Business Municipal solid waste treatment plant EPC and after-sales service for municipalities	
	Energy Plant Business Large boiler, biomass power plant, and industrial waste treatment plant EPC and after-sale service for private enterprises	
	Water Treatment Plant Business Sewage treatment facility EPC and after-sale service for municipalities	
	Power Retail Business Supply of electric power procured from delivered waste power plants, biomass power plants and other facilities to public facilities and private companies	
Overseas Environment and Energy	Energy from Waste plant and Energy plant EPC and after-sale service	
Package Boiler	Manufacture and sale of and after-sale service related to heat source equipment such as general-purpose boilers and vacuum-type water heaters	
Equipment and Systems	Sale of and after-sales service related to building equipment (air conditioning, water supply and drainage work, etc.) and products for the semiconductor manufacturing industry	

Revenue comes primarily from engineering and construction (EPC) and after-sales service (operational management, maintenance, O&M, etc.) of plants.



Performance Trends

In the latter half of the 2000s, we focused on after-sales service, which would provide its earnings base. There has been steady demand for renewal and service life improvement of waste treatment plants and an increase in demand for biomass power plants, resulting in stable net sales and profits.



Management Principles

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.



We will address social and environmental issues (ESG issues) through businesses that leverage the Group's strengths, viewing the resolution of these issues as an opportunity for growth, **while also increasing our company's economic value.**

Vision2030

We aim 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 reach an ordinary profit level of JPY 20.0 billion.

Keywords for realizing Vision2030



A great partner to our customers

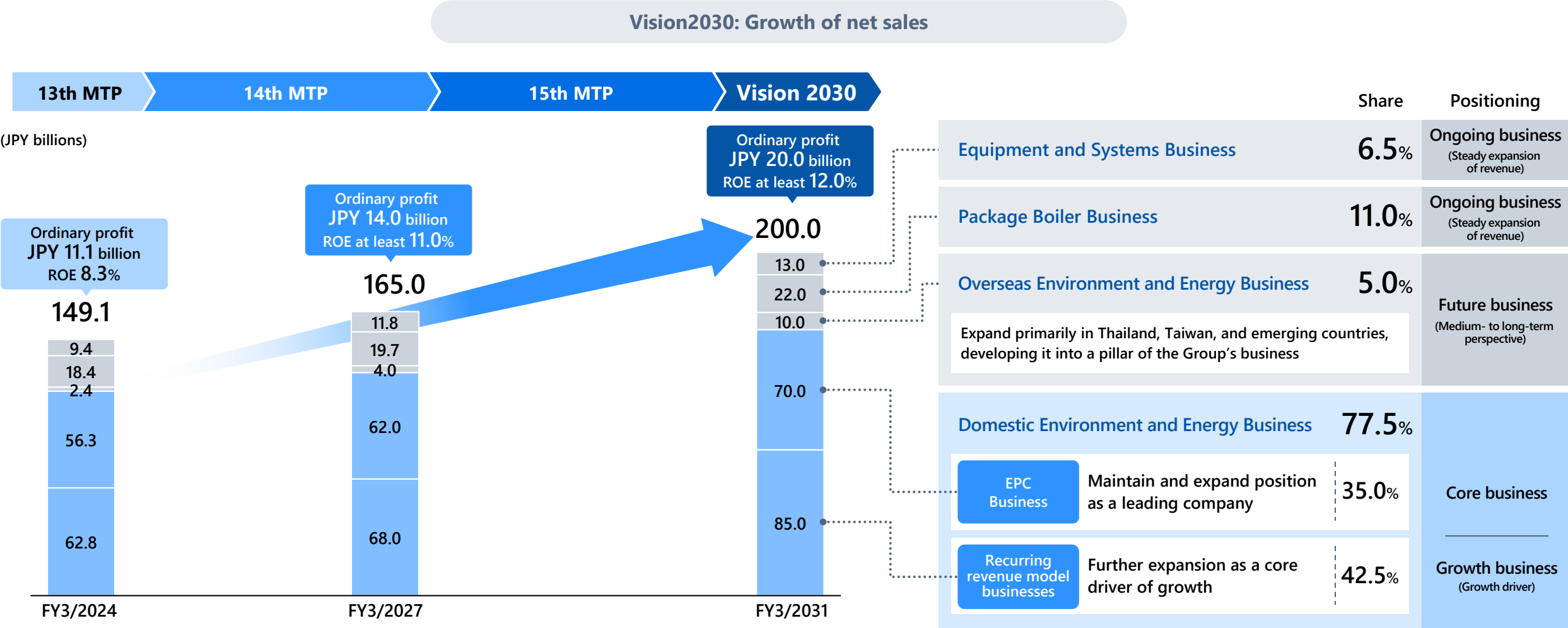


Innovation of technologies and services



Solving issues faced by our customers and society

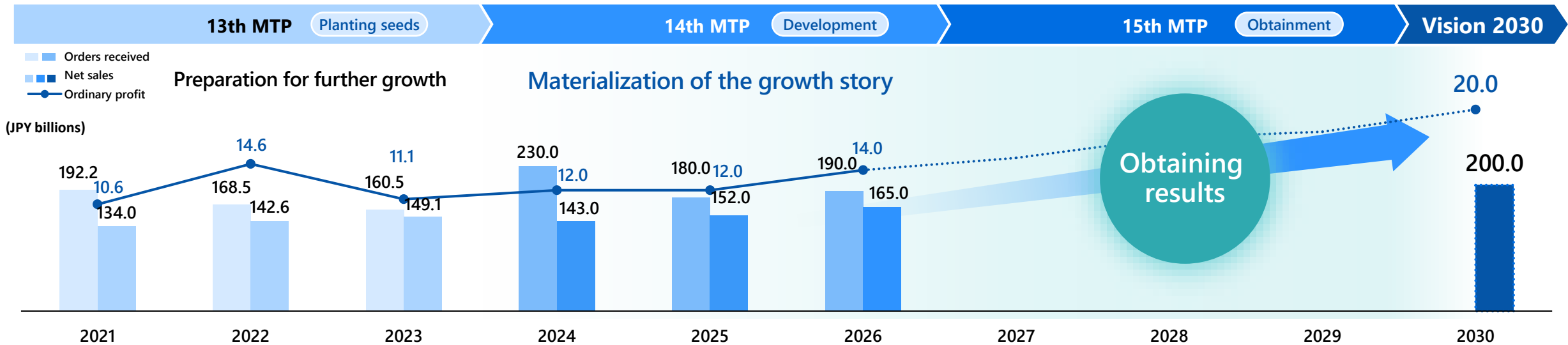
Achieve further expansion with **recurring revenue model businesses** as the core driver of growth for Vision2030.
Work on **expanding the EPC business** at the same time as recurring revenue will increase to achieve ordinary profit of JPY 20.0 billion by FY3/2031.



We expect the market environment for our business to be generally favorable and strong.

			14th Medium-Term Management Plan period (FY2024-2026)	Future
Domestic Environment and Energy	Municipal solid waste treatment plants	EPC	<div><div>+</div>Steady demand for renewal (rebuids)</div> <div><div>+</div>Ongoing demand for service life extension (primary equipment improvement)</div> <div></div>	<div><div>−</div>Decreased demand for renewal due to low birth rate and aging society</div> <div><div>+</div>Increased demand for decarbonized facilities</div> <div></div>
		After-sale services	<div><div>+</div>Increase in operations businesses (DBO Business and O&M contracts)</div> <div></div>	<div><div>−</div>Decrease in number of facilities in operation (reorganization)</div> <div><div>+</div>Ongoing demand for operations businesses</div> <div><div>+</div>Further development of projects outsourced to the private sector</div> <div></div>
	Energy plants	EPC: FIT/FIP/Non-FIT	<div><div>−</div>Decrease in large-scale projects due to changes in the FIT program</div> <div><div>+</div>Ongoing demand for small to medium-sized FIP and non-FIT projects</div> <div></div>	<div><div>+</div>Ongoing renewable energy policy support for achieving carbon neutrality</div> <div></div>
		EPC: For private consumption and industrial waste treatment	<div><div>+</div>Ongoing demand for renewal due to aging plants and decarbonization</div> <div></div>	<div><div>+</div>Certain level of ongoing demand</div> <div></div>
		After-sale services	<div><div>+</div>Increase in maintenance demand associated with increase in deliveries</div> <div></div>	<div><div>+</div>Ongoing maintenance demand at facilities in operation</div> <div></div>
	Water treatment plants	<div><div>+</div>Ongoing demand for renewal due to aging plants</div> <div><div>+</div>Increased demand for products with high environmental performance</div> <div><div>+</div>Progress and increase in private sector utilization</div> <div></div>	<div><div>+</div>Ongoing needs for energy conservation, energy creation, and resource utilization</div> <div><div>+</div>Increase in comprehensive contracting of plant construction and operation</div> <div></div>	
	Power retail business	<div><div>+</div>Increased demand for renewable energy and non-fossil fuel-based power associated with decarbonization</div> <div></div>	<div><div>+</div>Certain level of ongoing demand</div> <div></div>	
	Overseas Environment and Energy * Southeast Asia		<div><div>−</div>Continued intense competition in the biomass power generation market</div> <div><div>+</div>Increased needs for utilization of diverse fuels</div> <div><div>−</div>Sluggish start in waste power generation market (Caused by system, funding, and other issues)</div> <div></div>	<div><div>+</div>Increased demand for waste disposal and electric power due to economic growth and urbanization</div> <div></div>
Package Boiler		<div><div>+</div>Japan: Certain level of ongoing renewal demand despite market maturity</div> <div><div>+</div>Emerging countries: Increased demand for energy-saving products</div> <div></div>	<div><div>−</div>Japan: Market shrinkage due to low birth rate and aging society along with population decline</div> <div><div>+</div>Japan: Ongoing demand for energy-saving and decarbonization products</div> <div><div>+</div>Emerging countries: Market expansion with economic growth</div> <div></div>	
Equipment and Systems		<div><div>+</div>Certain level of ongoing demand from construction demand and increased semiconductor capital investment</div> <div></div>	<div><div>+</div>Certain level of ongoing demand (building equipment)</div> <div><div>+</div>Expansion of demand for semiconductor equipment with utilization and development of AI, etc.</div> <div></div>	

The 14th Medium-Term Management Plan is positioned to materialize the growth story for realizing the vision by prioritizing investment of management resources into receiving orders for municipal solid waste treatment plants (renewals and primary equipment improvement) and establishing a revenue model that maximizes the use of recurring revenue while formulating and implementing measures to solve various challenges.



Business Strategy

Further strengthening of existing businesses

Addressing future changes in the environment

Basic Policy

- Maintaining and expanding our market position in the EPC Business
- Establishing a revenue model that fully utilizes recurring revenue
- Steadily expanding revenue in the Package Boiler Business and Equipment and Systems Business
- Building a track record for the future in international business
- Promoting strategic M&As and creating new businesses

Management foundation enhancement

- Securing and development of human resources
- Knowledge management
- Compliance and risk management

In addition to ordinary profit, new targets for orders received and return on equity (ROE) are set in the 14th Medium-Term Management Plan. Three-year total target set for **orders received of 600 billion JPY, which is significantly higher than the previous medium-term plan** and is planned to be used as a foothold to achieve the target for FY2031.

■:Main target

(JPY billions)	13th MTP	14th Medium-Term Management Plan				Vision2030
	(3-year total)	3-year total	FY2024	FY2025	FY2026	FY2031
Orders received	521.3	600.0↑	230.0	180.0	190.0	
Net sales	425.9	460.0	143.0	152.0	165.0	200.0
Operating profit	33.9	35.6	11.2	11.2	13.2	
Ordinary profit	36.4	38.0➡	12.0	12.0	14.0	20.0↑
ROE	8.3% (FY3/2024)	at least 11%↑ (FY3/2027)	8.0%	9.0%	11.0%	at least 12%↑ (FY3/2031)

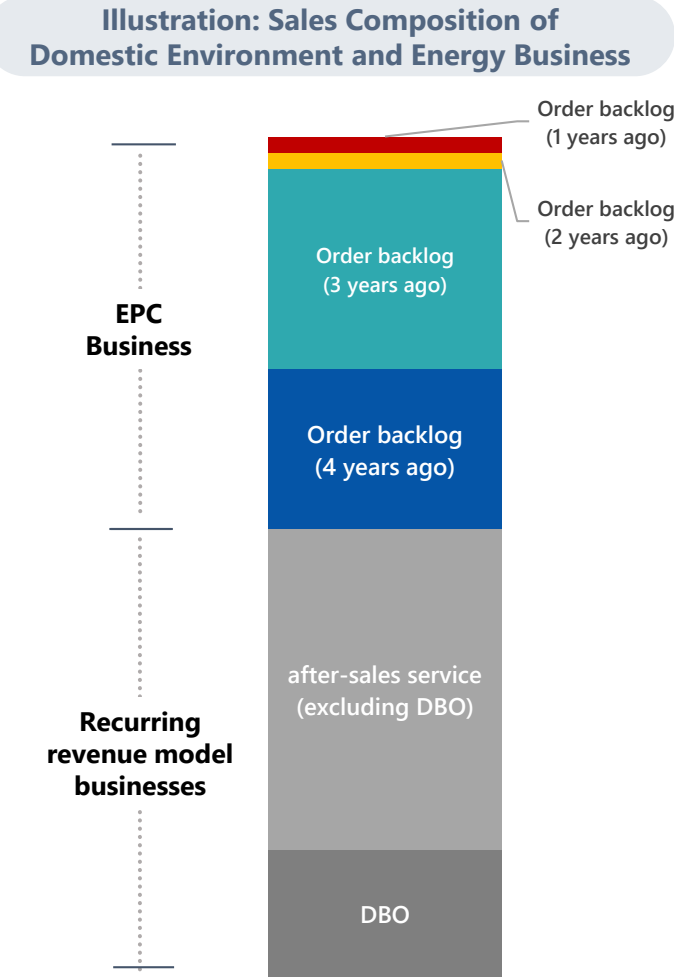
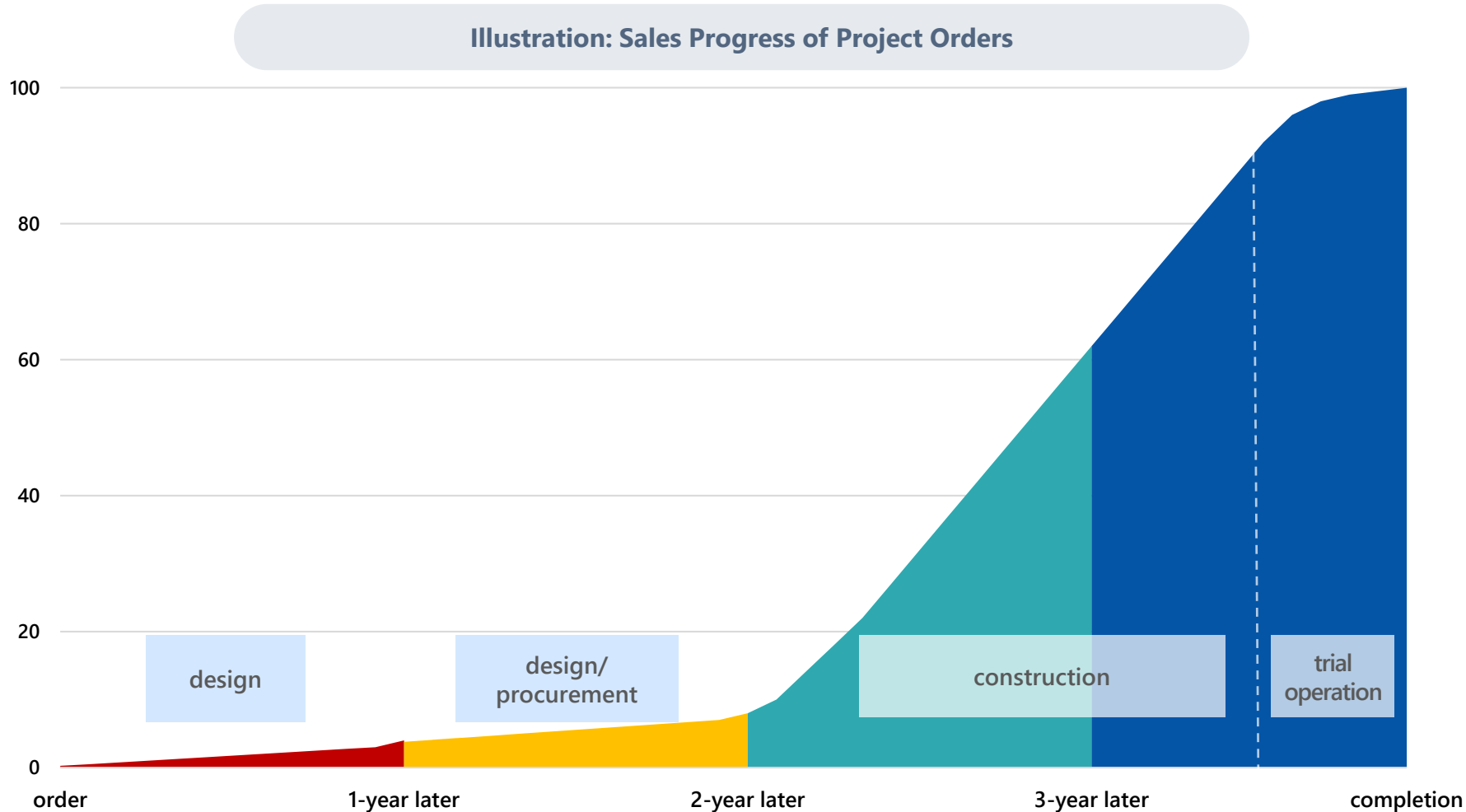
ROE = Profit / Equity capital

Upward Revision
at November 8, 2024

(JPY millions)	FY2024	FY2025	FY2026	3-year total
Orders received				
Total	230,000	180,000	190,000	600,000
Domestic Environment and Energy	198,700	146,700	155,000	500,400
Overseas Environment and Energy	4,000	4,000	4,000	12,000
Package Boiler	18,800	19,300	20,000	58,100
Equipment and Systems	9,000	10,500	11,500	31,000
Net sales				
Total	143,000	152,000	165,000	460,000
Domestic Environment and Energy	109,400	118,900	130,000	358,300
Overseas Environment and Energy	5,000	4,000	4,000	13,000
Package Boiler	18,600	19,100	19,700	57,400
Equipment and Systems	10,500	10,500	11,800	32,800
Operating profit				
Total	11,200	11,200	13,200	35,600
Domestic Environment and Energy	12,300	12,600	14,400	39,300
Overseas Environment and Energy	300	0	0	300
Package Boiler	1,000	1,050	1,100	3,150
Equipment and Systems	700	700	900	2,300

*Adjustments omitted

For EPC orders, sales are recorded according to the progress of construction. Assuming that the plant construction period is 4 years, sales will make significant progress in the 3rd year and the first half of the 4th year (see “construction” period in the diagram below).



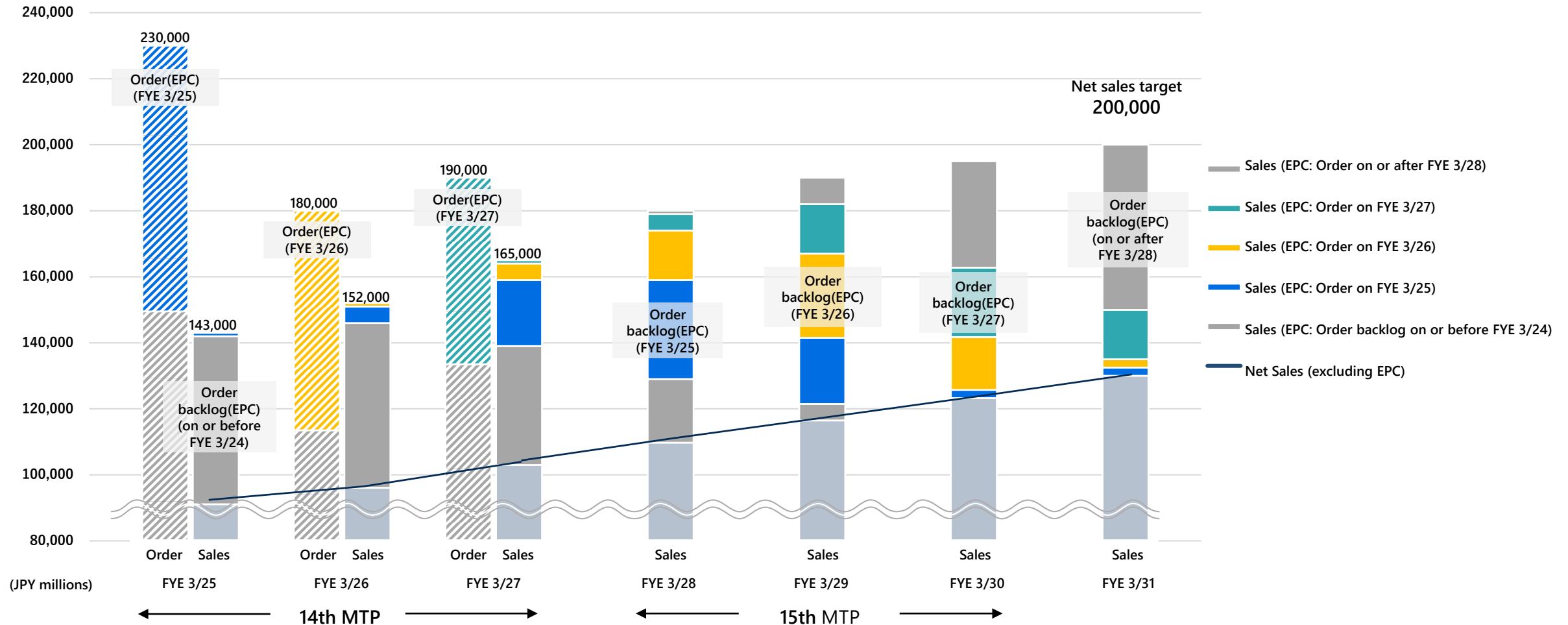
14th Medium-Term Management Plan

Illustration: Transition of Orders Received and Net Sales (reference material)

TAKUMA

Regarding EPC orders in the 14th MTP (see shaded area in the diagram below), **it will be from the 15th MTP that significant contributions will be made to sales.**

By significantly increasing orders during this medium-term plan period, we aim to achieve net sales of 200 billion yen in FY 2031.



In the Domestic Environment and Energy Business, which is a pillar supporting growth, we will increase EPC orders and link them to operation management and maintenance **to achieve a virtuous cycle between the EPC Business and recurring revenue model businesses.**

Priority measures by business/field

		<div>Basic policy ①</div> <div>Maintaining and expanding our market position in the EPC Business</div>	<div>Basic policy ②</div> <div>Establishing a revenue model that fully utilizes recurring revenue</div>
Domestic Environment and Energy	Municipal solid waste treatment plants	<ul style="list-style-type: none"> Expansion of orders for renewal and primary equipment improvement projects Review of measures to address market changes <div> <ul style="list-style-type: none"> 3 or more renewal project orders per year Steady response to primary equipment improvement projects Support for decarbonization models and private sector utilization </div>	<ul style="list-style-type: none"> Maintenance and expansion of orders for operation management, maintenance, and long-term O&M projects <div> <ul style="list-style-type: none"> Steady orders for regular maintenance work and DBO projects Cost reduction and quality improvement with data utilization </div>
	Energy plants	<ul style="list-style-type: none"> Ongoing orders for new small and medium-sized biomass power generation plants and renewal of plants for private consumption and industrial waste treatment plants 	<ul style="list-style-type: none"> Ongoing maintenance orders for delivered projects Enhancement of solution proposals, such as functional improvements and energy savings
	Water treatment plants	<ul style="list-style-type: none"> Acquisition of orders for sewage sludge incinerators and sand filtration facilities Expansion of share through technological superiority 	<ul style="list-style-type: none"> Ongoing maintenance orders, including regular maintenance work
	Power retail business	-	<ul style="list-style-type: none"> Expansion of revenue by expanding relative power sources, securing new customers, and expanding service lineup

We will focus on expanding our product lineup, developing overseas operations, and securing and developing human resources to maintain and expand orders in each business.

Priority measures by business/field

Basic policy ③

Steadily expanding revenue in the Package Boiler Business and Equipment and Systems Business

Package Boiler

- Ongoing orders for renewal projects from expansion of product lineup, including low-carbon and decarbonization products
- Strengthening of maintenance business and overseas development

Equipment and Systems

- Building equipment business (air conditioning, water supply and drainage sanitation equipment work): Strengthening of sales capabilities, securing and development of engineers, and cost reductions
- Semiconductor industrial equipment business: Maintenance and expansion of domestic sales and strengthening of overseas sales

Basic policy ④

Building a track record for the future in international business

Overseas Environment and Energy

- Acquisition of orders for biomass power plants through expansion of supported fuels
- Acquisition of orders for energy from waste plants, primarily in Thailand and Taiwan

We will gather information with a focus on the business fields below to actively look into projects that match our business strategy.

Priority field

Segment (Business field)		Purpose/category		
		Functional enhancement	Expansion of business domain	In-house production of key devices
Domestic Environment and Energy	Municipal solid waste treatment plants	Strengthening of existing businesses and expansion of personnel	Expansion of peripheral businesses and creation of new businesses	Manufacturers and engineering companies
	Water treatment plants			
	Energy plants			
	Power retail business	Expansion of service lineup and personnel		
Overseas Environment and Energy		Local partners in EPC Business		
Package Boiler		Supplementation of producing functions	New heat source systems	
Equipment and Systems		Securing of human resources and area expansion (Equipment business)		

We will promote various human resources measures to expand resources in recurring revenue model businesses and the EPC Business.

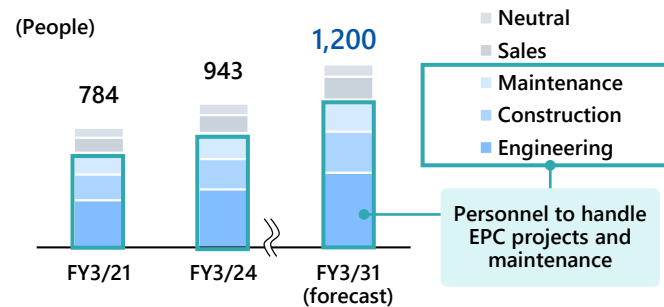
Challenges

- Elimination of human resources gap (quantity and quality) to achieve Vision 2030
- Establishment of internal environment where diverse human resources can play active roles over the long term
- Fostering of a corporate culture that accepts change while passing down a good corporate climate

Human resources measures linked to management strategy

Securing of diverse human resources matching our business strategy

- Assumed number of necessary personnel*1



Strengthening of foundation for human resources development

- Enhancement of training system by rank and field, etc.



Further improvement of job satisfaction and pleasant work experience

- Effective use of senior human resources
- Establishment of a personnel system that enables work-life balance



Main KPI

Number of main career track and management positions filled by women*2

At least **35**

Utilization of parenting support programs*3

At least **25%**

Employee engagement

Highest rating **50% or more***4

*1. Non-consolidated basis, main career-track (does not include factory work positions, general positions, or secondment). Each of the figures is for the beginning of the year.

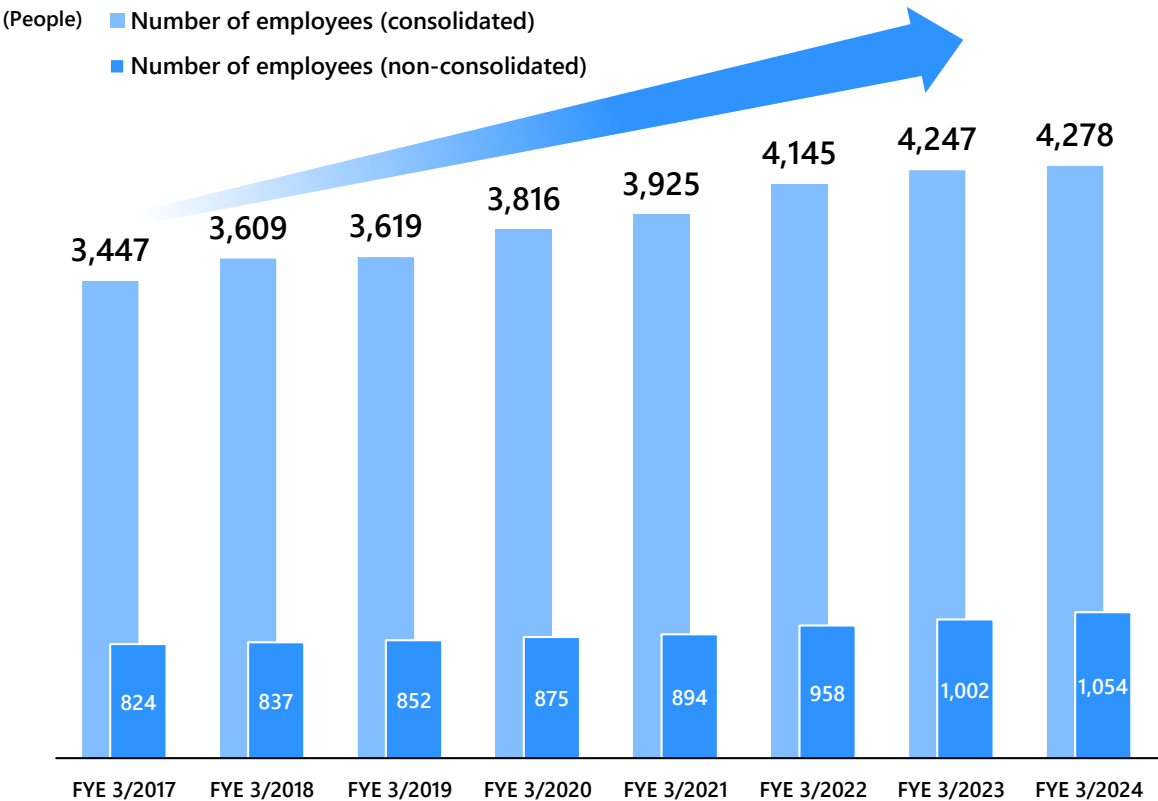
*2. Cumulative total for April 1, 2021 to March 31, 2026.

*3. Average for FY3/2022 to FY3/2026.

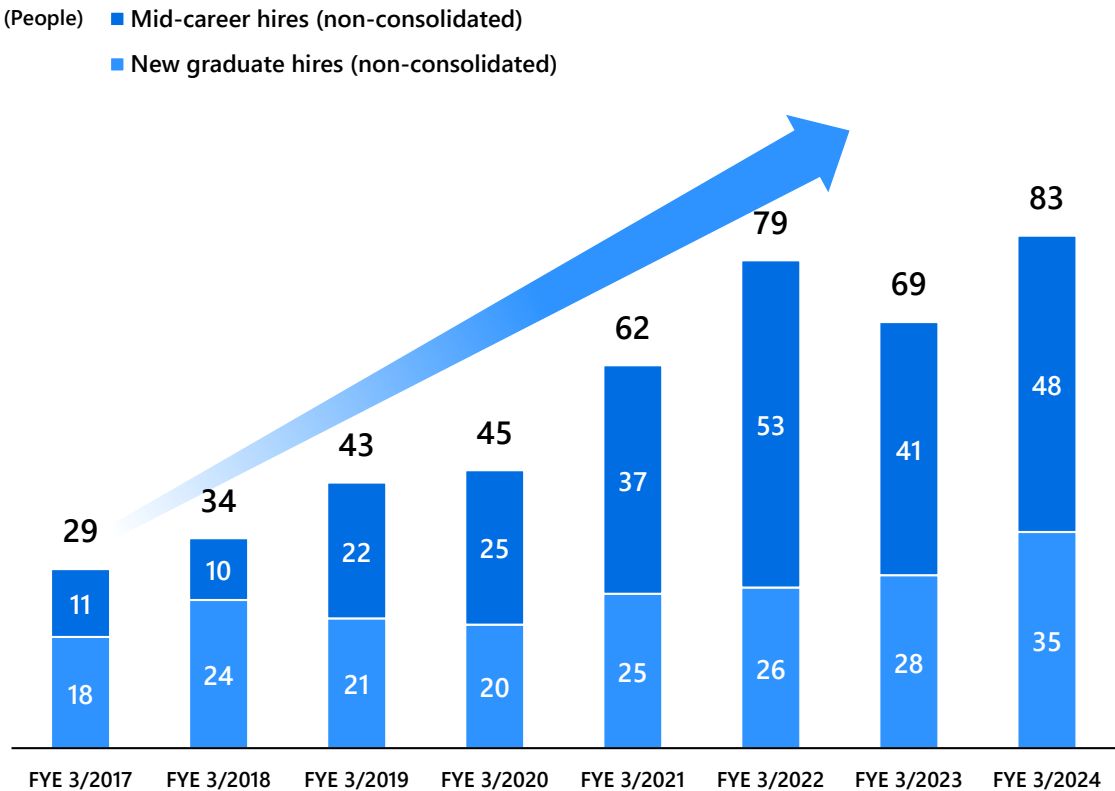
*4. The percentage of respondents giving the highest rating for each question (on a 5-point scale) on job satisfaction and pride in the company in the Employee Attitude Survey.

Strengthen hiring and training of human resources to pass on our greatest strength, our technological capabilities, and expand our resources. Continue hiring and training efforts in the Engineering Division, as well as the Construction and Maintenance divisions.

Number of employees

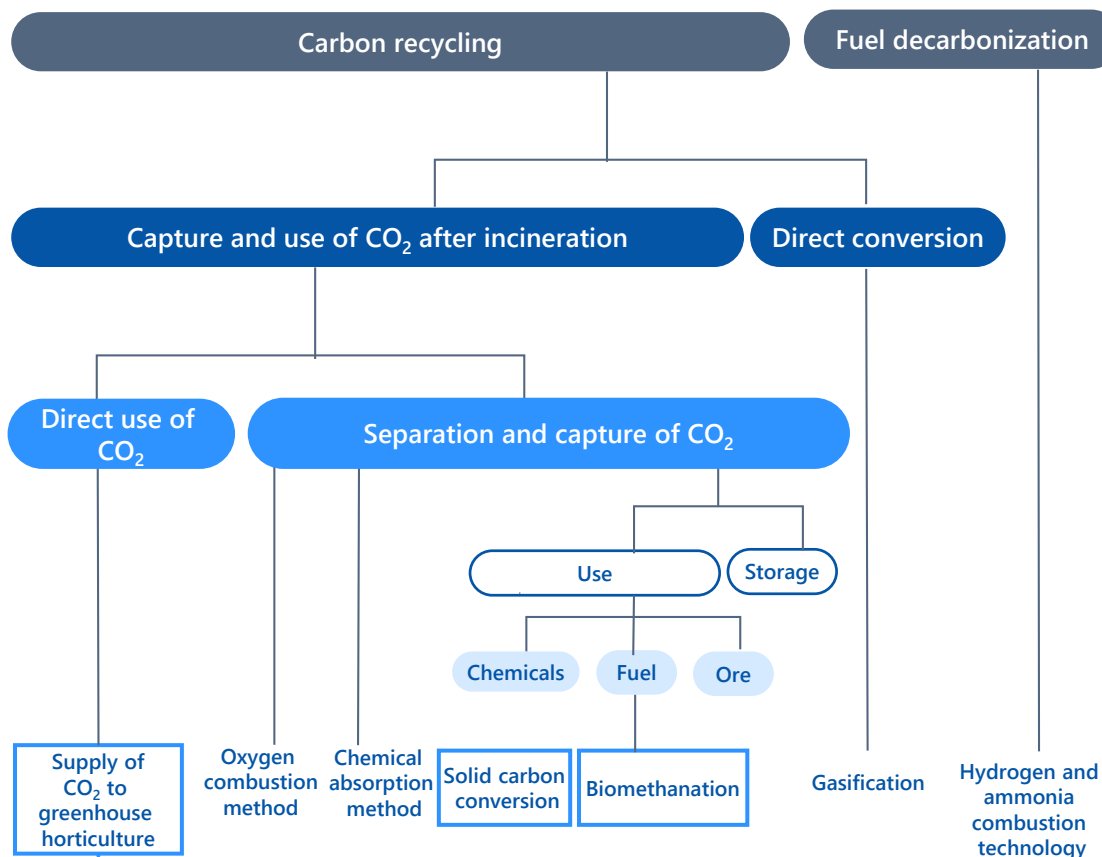


Number of new hires



In addition to fine tuning existing technologies, we will strengthen R&D focusing on CCUS and carbon recycling technologies to realize a decarbonized society.

R&D roadmap for decarbonization technologies



Examples of our technology/R&D

Agricultural use of CO₂ from flue gas purification

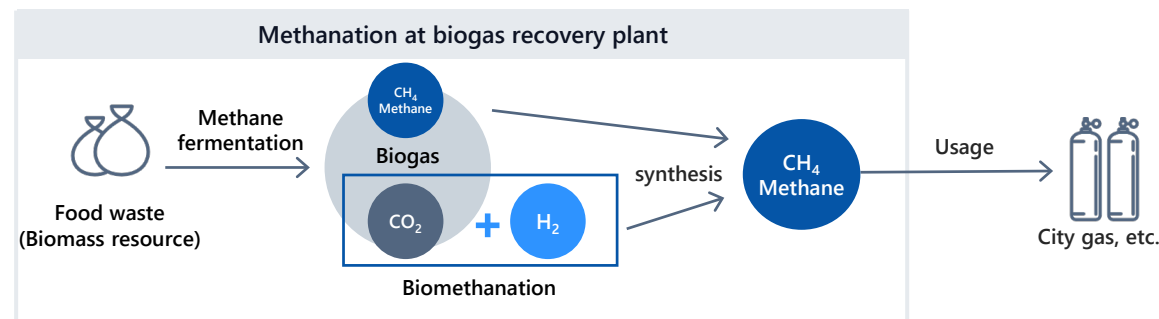
- Delivered a t-CarVe® CO₂ supply system with a customer (SARA Inc. and F Bit Communications Corp.) that directly utilizes purified flue gas generated from burning woody biomass as fuel, after removing components harmful to plant growth, in a green house.
- Launched joint demonstration experiment with AEON AGRI CREATE Co., Ltd. at the Machida City Bio Energy Center (Machida City, Tokyo) to utilize CO₂ from combustion gases generated at the waste treatment facility in strawberry cultivation.

Solid carbonization

Technology for recovering CO₂ from the flue gas of waste incineration facilities as solid carbon. Can be used as a raw material for chemicals, such as carbon black.

Biomethanation

Technology that supplies hydrogen to biogas generated by methane fermentation of food waste and converts CO₂ into methane using microorganisms. Methane can be used as fuel for city gas, etc.



“Offensive” digital transformation (DX) has had some success in areas such as automated plant operation (AI development). We will continue efforts to create new value for further strengthening our competitiveness. Regarding “defensive” DX, the entire Group will further promote digitalization to improve productivity and ensure smooth technology succession with limited resources (human resources and time).

Establishment of competitive advantage using “offensive” and “defensive” approaches

Offensive DX

Digitalization of products and services

Providing new value to customers through the use of digital technology in plant construction, operation, and other businesses



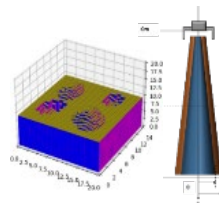
Automatic sorting of glass bottles



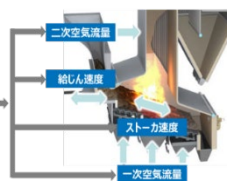
Solution Lab

Enhancement of waste pit management

3D layer model



AI combustion control System



Defensive DX

Digitalization of operations

Business fields

Planning, design, procurement, construction, operation, etc.

Office field

General Affairs, HR, Accounting, etc.

Human Resources

Challenges

- Early development of new hires
- Elimination of waste and control of errors in business processes
- Maintenance and improvement of technical capabilities

Measure

Promotion of knowledge management
(Collection, storage, sharing, and utilization of knowledge and data)

Time

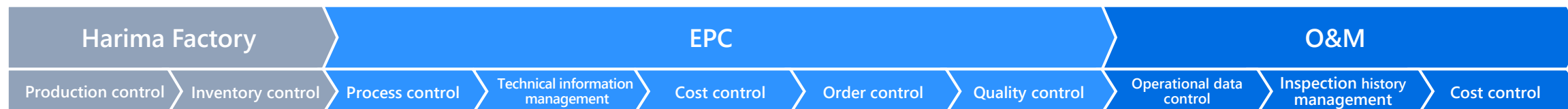
Challenges

- Increase in work volume
- Working hour control and diversification of work styles
- Establishment of systems and data assets that are easy to utilize

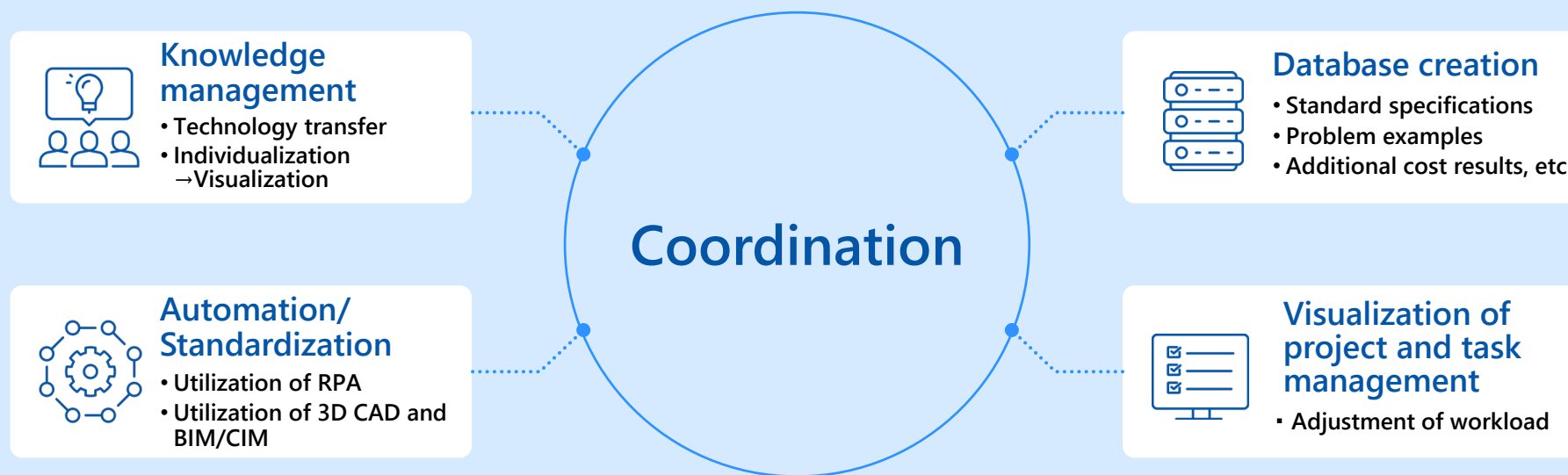
Measure

Improved operational efficiency through automation and project/task management

We are systematizing (visualizing) technical data, plant data, problem information, etc. as data assets to promote knowledge management.



Promote visualization, utilization of data assets, and operational efficiency by linking systems in each process of business fields.



We will establish a quantitative policy based on an analysis of the current situation related to cost of capital and stock price. We will enhance corporate value by balancing business growth and shareholder returns that meet market expectations with a solid financial foundation.

1

Establishment of ROE targets
mindful of cost of capital

Establish target ROE based on the recognition that the cost of equity over the past 10 years has been around 6%.

FY3/2027 ROE
At least **11%**

Upward Revision
at November 8, 2024

FY3/2031 ROE
At least **12%**

2

Establishment of appropriate
cash allocation

Secure a working capital and business risk buffer of roughly 2-3 months' worth of sales (JPY 30-40 billion).

For cash and deposits above that level (operating CF + cash and balance in account), implement **appropriate allocation** between investment in growth and shareholder return.

3

Establishment of new
shareholder return policy

Dividends

Establish as a target **amount whichever is higher calculated based on dividend payout ratio of 50% or dividend on equity (DOE) ratio of 4.0%**

Share repurchase

Share repurchase **totaling approximately JPY 18 billion over three years** to improve capital efficiency

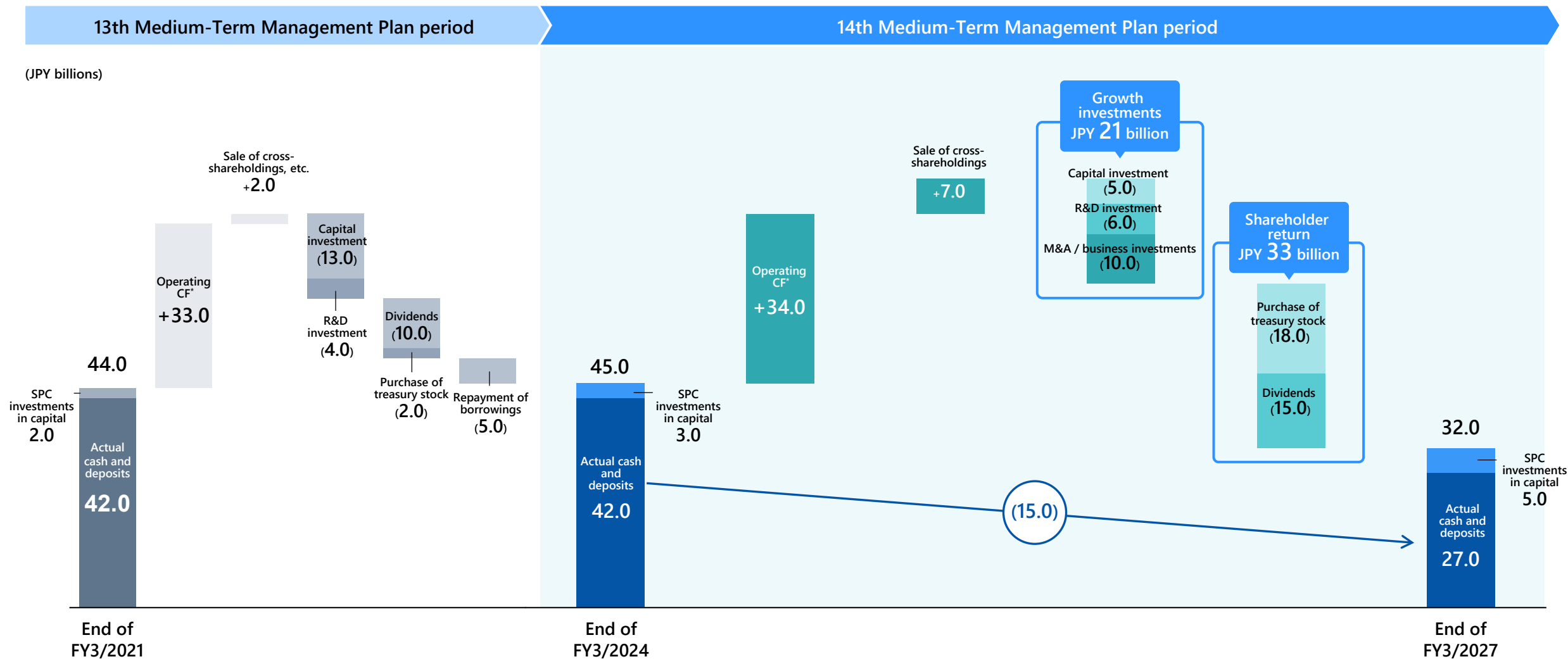
Upward Revision
at November 8, 2024

4

Maintenance of solid
financial foundation
to support the EPC and long-term O&M
businesses

Equity ratio
Maintain at
the **50%** level

Focus on growth investments and shareholder returns and execute appropriate cash allocation to increase corporate value.



*Before R&D expenditure

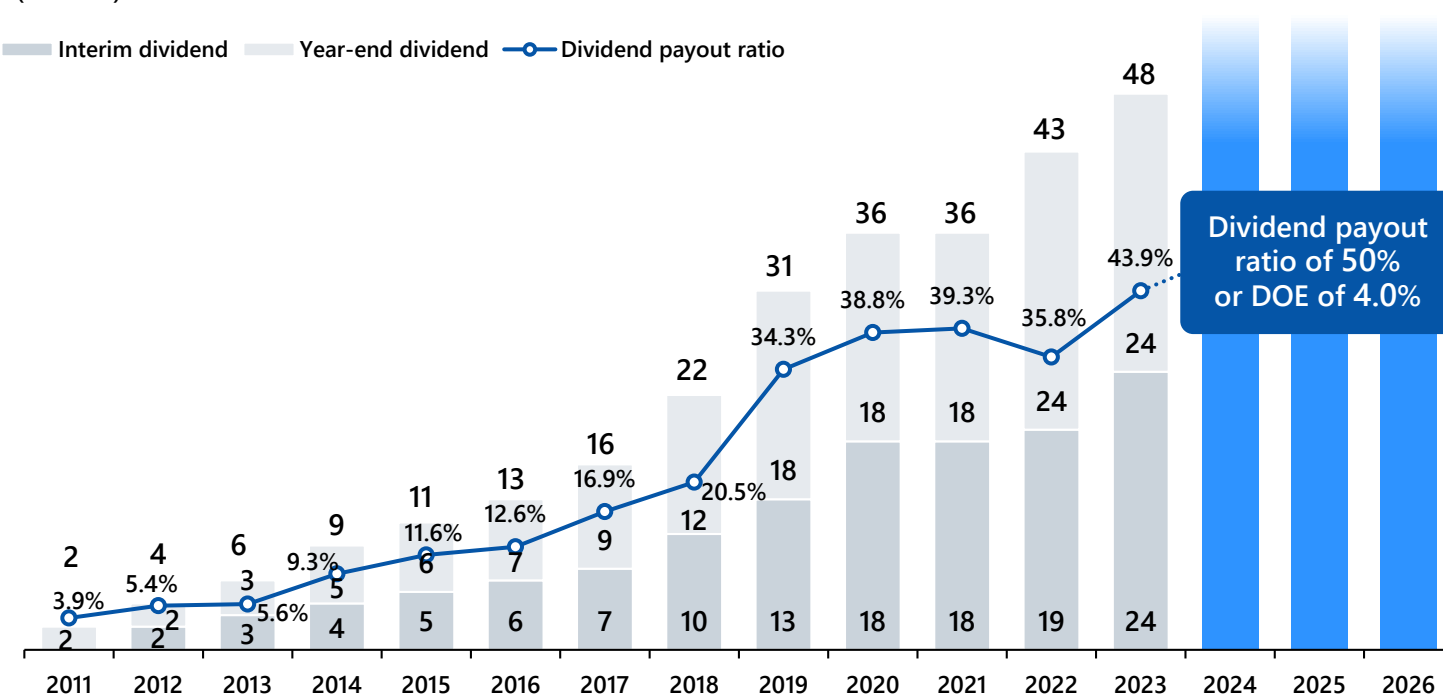
Takuma will work to improve the efficiency of its balance sheet, primarily by reducing cross-shareholdings, and use the cash generated to return profits to shareholders, such as dividends and purchases of treasury shares. As a result, **shareholder returns over the three-year period of the 14th MTP are expected to be a total of 33 billion yen, with a total return ratio of approximately 110%.**

Shareholder return policy

- 1 Enhancing shareholder returns and improving capital efficiency through stable dividends and share repurchase
- 2 Establish as a target amount whichever is higher calculated based on dividend payout ratio of **50%** or dividend on equity (DOE) ratio of **4.0%**
- 3 Share repurchase totaling approximately **JPY 18 billion** over three years to improve capital efficiency

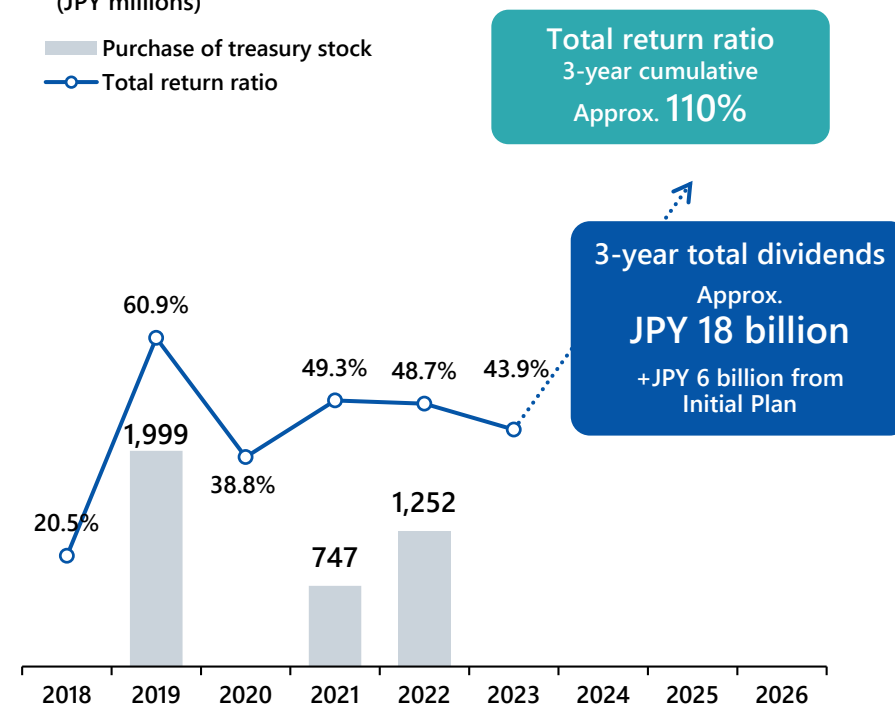
(JPY YEN)

Interim dividend Year-end dividend Dividend payout ratio



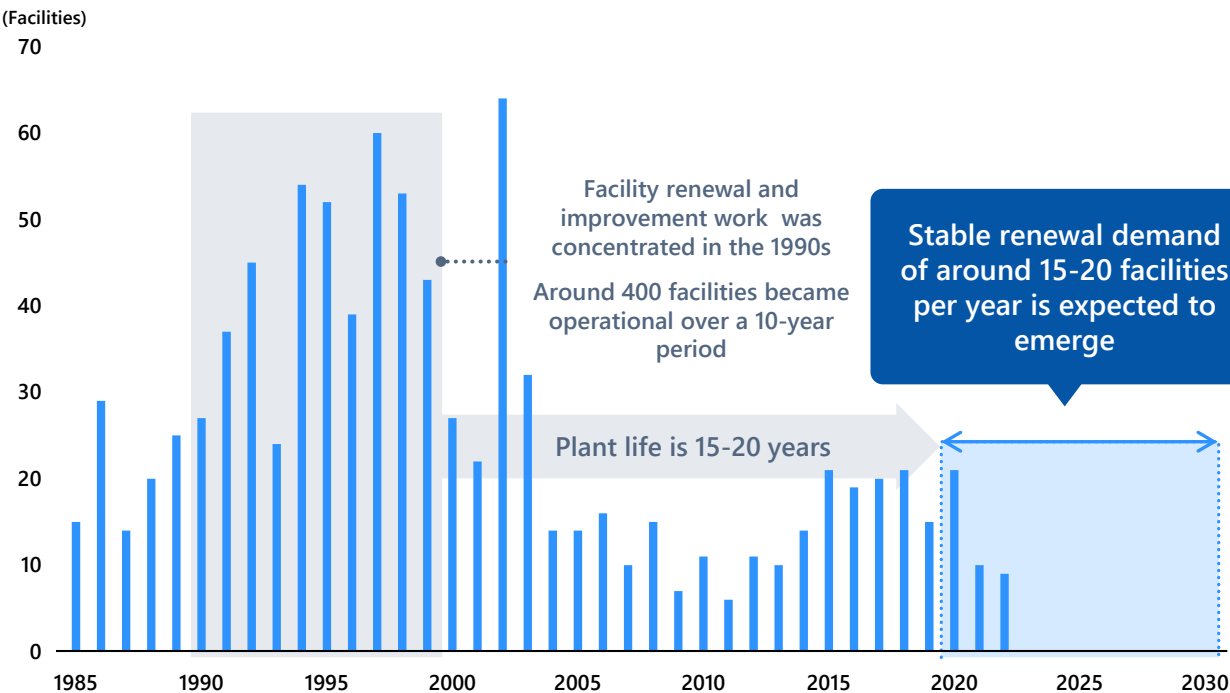
(JPY millions)

Purchase of treasury stock Total return ratio



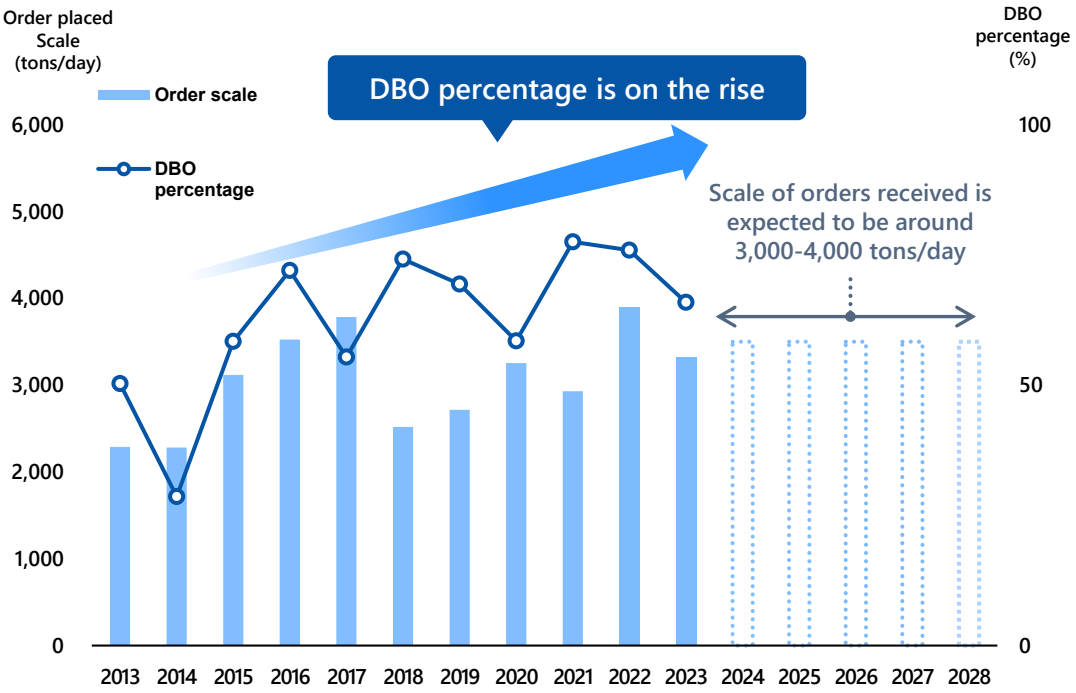
Demand for renewal and service life improvement will continue due to the aging of waste treatment facilities. We expect renewal demand to continue for the time being. DBO orders are on the rise utilizing know-how from the private sector. We expect this to continue.

Number of waste incineration facilities in operation
(1,016 facilities, by operating year)



Source: Prepared by the Company based on the "2022 Survey of Municipal Solid Waste Treatment" by the Ministry of the Environment.
*Includes facilities under construction and where operations have been suspended.

Market size for renewal demand
and DBO percentage



*Based on internal research *DBO percentage does not include PFI method such as BTO (four BTO projects since 2010)

Focus on winning ongoing orders through comprehensive proposals tailored to diversifying needs.

Results

Steadily landing orders for EPC/O&M. The long-term O&M (contract period of 10 years or more) ratio in the order backlog for municipal solid waste treatment plants is over 60%. Along with maintaining and expanding the EPC Business, we expanded our recurring revenue model businesses.

Future policy

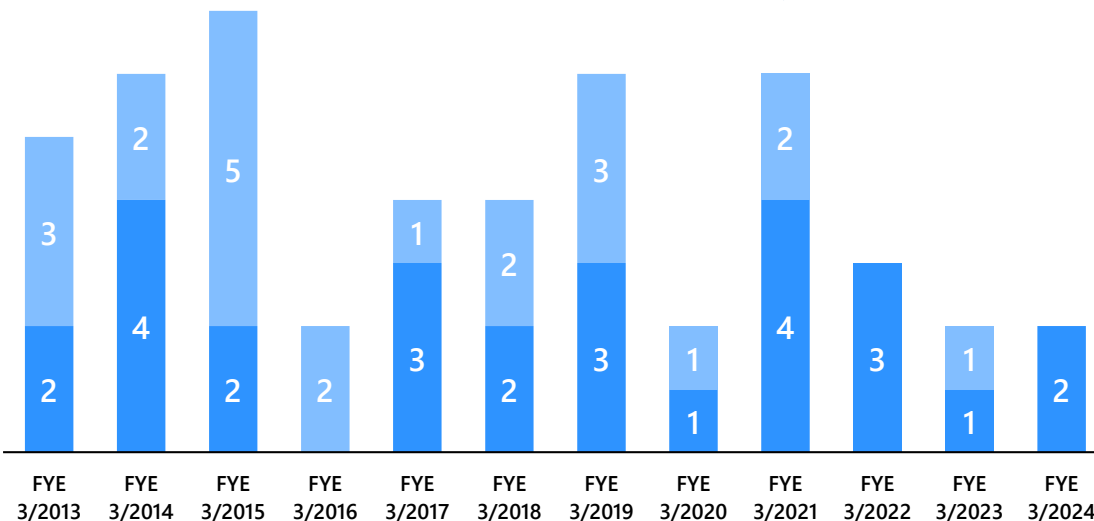
We aim to win at least three renewal orders per year on an ongoing basis and steadily meet the demand for service life extension by enhancing our proposal capabilities through differentiation in areas other than price based on our technological strengths and expanding our ability to respond to projects by increasing resources and improving operational efficiency.

EPC orders

(Projects)

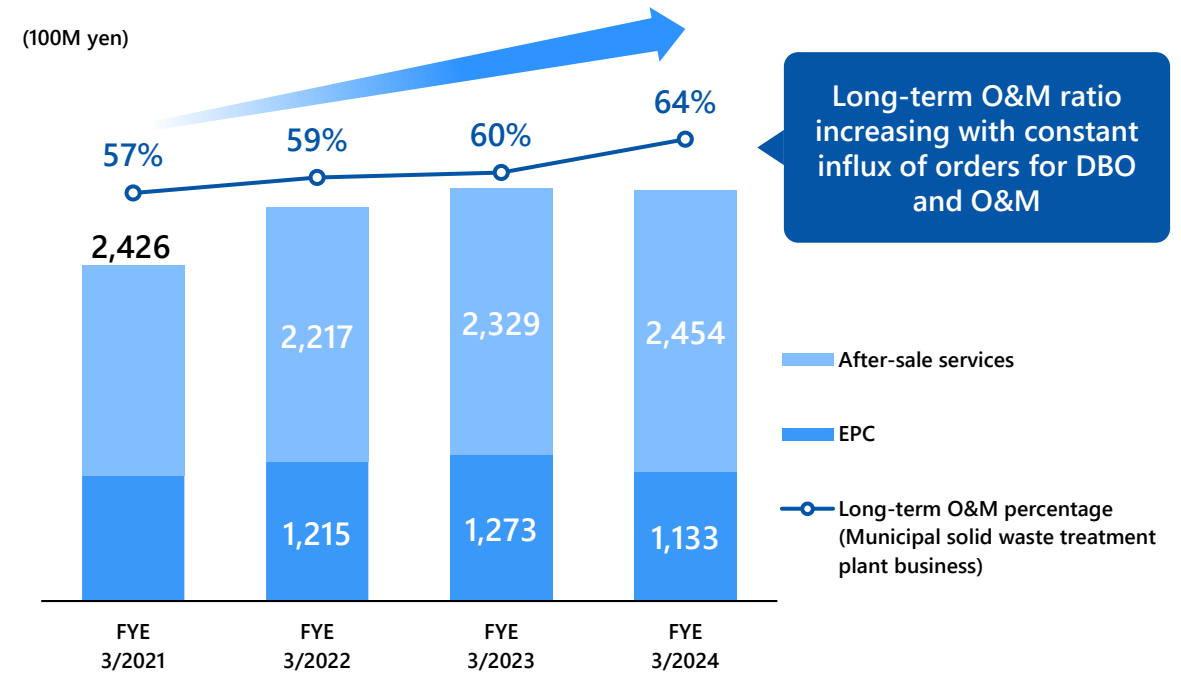
- Primary equipment improvement work
- New construction/renewal

Aiming to build up orders through expansion of resources in addition to steady orders



Order backlog

(100M yen)



Aim for sustainable growth of recurring revenue model businesses by strengthening O&M proposals and proposals for regular maintenance work.

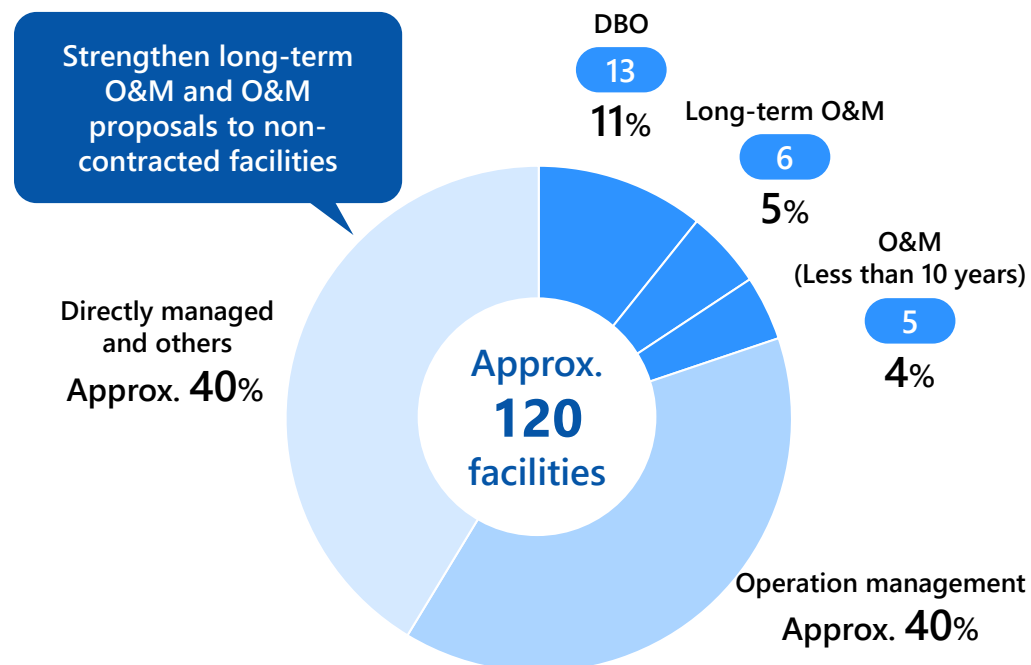
Results

The Company received orders for long-term O&M (contract period of 10 years or more) at 27 facilities (as of the end of FY3/2024). By the end of FY3/2025, 20 of the facilities under contract will be in operation. Operations at the remaining facilities will be launched one after another. Orders at non-contracted facilities also increased as a result of promoting proposal-based sales.

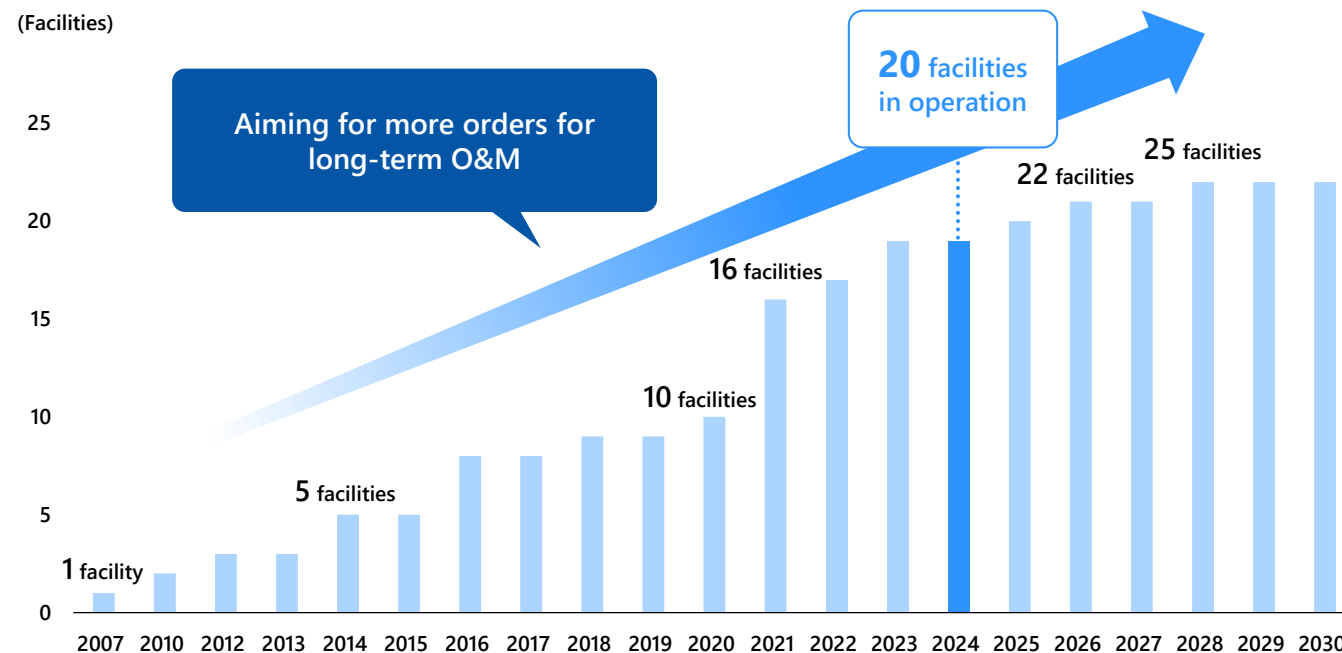
Future policy

Through proposal-based sales, we will maintain and expand orders for after-sale services every year. In addition, we aim to achieve growth of recurring revenue model businesses by enhancing O&M proposals for non-contracted facilities and initiatives to reduce costs through data utilization.

Number of municipal solid waste treatment facilities in operation at beginning of FY2024



Number of long-term O&M (more than 10 years, including DBO and BTO projects etc.) contracts (results and forecasts)



*Accumulation based on contract period of existing projects. The total does not come to 27 facilities because the contracts for some projects will expire before others begin operations.

Situation by Segment

Domestic Environment and Energy Energy Plants

TAKUMA

We contribute to stabilizing our customers' businesses and maximizing their revenues through biomass power plants and large-scale plants that supply electricity and heat to their factories.

Business Environment

Demand for small- and medium-sized biomass power plants, mainly from domestic fuels (such as unused timber), continues, driven primarily by policies to promote renewable energy and decarbonization. In particular, we expect to see demand for renewal of existing plants (fuel conversion) in the paper and lumber industries and demand for new small- and medium-sized power plants (FIT, Non-FIT, FIP).

Future policy

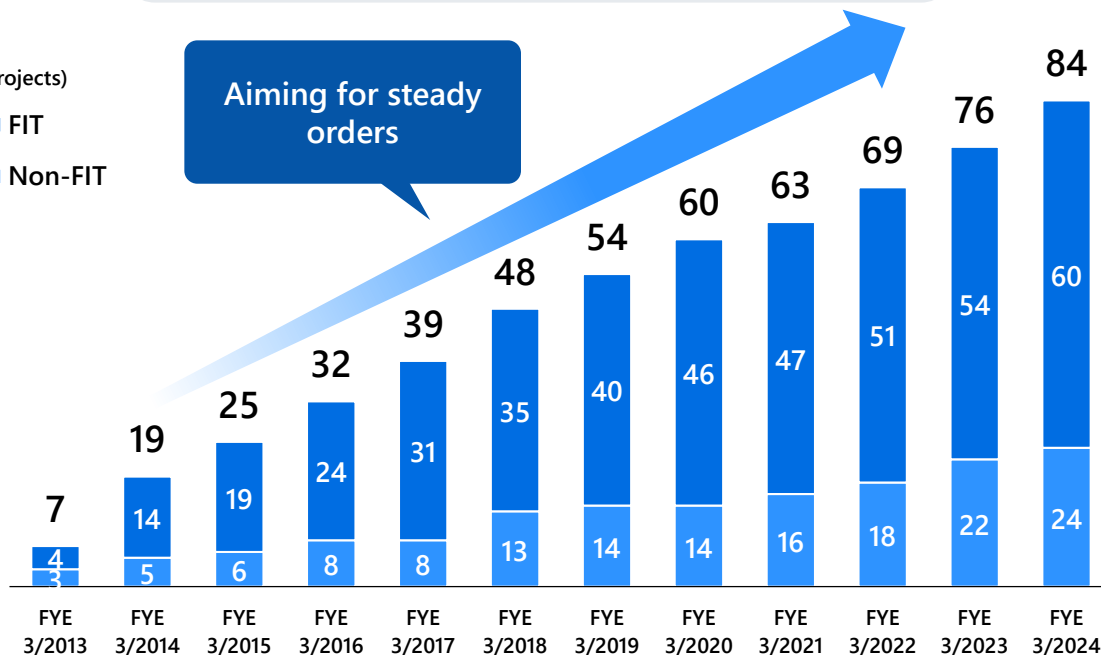
In the EPC Business, the aim is to continue winning orders, particularly for small- to medium-sized biomass power generation plants, including renewal of existing plants and proposals for new power plants. In after-sales service, we aim for recurring revenue model business growth by proposing solutions for energy savings, functional improvement, and service life extension, in addition to maintenance.

Orders received (cumulative)

(Projects)

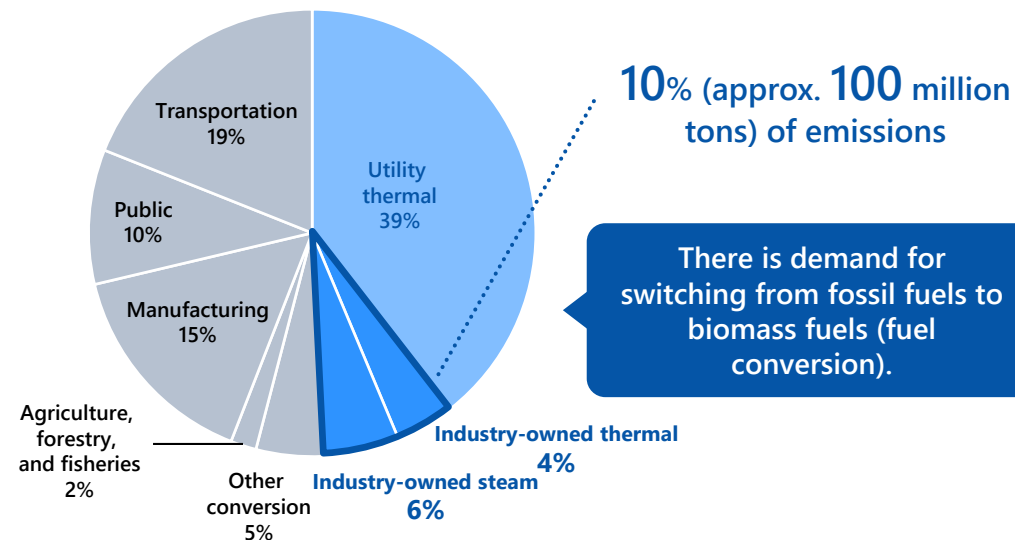
- FIT
- Non-FIT

Aiming for steady orders



* Source: 2022 results from "Comprehensive Energy Statistics" by Ministry of Economy, Trade and Industry

Japan's energy-derived carbon dioxide emissions^{*3}



Contribute to the effective use of energy and decarbonization of sewage treatment facilities through greenhouse gas-reducing and highly energy-saving products.

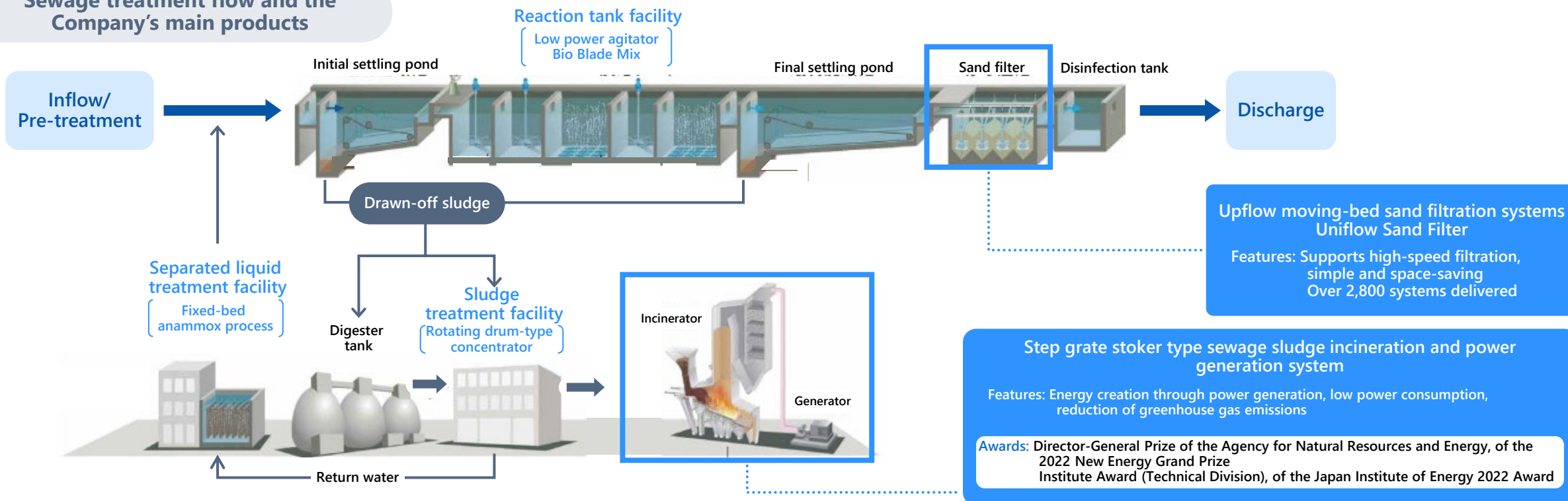
Business Environment

In addition to renewal and service life improvement demand due to aging sewage treatment plants, demand for reduction of greenhouse gas emissions and effective utilization of biomass sewage sludge is growing in the sewage treatment field. Our step grate stoker type sewage sludge incineration and power generation system received two awards in FY2022 for CO₂ reduction, energy saving, and energy creation.

Future policy

Focus on securing ongoing orders with mainstay products (step grate stoker type sewage sludge incineration and power generation system and sand filtration systems) that have high environmental performance and meet customer needs. Also promote establishment of a system for receiving orders for DBO projects, which are expected to continue increasing.

Sewage treatment flow and the Company's main products



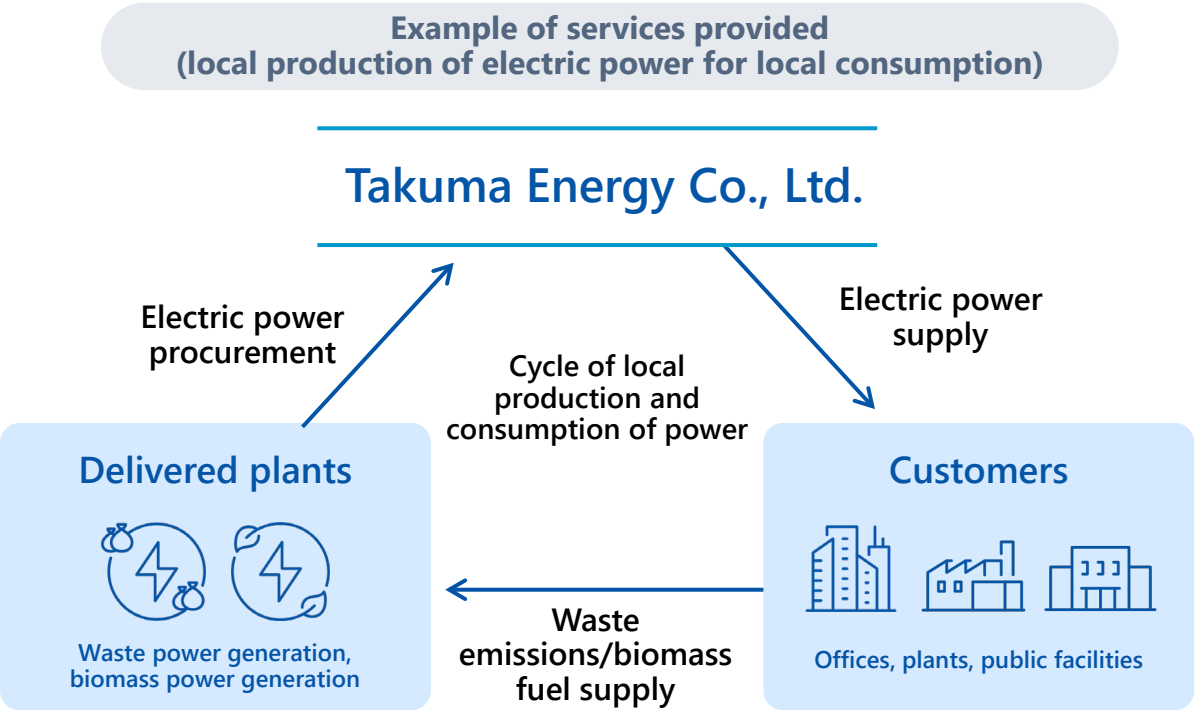
Contribute to stabilizing customers’ electricity rates and reducing greenhouse gas emissions through the procurement and supply of electricity generated from renewable energy and non-fossil fuels.

Business Environment

Demand is increasing for renewable energy and CO₂-free electricity for decarbonization. Demand is also increasing for local production of electric power for local consumption.

Future policy

Leverage strength in stable power procurement to promote the supply of electric power to areas near power sources and to environmentally conscious customers. We will also promote expansion of our lineup of related services such as supply and demand management services and environmental value transactions to expand our customer base.

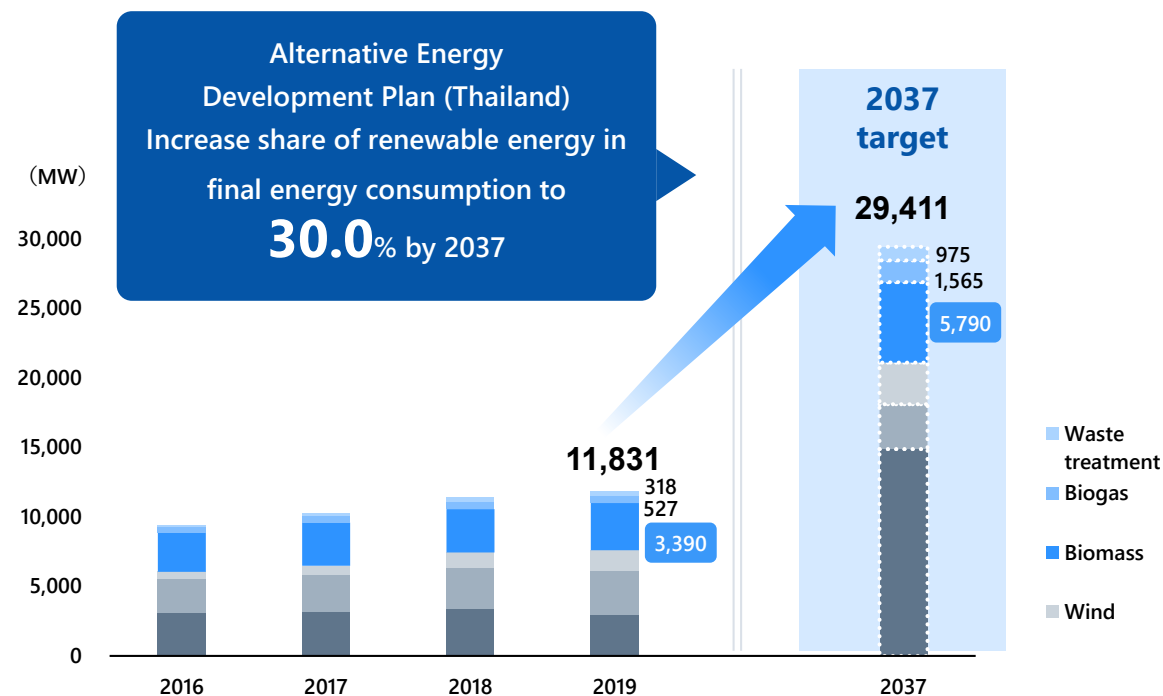


Main recent projects

	Provided to	Main supplier	Start
Local production for local consumption/ supply of CO ₂ -free electric power	Kunohe Village, Iwate	Iwate-Kenpoku Clean Co., Ltd.	Apr 2022-
	Imabari City, Ehime	Imabari City Clean Center	Apr 2022-
	Machida City, Tokyo	Machida City BioEnergy Center	Apr 2022-
	Kurume City, Fukuoka	Miyanojin Clean Center	Jan 2023-
	Kitahiroshima-cho, Hiroshima	Kawakoda Micro Hydro Power Plant *Not delivered by us	Aug 2023-
	Fujisawa City, Kanagawa	Rikyuu Co., Ltd.	Mar 2024-
	Osaka City, Osaka	Nishiyodo Incineration Plant	Apr 2024-

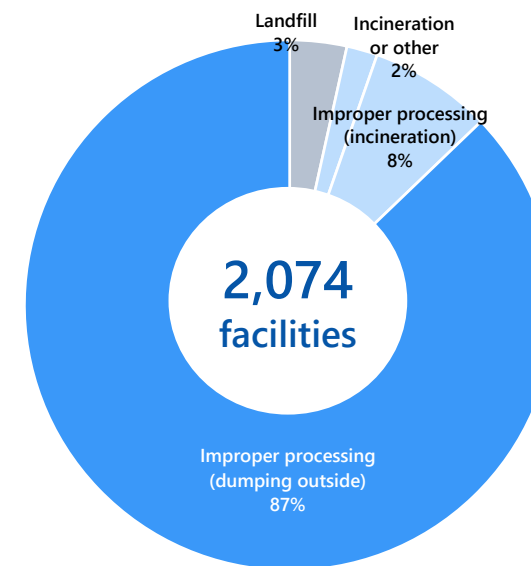
- In addition to population and economic growth, the trend toward decarbonization in Southeast Asia has increased demand for biomass power generation and Energy from Waste plants.
- In Thailand, demand for Energy from Waste and for biomass power generation, including fuel conversion, is expected to grow against the backdrop of government promotion of renewable energy.
- In Taiwan, demand for facility renewal and service life extension is expanding due to the aging of Energy from Waste plants.
- In Taiwan and Vietnam, the need for in-house processing of industrial waste generated in manufacturing plants is also increasing.

Renewable Energy Policy in Thailand*



*Alternative Energy Development Plan (AEDP)

Number of Waste Treatment Facilities in Thailand and Method of Treatment (2022)



Expected to shift from dumping outside to recycling and incineration in the future

*Source: "General Research Report: Waste Situation in Thailand," Bangkok Industrial Information Center, Aichi prefecture (November 10, 2023)
Ministry of Natural Resources and Environment of Thailand

Focus on securing continuous orders for biomass power generation plants and Energy from Waste plants and improving the system.

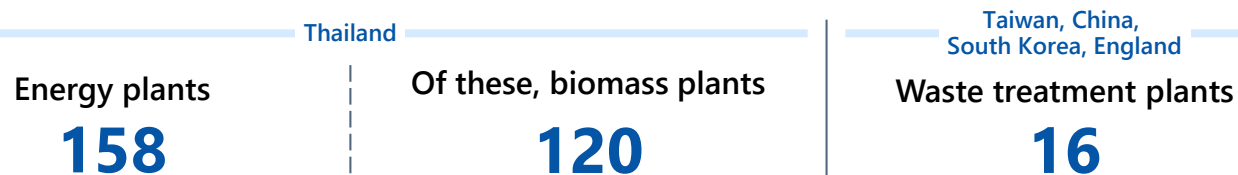
Results

Promoted the development of a system to win orders via local subsidiaries in Thailand and Taiwan, and won 3 orders in FY2021-2023.

Future policy

Aim to expand collaboration with local subsidiaries and partnerships with local companies to increase orders in Southeast Asia and Taiwan. In addition to reducing costs and shortening construction periods, the Company aims to differentiate itself in terms of performance and quality, including stable operation and high-efficiency technology, and to achieve stable profitability and growth by continuing to receive at least one to two new construction orders per year.

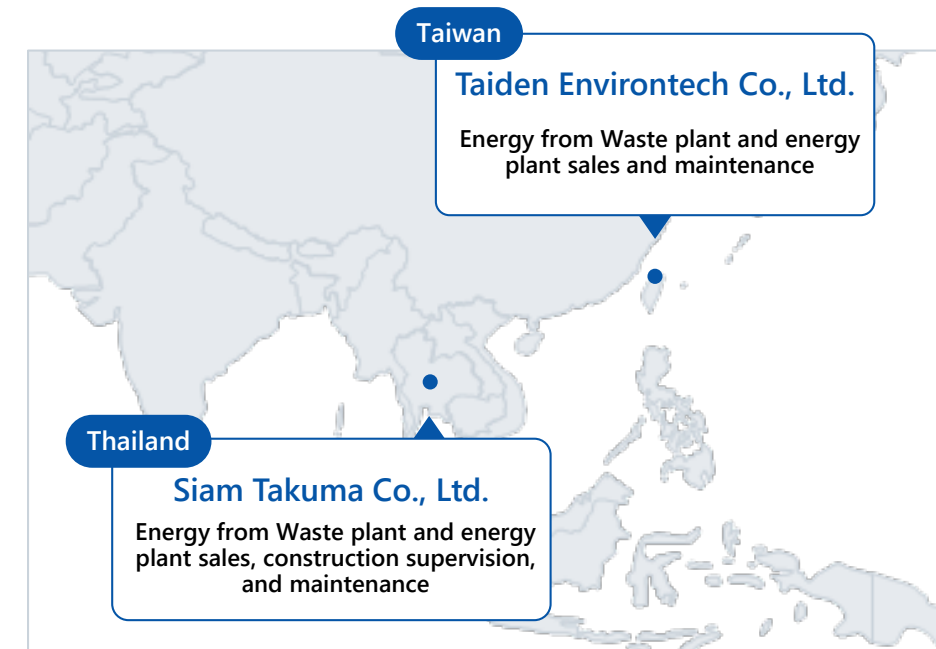
Deliveries (cumulative)



Main recent projects

	Year		Delivered to (Honorifics omitted)	Description	Scale	Scheduled Completion
Energy from Waste plant	FYE 3/2022	Q3	TA-HO LU-TSAO ENVIRONMENT CO., LTD. (Taiwan)	Stoker upgrade	900 t/day	Nov 2024
Waste treatment plant	FYE 3/2023	Q4	Company A (Vietnam)	New construction	427 t/day	Sep 2025
Energy plant	FYE 3/2023	Q4	Company B (Thailand)	New construction		Mar 2025

Local subsidiaries (2 companies)



Package Boiler Business

Domestic market has matured, but we expect a certain level of demand for renewal and other work to continue for the time being.

In addition to new heating businesses (hydrogen, biomass, electric heat sources, decarbonized products, etc.), the Company aims to expand the scale of orders by expanding its overseas business in Southeast Asia, particularly in Thailand.

→ See “Topics of Package Boiler Business” on P.17

Group company

NTEC Nippon Thermoener Co., Ltd.

Manufacture and sale of and after-sale services for steam boilers, hot water heaters, and other heating products

Main products



Once-through
boilers



Vacuum-type
water heaters



Hybrid hot
water supply
systems



Biomass
boilers



Hydrogen-fired
vacuum-type
water heaters



CO₂ capturing
compact once-
through boilers

Equipment and Systems

Building equipment business

Strong demand is expected to continue due to urban redevelopment and new construction and renewal of medical and welfare facilities. The Company will continue to further strengthen its sales and construction capabilities by securing and training human resources, thereby maintaining and expanding the scale.

Semiconductor industrial equipment business

The semiconductor and electronic device manufacturing equipment market is growing over the medium to long term due to the trend toward digitalization. Aim to maintain and expand the scale by providing products that create and maintain a highly clean environment required for the manufacturing process.

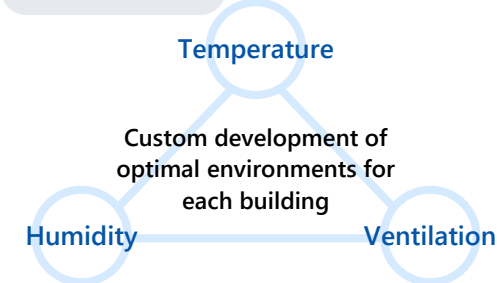
Group companies



Sun Plant Co., Ltd.

Design and construction of air conditioning and plumbing equipment for buildings

Characteristics



Dan-Takuma

Sale of and after-sale services for various semiconductor industrial systems

Main products



Chemical
filters



AMC environmental
concentration analyzers

Term	Definition
EPC	Engineering, procurement, and construction; one approach we use in our plant construction business.
O&M	Operation and maintenance; one approach we use in our plant operation business.
DBO	Design, build, and operate; one approach we use in our plant construction and operation businesses (EPC + O&M).
DBM	Design, Build, and Maintenance. These projects take the form of EPC + long-term maintenance agreements.
BTO	Build, transfer, and operate; one approach we use in our plant construction and operation businesses (EPC + O&M).
Primary equipment improvement project	A method that aims to restore functionality and extend the lifespan of facilities by updating and improving deteriorated equipment while maintaining the existing buildings, etc. which have a long useful life, from the standpoint of reducing life cycle costs.
FIT	A feed-in tariff for renewable energy.
FIP	Feed-in Premium; a system in which a certain premium (subsidy amount) is added to the price at which electricity is sold in the market.

Information related to performance forecasts, business plans, and related topics included in this document is based on data currently available to the Company and on certain assumptions that are deemed to be reasonable. This information includes elements of risk and uncertainty.

Please note that actual performance may diverge significantly from these forecasts for a variety of reasons.

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