Yotai Refractories Co., Ltd.



Second Medium-term Management Plan

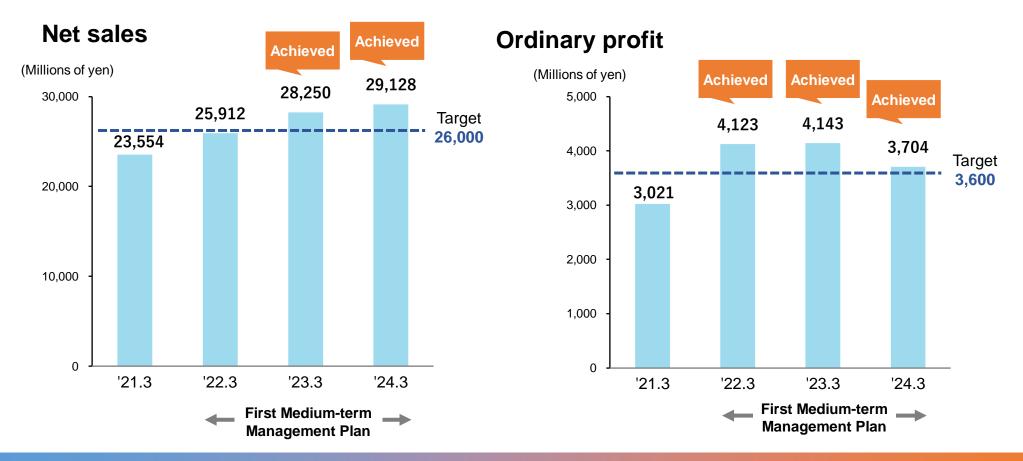
(Fiscal 2025 ending March 31, 2025 to Fiscal 2027 ending March 31, 2027)

May 10, 2024

Securities Code: 5357

Summary of the First Medium-term Management Plan (Quantitative Aspects) (1)

- Although the amount of domestic crude steel production in the steel industry, the Company's major customer, has been declining since FY2022 (fiscal year ended March 31, 2022), net sales have increased due to price pass-through.
- In the final fiscal year, the Company was unable to expand its business performance partially due to the rise in raw material and fuel costs, mainly caused by the weak yen, depreciation expenses, and labor costs caused by wage hikes, while production for steel and cement did not grow.



YOTAI REFRACTORIES CO., LTD

Summary of the First Medium-term Management Plan (Quantitative Aspects) (2)

- Even excluding the transfer of equity in YINGKOU NEW YOTAI REFRACTORY CO., LTD., a consolidated subsidiary, and the recognition of extraordinary income due to the reduction of cross-shareholdings, profit and ROE for the final fiscal year were 2,669 million yen and 8.6%, respectively, achieving the targets.
- The engineering business increased its workforce through mid-career recruitment, etc. and handled a large number of construction projects, resulting in strong net sales and profits. The Company achieved record-high net sales and profits in the final fiscal year. (Million ven)

	FY2021 Result	FY2022 Result	FY2023 Result	FY2024 Target in the Medium- term Management Plan	FY202	4 Result	Change from FY2021
Net sales	23,554	25,912	28,250	26,000	0	29,128	+23.7%
Operating profit (Operating profit to sales ratio)	2,921 (12.4%)	4,089 (15.8%)	4,012 (14.2%)	3,500 (13.5%)	0	3,602 (12.4%)	+23.3%
Ordinary profit (Ordinary profit to sales ratio)	3,021 (12.8%)	4,123 (15.9%)	4,143 (14.7%)	3,600 (13.8%)	0	3,704 (12.7%)	+22.6%
Profit attributable to	1,845	2,966	2,971	2,400	0	3,878 (13.3%)	+110.2%
owners of parent (Profit to sales ratio)	(7.8%)	(11.4%)	(10.5%)	(9.2%)	0	2,669 * (9.2%)	+44.7%
DOE	6 69/	/ /0.00/	0.70/	. 8% -	0	12.2%	+5.6 pts
ROE	6.6%	10.0%	9.7%	070	0	8.6%*	+2.0 pts
Consolidated payout ratio	20.1%	30.4%	30.5%	30%	0	41.4%	+20.3 pts
excluding extraordinary income from the transfer of equity in YINGKOLI NEW YOTAL							

* Figures excluding extraordinary income from the transfer of equity in YINGKOU NEW YOTAI REFRACTORY CO., LTD., a consolidated subsidiary, and the reduction of cross-shareholdings.

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YOTAI REFRACTORIES CO., LTD

Summary of the First Medium-term Management Plan (Qualitative Aspects)



		Achievement level	Outline of the initiatives		Issues
Increase net sales by	sales by	Δ	Products	 Achieved increased net sales by revising prices to cope with higher raw material and fuel prices Reinforced the structure to secure a stable supply of products Developed new products, such as environmentally friendly refractories, and asked customers to evaluate their performance. Initiatives to increase sales volume are in progress 	Measures to increase sales volume Refer to page 11
Maint	improving the quality of products and services	0	Technology/ Sales	Progress was made in hiring and training technical service personnel, allowing us to handle the increasing number of projects	Response to the so-called "2024 Problem" in the construction industry Refer to page 11
ain profitabi		0	Customer service	 Expanded the Hokkaido office and increased sales staff in the Kyushu region Increased the number of staff at the Kaizuka branch and established a Tokyo branch in the Engineering Division 	Strengthen sales activities and increase personnel in areas where demand is expected to increase Refer to page 11
ility	Reinforce the structure to secure a stable supply with low costs	0	Raw material procurement	 Reinforced the system to store raw materials in response to geopolitical risks 	Further strengthen the system to store raw materials and diversify procurement Refer to page 12
		0	Rationalization and streamlining	 Installed large presses and high-efficiency presses at each plant to improve the efficiency and quality of the molding process Introduced the "Mikumo" mission-critical system to promote establishment of a foundation for DX Reduced labor hours by utilizing AI-OCR and RPA 	 Investment in pre- and post- processes to maximize benefits from cost reductions Create positive effects by promoting DX Refer to page 12

Summary of the First Medium-term Management Plan (Qualitative Aspects)



		Achievement level		Outline of the initiatives	Issues
Maintain profitability	Cultivate new revenue sources	Δ	R&D structure	 Reinforce a new product development system by increasing the number of personnel at the Technical Research Laboratory and the Advanced Materials Laboratory, and by installing high-performance analysis equipment Promote hydrogen combustion demonstration experiments through industry-academia partnerships 	 Accelerate development, including development through industry-academia partnerships Refer to page 13
ability		\times	Overseas development	 Establish a foothold for overseas development by finding partners despite delayed progress due to the impact of COVID-19 	Capture growing markets, especially in Asia Refer to page 13
Pro	P	0	E Environment	 Install equipment for decarbonization and strengthen the sustainability-related system and information disclosure Promote effective use of community-based resources 	Install more equipment to reduce GHG emissions and reduce costs Refer to page 14
Promote ESG ma	Build a management	0	S Society	 Implement various measures to enhance the vitality of employees (thorough management of working hours, workplace improvements, and compensation improvements) 	 Further promote health management and career advancement for women Strategic human resource allocation based on work style reform and talent management by DX promotion Refer to page 14
management	promoting ESG	Δ	G Governance	 Communicate with stakeholders, in particular shareholders and investors, provide feedback to the Board of Directors, and implement various measures (adopt RS, transition to a company with an Audit and Supervisory Committee, and increase the number of internal audit staff) 	 Develop and promote management plans from a long-term perspective in response to changes in the environment Establish a governance structure for overseas development Strengthen the management foundation and ensure stable dividend payments Refer to page 14

Invest in People, Products, and Information



	Details	Three-year plan	Amount spent in the three years	Results of initiatives	Growth in the future
Renovation investment	 Investment for rationalization and streamlining 	¥1.4 billion	¥1.4 billion	Renovation of aged facilities	
Stratogia	 Installation of strategic equipment 			 Installation of large presses and high-efficiency presses to each plant to improve productivity and quality Expansion of basic monolithic refractory production lines at the Hinase Plant 	
Strategic investment	 Decarbonization investment BCP investment 	¥2.3 billion	¥3.8 billion	 Response to China risk by securing raw material storage space at plants to store raw materials Installation of a solar power generation system at each plant (1,969 kW in total) Introduction of battery lifts (EV conversion rate: 49.2%) 	
DX	Information system			 A mission-critical system called "Mikumo" started operation in October 2023 	
investment	investment	¥0.4 billion	¥0.4 billion	 Continue to reduce working hours by promoting the use of AI-OCR and RPA (2,850 hours less than the figure for FY2021) 	
Other	 M&A investment, etc. 	¥0.9 billion	¥0.1 billion	 Acquired the refractory raw materials manufacturing business of Shibata Ceramic Raw Materials Co., Ltd. 	

We plan to continue to allocate funds preferentially to themes with large potential for growth

Environment Surrounding Our Company and Issues



Recognition of external environment

Assumptions at the time of formulating the first medium-term plan	Additions at the time of formulating the second medium-term plan
Maturity of the domestic refractories market	Reduction of the domestic production of blast furnaces and cement
Changes in demographic composition	Growing China risk
Rapid development of technology	Regulation limits on overtime work
Contribution to a sustainable society	Concerns about raw material and fuel prices and labor costs remaining high

Our issues

- Capture domestic and overseas demand and build a strategic sales structure in areas where we have strengths
- Develop a management structure to deal with growing uncertainties
- Reinforce the structure to store raw materials and expand procurement sources other than China
- Supply chain management to address the so-called "2024 Problem" in the construction and logistics industry
- DX promotion and investment in human capital
- Capital investment aiming for further cost and manpower reduction
- Capital investment to achieve carbon neutrality

The external environment has been more volatile than expected, so measures from a medium- to long-term perspective and continuously strengthening the foundation are necessary to maximize the effects of the measures implemented to date

Concept and Recognition of the Second Medium-term UV VOTAL REFRACTORIES CO., LTD Management Plan

We newly established the 2030 Vision to achieve a medium- to long-term leap.

We aim to maximize investment returns in 2030 by expanding investment returns during the period covered by the Second Medium-term Management Plan.

Corporate Vision

A company that continues to improve its corporate value sustainably in harmony with society through the enhancement of financial and non-financial value by maintaining profitability and promoting ESG management

First Medium-term Management Plan (FY2022-FY2024)

Establish a structure to achieve the corporate vision

- Earn revenue from existing businesses
- Investment in people, products, and information

Net sales for FY2024 **¥29.1 billion** (including ¥1.3 billion overseas) Second Medium-term Management Plan (FY2025-FY2027)

Continuously develop a structure to achieve the corporate vision and cultivate new revenue sources

- Strengthen the structure through continuous investment in people, products, and information
- Cultivate new revenue sources

Net sales target for FY2027 **¥32.0 billion** (including overseas sales of approx. ¥1.7 billion) 2030 Vision Company with a strong presence in the refractory industry in Japan and Asia

Net sales target for FY2030

¥38.0 billion (including approx. ¥3.5 billion overseas)

Basic Policies of the Second Medium-term Management Plan



Promote ESG management

Second Medium-term Management Plan (FY2025-FY2027)

A period for **continuously developing a structure** to achieve the corporate vision and **cultivate new revenue sources**

Basic strategies and prioritized measures

Continue to **invest in people, products, and information** to maximize investment returns, while responding to changes in the business environment to **strengthen profitability and diversify revenue sources**

Strengthen profitability and diversify revenue sources

2 3 Expand net sales by Strengthen the structure Cultivate new revenue **Promote ESG management** improving the quality of to secure a stable sources products and services supply with low costs **Procurement of raw** E: Environment **Development system** Products materials Further strengthen the R&D Install facilities to reduce GHG emissions Expand sales of new Stable and sustainable raw structure and promote new products and capture needs and promote technological innovations product development in growing sectors material storage and enhancement of domestic production Technical sales **Overseas development** S: Society Continue to recruit and train **Rationalization and** Enhance employee diversification and Examine areas for technical sales staff and streamlining development and establish a address the so-called "2024 create a comfortable work environment foundation Promote rationalization and Problem" in the construction streamlining by continuously industry Utilize overseas OEM strengthening the production products G: Governance **Customer support** structure Strengthen the governance structure that Promote DX that contributes Utilize expanded sales to achieving management contributes to sustainable growth offices and provide attentive

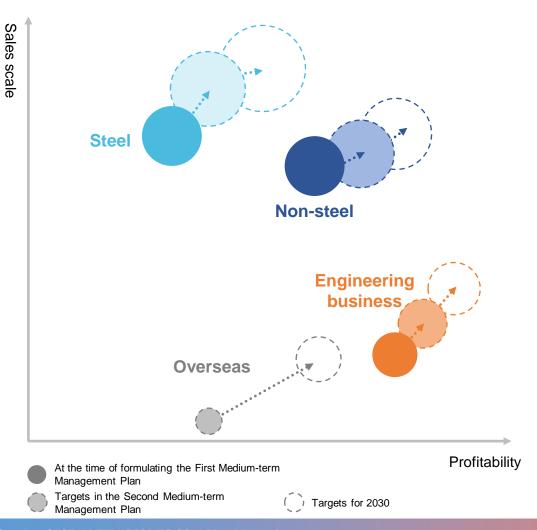
sales support

strategies

Business Portfolio Approach to Achieve the 2030 Vision



Aim to build a portfolio that generates sustainable growth while responding to changes in the environment



Steel (refractory)

Aim to increase net sales and improve profitability as the Company's primary business

 New revenue sources: Environmentally friendly refractories and overseas OEM products

Target KPI

Net sales growth rate (FY2024→FY2027) +10%

Non-steel (refractory)

Increase net sales and improve profitability by leveraging our strengths in doing business with diverse business sectors

• New revenue source: Environmentally friendly refractories

Target KPI

Net sales growth rate (FY2024→FY2027) +5%

Engineering business

Capture robust demand while addressing the so-called "2024 Problem"

Target KPI

• Net sales growth rate (FY2024→FY2027) +10%

Overseas

Generate profit as soon as possible through collaboration with partners and utilization of overseas OEM products

Target KPI

Net sales growth rate (FY2024→FY2027) +25%

Numerical Targets in the Second Medium-term Management Plan



(Million yen)

	EV0004	EV0007	Change fro	om FY2024
	FY2024	FY2027	Amount	Rate
Net sales	29,128	32,000	+2,871	+9.9%
Operating profit (Operating profit to sales ratio)	3,602 (12.4%)	4,400 (13.8%)	+797	+22.2%
Ordinary profit (Ordinary profit to sales ratio)	3,704 (12.7%)	4,500 (14.1%)	+795	+21.5%
Profit attributable to owners of parent (Profit to sales ratio)	2,669 [*] (9.2%)	3,200 (10.0%)	+530	+19.9%
ROE	8.6% [*]	10.0% or more	+1.4 pts or more	-
Consolidated payout ratio	41.4%	60.0%	+18.6 pts	-

* Figures excluding extraordinary income from the transfer of equity in YINGKOU NEW YOTAI REFRACTORY CO., LTD., a consolidated subsidiary, and the reduction of crossshareholdings.

Prioritized Measures (1) Increase Net Sales by Improving the Quality of Products and Services



Products

- Expand sales of new high value-added products and capture needs in growing sectors
 - Promote the performance evaluation of newly developed products to increase sales volume
 - Develop and propose products to promote the use of environmentally friendly refractories
 - · Capture needs in growing sectors
 - Steel: Demand for the diversification of suppliers in response to geopolitical risks, overseas OEM products, and conversion of blast furnaces to electric furnaces
 - Environmental systems: Renovation demand
 - Nonferrous: Recycling-related, aluminumrelated
 - Electronic parts: Semiconductor-related, LiB-related

Technical sales

- Continuous recruitment and training of technical sales staff and response to the so-called "2024 Problem" in the construction industry
 - Promote the continuous recruitment and training of technical sales staff
 - Improve the working environment for construction supervisors by establishing middle offices
 - Structural reform of the engineering business to address the so-called "2024 Problem" in the construction industry

Customer service

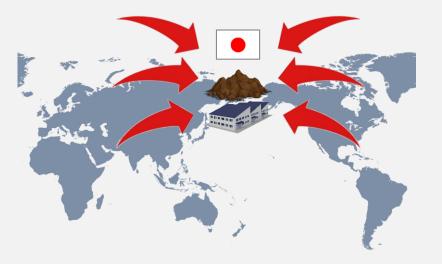
- Active sales activities and sales support utilizing newly established sales offices
- Active recruitment and training of engineers through the use of newly established bases in Tokyo and Osaka
- Rationalization of methods for furnace construction

Prioritized Measures (2) Reinforce the Structure to Secure a Stable Supply with Low Costs



Raw material procurement

- Stable and sustainable storage of raw materials and enhancement of domestic production
 - Strategic accumulation of raw materials and diversification of suppliers



 Continue to conduct evaluation tests for the practical application of production with recycled raw materials

Rationalization and streamlining

- Promote rationalization and streamlining by continuously strengthening the production structure
 - Improve quality and productivity by utilizing large presses and high-efficiency presses
 - Investment in pre- and post-processing to further reduce costs (automation and streamlining of plant operation, improvement of transportation efficiency)
 - Promote IoT in plants

Further promote DX that contributes to achieving business strategies

- Further promotion of DX utilizing the "Mikumo" mission-critical system
- Reform sales activities by digitizing customer management and customer information
- Enhance efficiency in operations through the use
 of AI

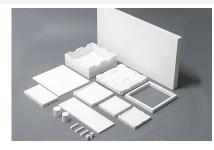
Prioritized Measures (3) Cultivate New Revenue Sources

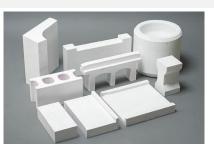


R&D system

Further strengthen the R&D structure and promote the development of new products

- Discover customer needs and identify research themes through collaboration between the sales and engineering departments
- Promote the speeding up of development, including development through industry-academia partnerships
- Promote the development of products that will drive future growth
 - Steel: Continue the development of environmentally friendly refractories, as well as refractories and construction techniques that contribute to labor savings
 - Environmental system: Bricks for next-generation boilers and demonstration furnaces for chemical recycling
 - > Nonferrous: Recycling furnaces at urban mines
 - Electronic parts: Kiln furniture for LiB and non-oxide furniture materials





Overseas development

- Examine areas for expansion and build a foundation
 - Development tailored to the local needs in business sectors where we have strengths, mainly in steel, cement, non-ferrous metals, and electronic components
 - Examine areas for development, identify partner companies, and build a foundation for overseas development
 - Sales of overseas OEM products (Chinese subsidiaries, etc.)

Image of industryacademia partnerships Yotai University Conclusion of contracts University



Prioritized Measures (4) Promotion of ESG Management



Ε

Environment

- Installation of equipment and technological innovation to reduce GHG emissions
 - Promote the development of environmentally friendly refractories (monolithic refractories, nonsintered bricks, etc.)
 - Conversion to manufacturing processes with lower GHG emissions and their development
 - Change of fuels in the combustion process and replacement with non-fossil fuels, such as hydrogen fuel
 - Expand the use of electricity derived from renewable energy sources and the continuous introduction of solar panels, EV vehicles, and battery lifts
 - Utilization of community-based resources



S Society

- Enhance employee diversification and create a comfortable work environment
 - Improve well-being
 - Enhance the retention rate and develop careers through the promotion of work style reforms
 - Reinforce support for work-life balance
 - Increase diversity by increasing the number of female, foreign, and midcareer workers
 - Promote female employees to managerial positions
 - Conduct engagement surveys (employee awareness surveys)
 - Maintain certification as a corporation with excellent health management practices
 - Promote initiatives to respect
 human rights



Governance

C

- Strengthen the governance structure that contributes to sustainable growth
 - Develop and promote management plans from a long-term perspective in response to increasing uncertainty
 - Establish a governance structure for overseas expansion
 - Increase shareholder returns



Schedule of Investment in People, Products, Information, and Other



			Preparation time		n time	Fu	II operatio
		FY	2025	FY	2026	FY	2027
		First half	Second half	First half	Second half	First half	Second half
People							
Recruitment	Active recruitment of personnel with professional careers						
Training	Introduction of training programs by rank and job classification						
Training	Promotion of participation in e-learning (online training)						
	Revision of the retirement age (extension) system						
Work style	Introduction of a regionally fixed employee system						
	Revitalization of the employee shareholding association						
Benefits and welfare	Continuous promotion of health management						
Products	· · ·						
	Installation of large high-pressure presses and high-efficiency presses						
Equipment for	Installation of an automated sorting system						
automation	Remodeling of automatic presses dedicated to deformed shapes						
	Modification of kneading plants	-					
Improvement of facility efficiency	Improvement of plant layout	-					
	Modification of rotary kilns for raw material production	_					
Facilities to develop new products	Installation of non-oxide production facilities and new introduction of special presses	_					
Furnace construction	Rationalization of construction methods	_					
	Installation of solar panels						
Reduction of CO ₂	Continuous introduction of EV vehicles						
emissions	Change of energy sources in Scope 1						
Information		_					
	Continuous enhancement of the functionality of the mission-critical system "Mikumo"						
	Cultivation of new customers by digitizing customer information and sales activity information						
DX promotion	Improvement of productivity and the development of digital human resources by promoting the use of AI, RPA, and low-code tools						
	Improvement of manufacturing quality and cost reduction by promoting IoT at plants						
	Promotion of paperless operations by introducing file servers, electronic workflow, etc.						
	Enhancement of cyber security measures						
• Other							
	M&A investments in related sectors, etc.						

Fund Allocation Approach (Accumulated Total in Three Years)



Strengthen investment and the allocation of funds to shareholders

	Renovation investment ¥1.5 billion	Investment for rationalization and streamlining
Investment ¥8.0 billion	Strategic investment ¥4.0 billion	 Installation of strategic facilities Investment for decarbonization BCP investment
	DX investment ¥0.5 billion	Investment in information systems
	Other ¥2.0 billion	M&A investment, etc.
S	hareholder returns	 Enhance shareholder returns Consolidated dividend payout ratio of 60% or dividend per share of 85 yen, whichever is higher Consider implementing the acquisition of treasury shares while comprehensively examining the Company's financial condition, etc.

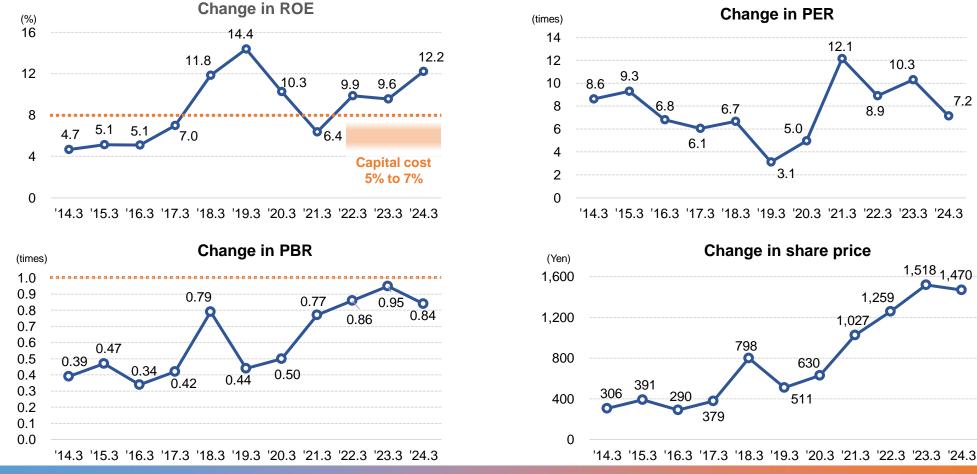
* We will make investments other than those mentioned above as appropriate after careful examination of the details and amount of the investment.



Response for Achieving Capital Cost-and Share Price-Conscious Management

Analysis of Current Status (1) (ROE, PER, PBR, and Stock Price)

- **Capital cost:** Perceived to be around 5% to 7%
- ROE: Established an 8% target in the First Medium-term Management Plan and almost achieved it (the equity spread was secured during the period covered by the First Medium-term Management Plan)
- **PER:** Although the level is improving, the Company recognizes that future growth potential is an issue
- PBR: Currently, the ratio is approximately 0.9 times, and the Company recognizes that the issue is to formulate and promote a management plan from a long-term perspective that can respond to changes in the business environment
- Share price: The share price has been rising over the long term, but has stagnated recently. The Company needs to securely implement financial and non-financial strategies.

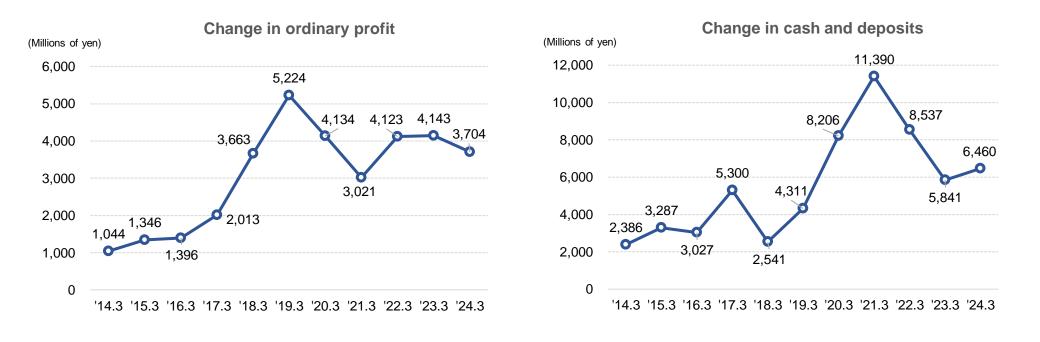


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Analysis of Current Status (2) (Financial Situation)

- The Company's business performance is affected by the amount of domestic crude steel production in the steel industry, which is its main customer, the prices of raw materials in China, and the depreciation of the yen.
- Still, the Company maintains a structure that can generate stable profit due to its strong customer base and financial strength.
- The Company will continue to work on further improvement and enhancement of capital efficiency with an awareness of the capital cost.



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Policies and Targets

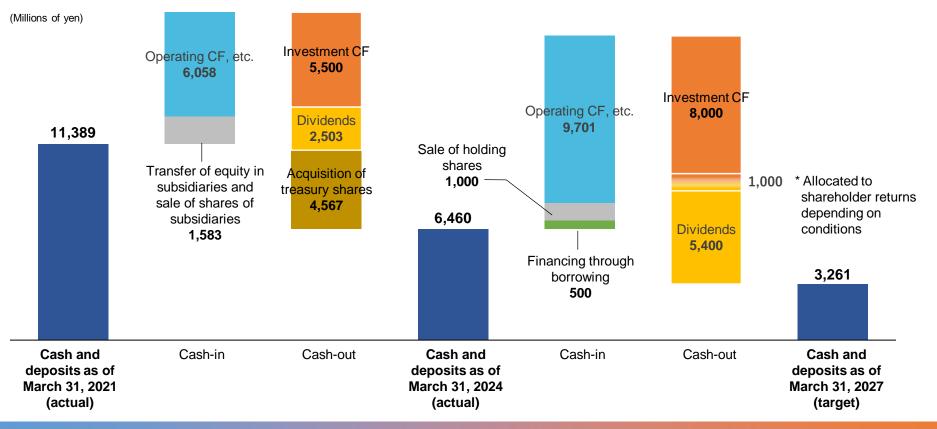


Policies		 Targets	
ROE	Increase investment returns	10.0% or more	
PBR	Formulate and promote management plans from a long-term perspective	1 times or more	

Strive to sustainably enhance corporate value by implementing the Second Medium-term Management Plan and the 2030 Vision in tandem

Initiatives (Financial Strategy)

- The Company formulated a new cash allocation policy in the Second Medium-term Management Plan to achieve optimal capital structure.
- The Company utilizes interest-bearing debts in a flexible manner with an awareness of the capital cost.
- Regarding shareholder returns, during the period covered by the Second Medium-term Management Plan, the Company will prioritize shareholder returns through dividends and raise its target to either a consolidated dividend payout ratio of 60% or a dividend of 85 yen per share, whichever is higher.
- Regarding M&A, the Company will continue to seek investment opportunities and actively invest in deals that will contribute to the enhancement of corporate value.



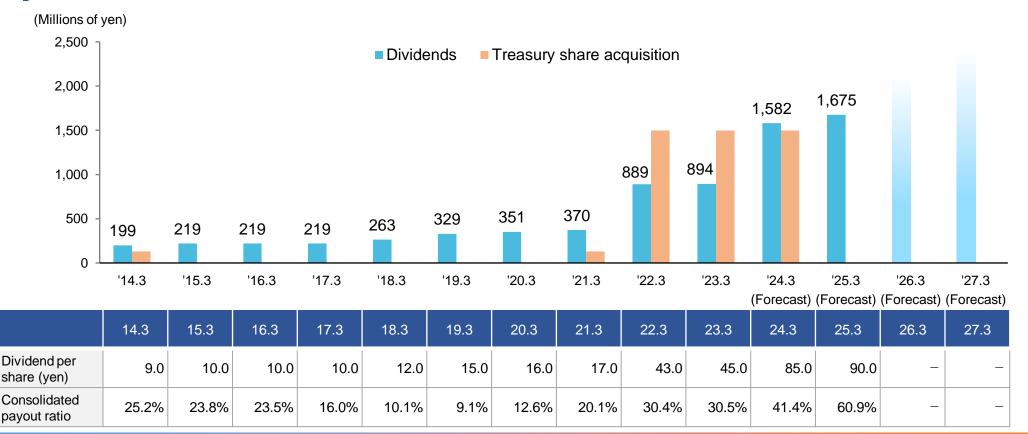
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During the period covered by the Second Medium-term Management Plan, the Company will focus on returning profits to shareholders through dividends, and raise its target to a consolidated dividend payout ratio of 60% or 85 yen per share, whichever is higher.

The Company will consider the acquisition of its treasury shares, examining its financial condition, etc. comprehensively.

Amount of dividends and treasury share acquisition





Appendix

Types and Classification of Refractories



	Classification	Туре	Main applications
	Refractory bricks are refractories with various shapes,	Spinel	Cement
	such as blocks and plates. Most refractories used in	Magnesium carbon	Blast furnace/electric furnace
	the growing electronic components industry are refractory bricks.	Aluminum magnesium carbon	Electric furnace
Refractory		Clayey	General purpose
bricks		High alumina	General purpose
		Other	General purpose
		Refractory bricks	
	Monolithic refractories are powder- and clay-type	Caster	
Monolithic refractories	refractories. Powder-type products are mixed with water and poured or sprayed on-site. Clay-type	Other	Steel, environmental equipment, general purpose
	products are pressed or patted in place for use.	Monolithic refractories	

Approaches and Measures to Reduce CO₂ Emissions

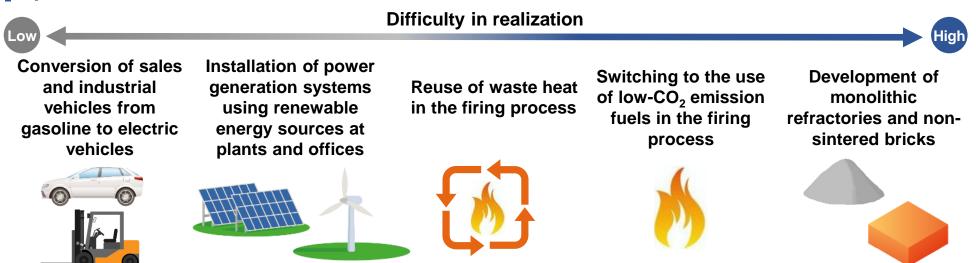
Proceed with studies to achieve themes that are also highly difficult to handle

Manufacturing process for refractory bricks

Process with the highest CO₂ emissions



Specific themes to be studied



YOTAI REFRACTORIES CO., LTD



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