



YOTAI REFRATORIES CO.,LTD

YOTAI REFRATORIES CO., LTD

FY2021(2020/4-2021/3)

# Financial Results

AND

# The First Medium-term Management plan (2021/4-2024/3)

May 27, 2021



# FY2021 Financial Results 【Consolidated】

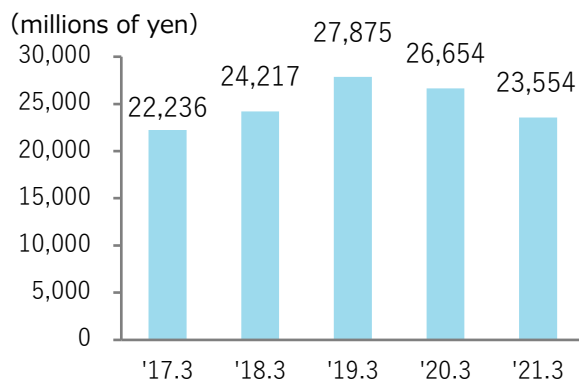
# Consolidated income statement

- Net sales decreased by 11.6% year-on-year due to decreased in sales volume for steel industry of our main customer.
- Ordinary profit decreased by 26.9% year on year due to factors such as lower production volumes and lower unit sales prices, despite efforts to reduce costs.
- In the engineering division, net sales increased by 1.6% year-on-year due to an increase in new projects for environmental equipment and steady construction progress, and segment profit increased by 18.3% due to higher occupancy rates from an increase in orders.
- An impairment loss of 225 million yen was recorded at YINGKOU NEW YOTAI for equipment related to sintered products due to the deterioration of market conditions (extraordinary loss).

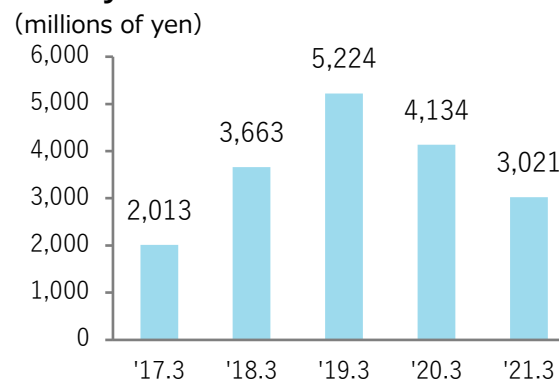
(millions of yen)

	FY 2020	FY 2021	Change	
<b>Net Sales</b>	26,654	<b>23,554</b>	▲3,100	▲11.6%
<b>Operating Profit</b> (Operating Profit Margin)	4,017 (15.1%)	<b>2,921</b> (12.4%)	▲1,096	▲27.3%
<b>Ordinary Profit</b> (Ordinary Profit Margin)	4,134 (15.5%)	<b>3,021</b> (12.8%)	▲1,113	▲26.9%
<b>Profit attributable to owners of parent</b> (Net Profit Margin)	2,794 (10.5%)	<b>1,845</b> (7.8%)	▲949	▲34.0%

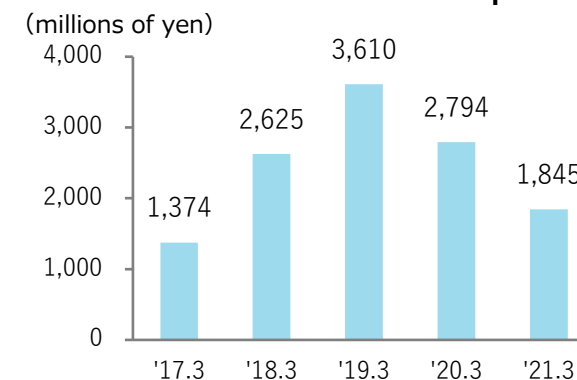
## Net Sales



## Ordinary Profit

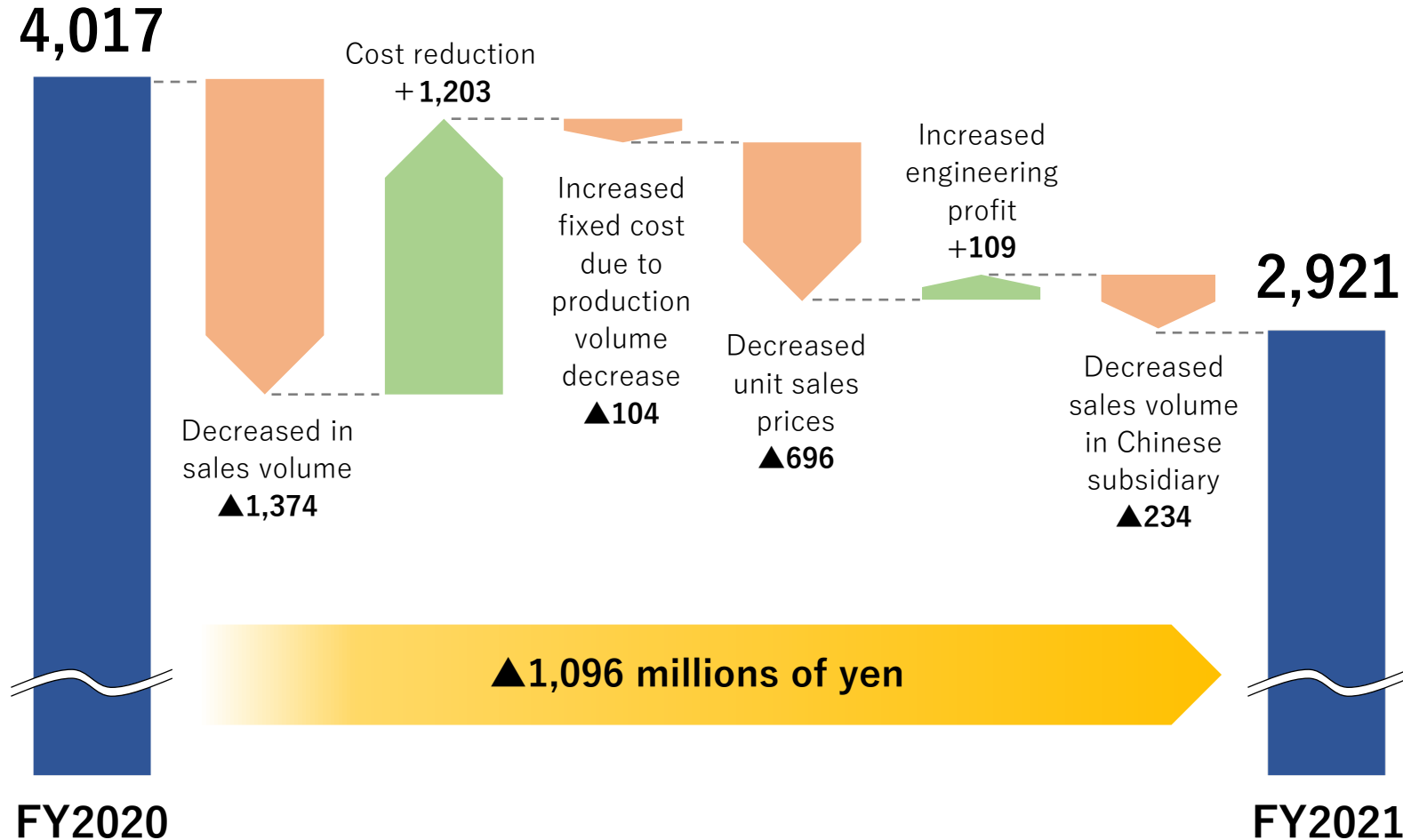


## Profit attributable to owners of parent



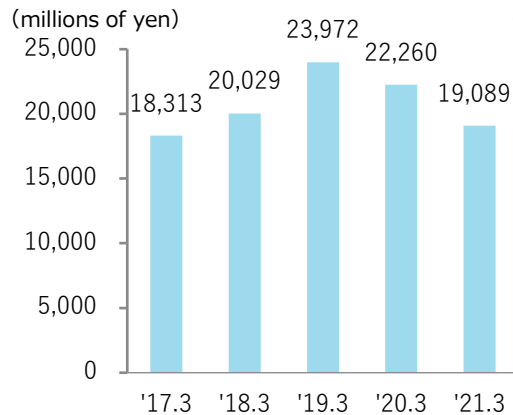
# Change in operating profit 【Consolidated】

(millions of yen)

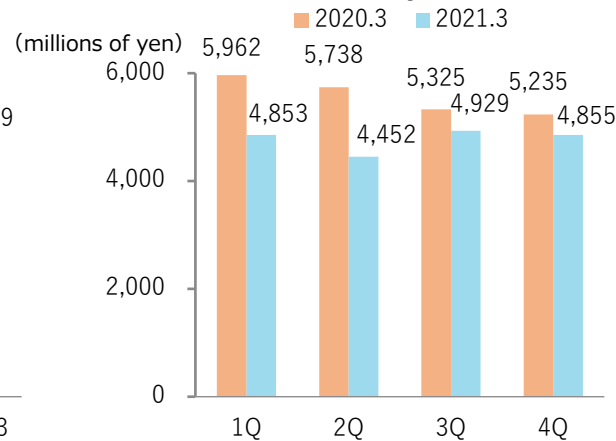


**Net sales decreased by 14.2% to 19,089 million, segment profit decreased by 24.6% to 3,609 million year-on-year.**

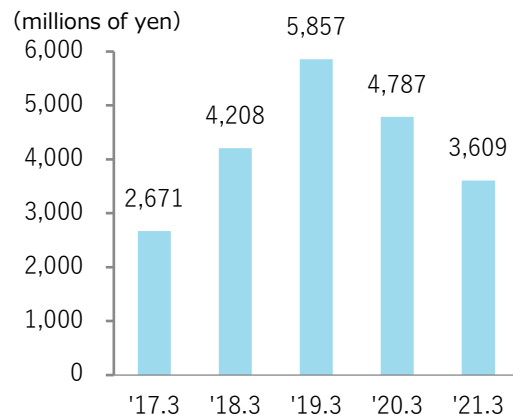
## Net sales



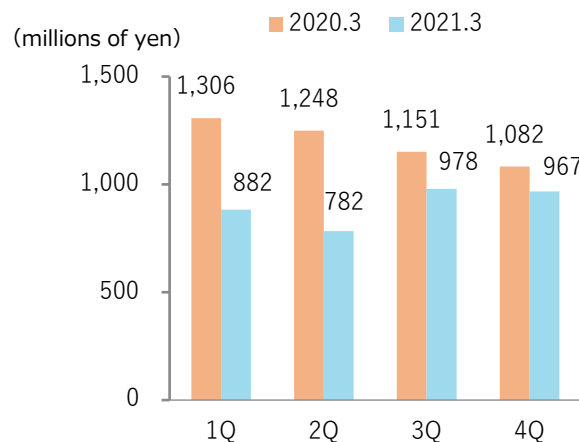
## Net sales (Quarterly)



## Segment profit



## Segment profit (Quarterly)

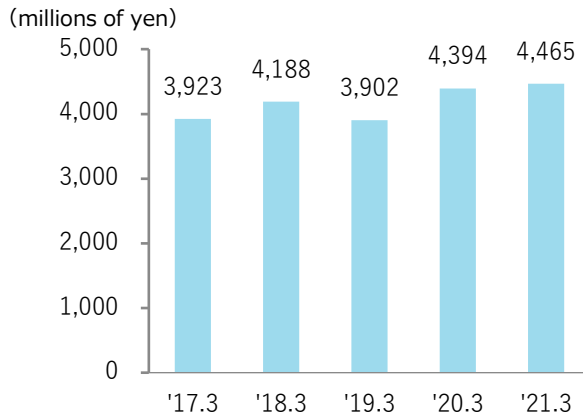


## Specific efforts

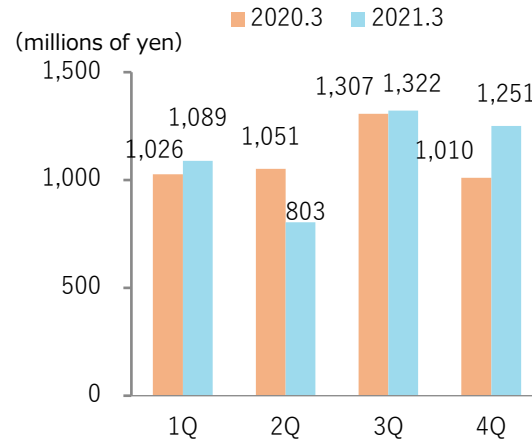
- Decided to install a high-pressure press of over 1,500 tons to improve quality and production efficiency.
- Expansion of equipment for sintering casting block X-Series and installation of equipment to reduce the workload of manual molding operations.
- Expanding sales of dry-type monolithic refractories suitable for improving the workplace environment.
- Expansion of domestic and overseas sales of bend-resistant setter and wrap correction setter.

**Net sales increased by 1.6% to 4,465 million, segment profit increased by 18.3% to 699million year-on-year.**

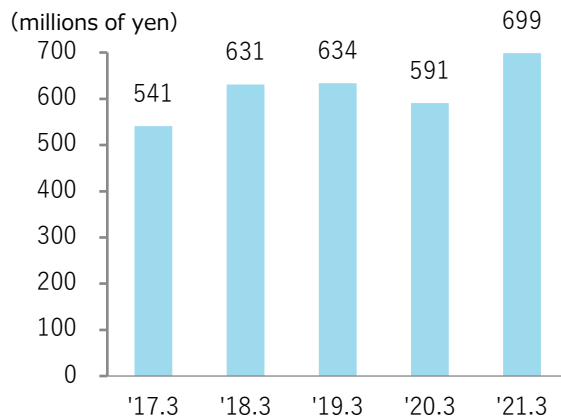
## Net sales



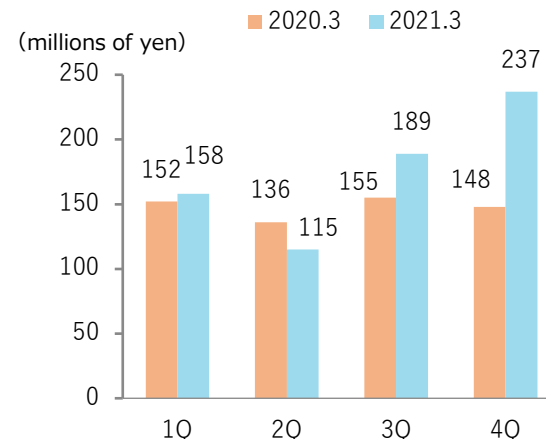
## Net sales (Quarterly)



## Segment profit



## Segment profit (Quarterly)



## Specific efforts

- Shortening the construction period by using newly developed monolithic refractories.
- Actively develop supervisory operations for overseas markets.
- Improvement of on-site capabilities through periodic safety and skills training.
- Systematic and sustainable recruitment of human resources to create a vigorous work environment.

# Consolidated balance sheet

(millions of yen)

	FY2020	FY2021	Change	Increase/Decrease Factors
Current assets	27,448	<b>27,921</b>	+473	Cash & Deposits +3,184 Receivables ▲1,097 Raw materials & Supplies ▲880
Fixed assets	6,994	<b>7,474</b>	+480	Investment securities +601 Buildings and structures +227
<b>Total assets</b>	34,443	<b>35,396</b>	+953	
Current liabilities	5,875	<b>4,967</b>	▲908	Electronically recorded obligations ▲264 Accounts payable ▲254
Fixed liabilities	1,334	<b>1,396</b>	+62	Net defined benefit liability +83
Total liabilities	7,209	<b>6,364</b>	▲845	
Total net assets	27,234	<b>29,032</b>	+1,798	Retained earnings +1,582 Valuation difference on available-for-sale securities +356
<b>Total liabilities &amp; net assets</b>	34,443	<b>35,396</b>	+953	
<b>Equity Ratio</b>	79.1%	<b>82.0%</b>	+2.9pts	
<b>ROE (Return on Equity)</b>	10.7%	<b>6.6%</b>	▲4.1pts	

# Consolidated statement of cash flows

(millions of yen)

	FY2020	FY2021	Increase/Decrease Factors
Cash flows from operating activities	5,413	<b>4,803</b>	Income before income taxes 2,788 Decrease in inventories 1,838 Decrease in trade receivables 940 Income taxes paid ▲989
Cash flows from investing activities	▲1,111	▲ <b>1,202</b>	Purchase of property, plant and equipment ▲1,113 Purchase of investment securities ▲107
Cash flows from financing activities	▲398	▲ <b>418</b>	Cash dividends paid ▲262 Purchase of treasury shares ▲130
Effect of exchange rate change on cash and cash equivalents	▲8	2	
Change in cash and cash equivalents	3,894	<b>3,184</b>	
Cash & cash equivalents at end of the year	8,206	<b>11,390</b>	

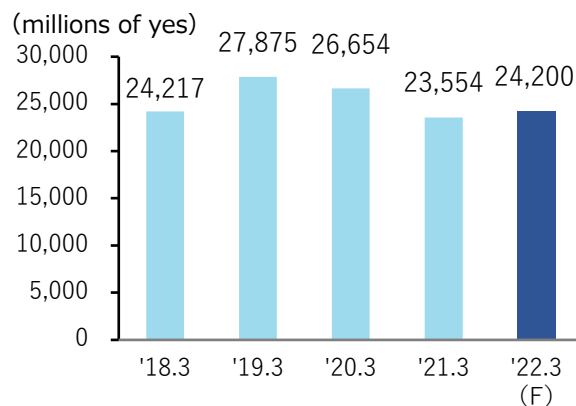
# **FY2022 Financial Forecast 【Consolidated】**

- Assuming a recovery in demand for steel and electronic parts industry, we expect net sales to increase by 2.7% and ordinary profit to increase by 5.9% year-on-year.
- However, crude steel production volume, which has a large impact on business performance, and raw material price trends from China are uncertain.

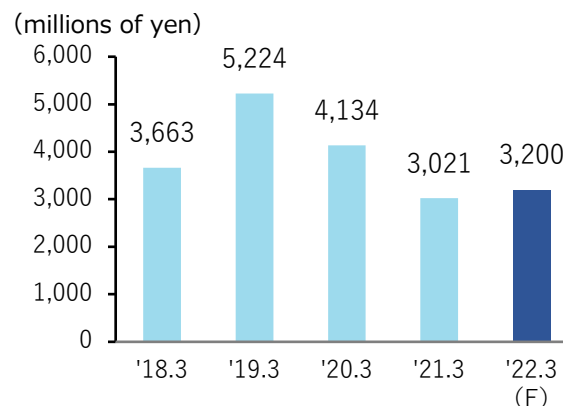
(millions of yen)

	FY2021	FY2022 Forecast	Change	
<b>Net Sales</b>	23,554	<b>24,200</b>	+646	+2.7%
<b>Operating Profit</b> (Operating Profit Margin)	2,921 (12.4%)	<b>3,100</b> <b>(12.8%)</b>	+179	+6.1%
<b>Ordinary Profit</b> (Ordinary Profit Margin)	3,021 (12.8%)	<b>3,200</b> <b>(13.2%)</b>	+179	+5.9%
<b>Profit attributable to owners of parent</b> (Net Profit Margin)	1,845 (7.8%)	<b>2,200</b> <b>(9.1%)</b>	+355	+19.2%

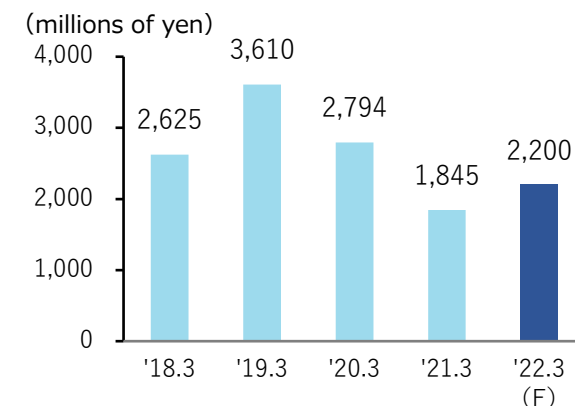
## Net Sales



## Ordinary Profit



## Profit attributable to owners of parent



## The First Medium-term Management plan (2021/4-2024/3)

A period of time to build a system for the realization of the corporate vision.

## Basic Strategy • Focused Policy

We will build a management base that supports sustainable growth by investing in people, products, and information while maintaining high profitability and soundness.

### ■ System

- Optimization of staffing
- Expansion of domestic and overseas sales offices
- Structural Reform of the R&D Division
- Establish a training system for technical service personnel

### ■ Equipment • Computer system

- Promoting Digital Transformation  
RPA、AI-OCR
- Updating the core system
- Installed a large high-pressure press
- Installation of Refractory Surface Improvement Equipment
- Expansion of R&D facilities

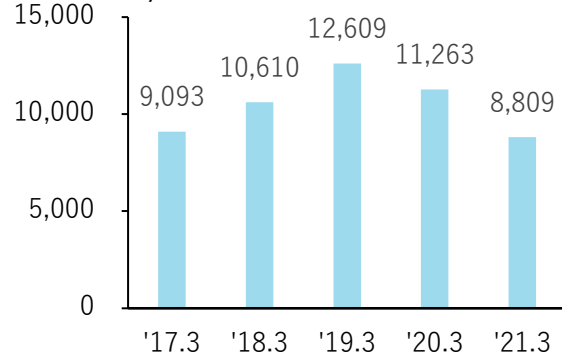
### ■ ESG

- Reduction of carbon dioxide emissions by reviewing manufacturing processes
- Introduction of electric vehicles
- Use of renewable energy  
(Solar and wind power generation)
- Establishing a foundation for certification as an excellent health management corporation
- Improving Talent Management
- Strengthen the effectiveness of the governance system
- Use of the Nomination and Compensation Advisory Committee
- Adoption of restricted stock compensation plan

# Sales results and forecast by industries 【Non-consolidated】

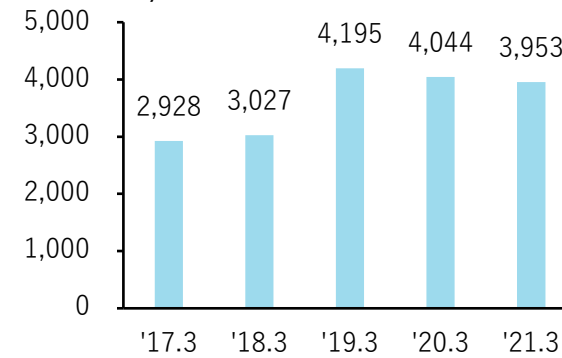
## For Steel

(millions of yen)



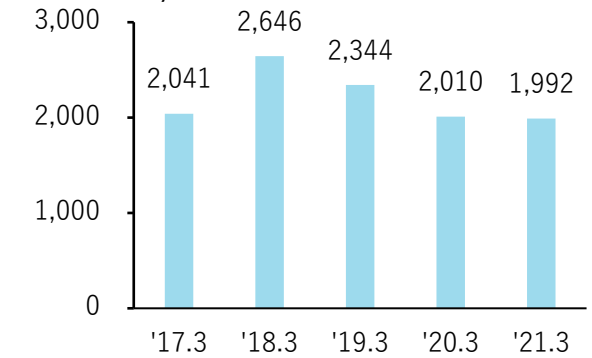
## For Cement

(millions of yen)



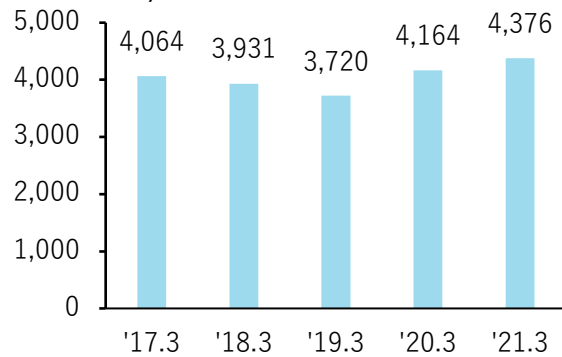
## For Nonferrous

(millions of yen)



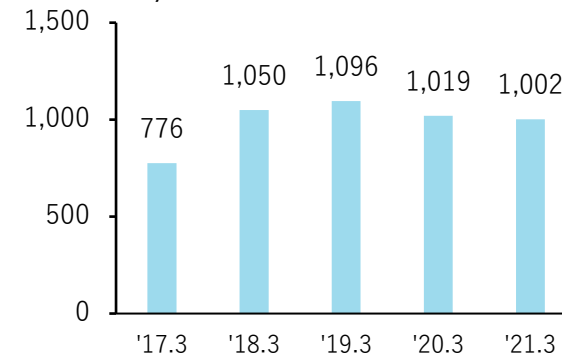
## For Environment

(millions of yen)



## For Electronic parts

(millions of yen)



	FY21	FY22 Forecast
For Steel	↘	↗
For Cement	→	→
For Nonferrous	→	↗
For Environment	↗	→
For Electronic parts	→	↗

## Fulfill our social responsibilities in good faith and develop together with local communities.

<SDGs>

### Life Below Water



We invited a fishery cooperative and held a Satoumi Class (eelgrass bed restoration activity) in HINASE plant.

<SDGs>

### Life On Land



50 Sakura trees were planted in HINASE plant.

<SDGs>

### Blood Donation



Many employees participate in blood donation every year.

### Under the guidance of the firefighting union Fire drill



Many of our employees are active members of the fire department. It contributes to firefighting in the neighborhood.

### Donation to Ube City's "100th Anniversary of Cityhood Project Fund"



We made a joint donation with Murakami Corporation to a project in Ube City, where many of our customers are located.

### Donation of two table tennis tables to ECEC



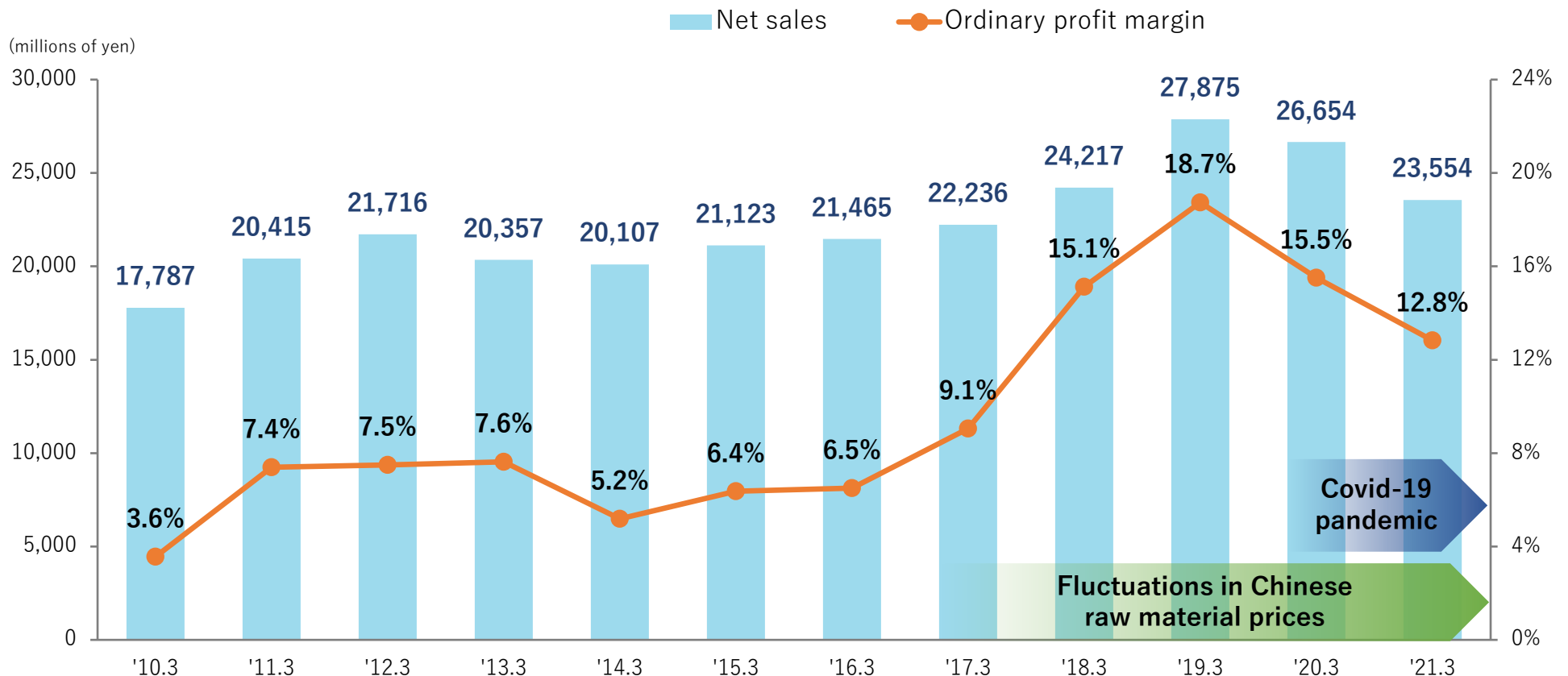
Since 2019, we have donated table tennis tables to ECEC located in our offices every year.

**We are also involved in various other activities to contribute to the development of the local community.**



# The First Medium-term Management plan

- We have been working to achieve sustainable growth and improve profitability by diversifying our client industries and responding flexibly and quickly to customer needs.
- In the FY 2021 both sales and profits decreased, because the steel production shocks caused by the COVID-19 outbreak. However, we were able to achieve results in line with the initial plan by steadily meeting demand and thoroughly reducing costs.
- There are concerns about the situation of raw materials in China and trends in the steel industry.





## Maturity of the refractory market

- Stable domestic demand for refractories.
- Changes in the business environment, such as deteriorating business performance of business partners and soaring raw material and energy prices.



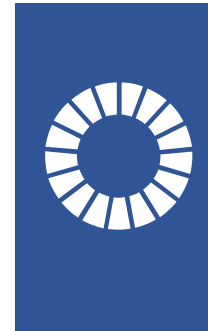
## Demographic change

- Decline in Furnace Construction company.
- Decline in working-age population and shortage of human resources.



## Rapid development of technology

- Evolution of AI, IoT, and Information and Communication Technology.
- Skillful use of technology will have a significant impact on future corporate value



## Contributing to a sustainable society

- Increasing demand to reduce carbon dioxide emissions and contribute to a carbon-free society
- Growing demand for ESG and SDGs

**Increasing Uncertainty**

## Strengths

Independent, not part of any particular group

- High share of **refractory bricks**
- Wide range of client industries · **Stability of business performance** based on the company
- Extensive experience and know-how in **the fields of electric furnaces, cement, nonferrous, and environment.**
- Efficient production system for **low volume and high variety**
- **High profitability and high financial soundness** by promoting thorough rationalization
- **Sales and technical staff work in unison** to provide detailed support.

## Opportunities

Recovery of demand for refractories in specific fields  
Business opportunities for engineering business

- **Recovery in demand for refractories** for the steel, non-ferrous, and electronic parts industries.
- **Refractory demand expected to remain stable** in cement and environment sectors
- Growth potential in **engineering business** and increasing need for material and construction packages.

## Weaknesses

Weak connections with blast furnace manufacturers and delays in overseas expansion

- Business structure dependent on trends in **the steel sector**
- Weak relationship with **blast furnace manufacturers** (Low share of **monolithic refractories**)
- Delay **in overseas expansion**, System not in place
- **Human resource shortage** to develop new fields

## Threats

Declining demand in the refractory market and increasing demand for ESG and SDGs

- Concerns over deteriorating business performance of customers due to **maturation** of the domestic market, **decline in demand** for refractories from a long-term perspective
- Shift in demand from refractory bricks to **monolithic refractories.**
- Soaring **raw material prices, dependence on China** for raw material procurement
- **Reducing carbon dioxide emissions** · Growing demand **for ESG and SDGs**

## External environment recognition



Maturity of the refractory market



Demographic change



Rapid development of technology

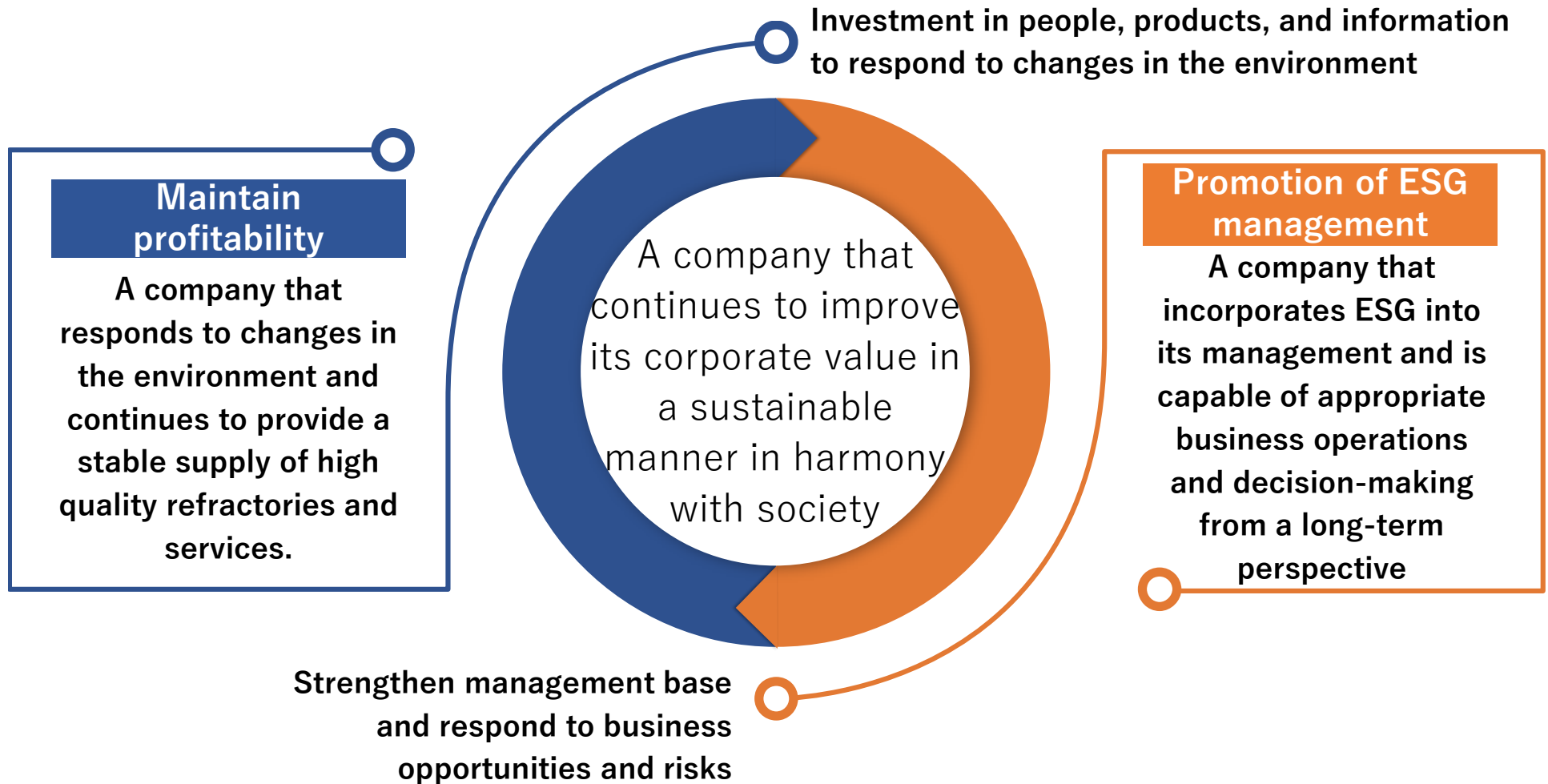


Contributing to a sustainable society

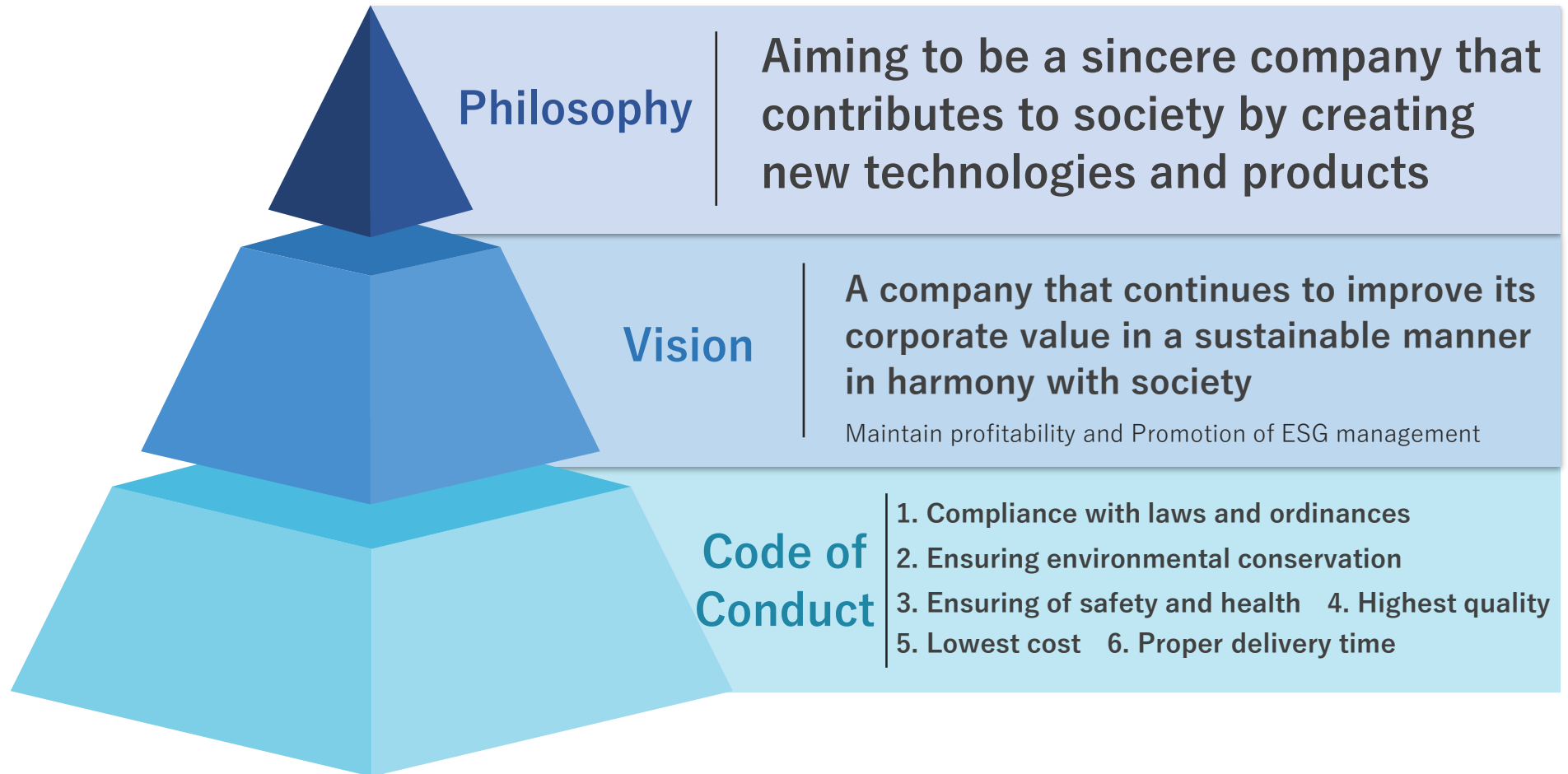
## Our challenges

- Differentiate ourselves from competitors by providing products and services that leverage our strengths.
- Increase and train employees to support the provision of high quality products and services.
- Establishment of a sustainable low-cost and stable supply system.
- Accelerate streamlining and efficiency improvement through the use of AI, IoT, and ICT.
- Strengthen management base and risk response by becoming carbon neutral and promoting ESG management.

## A company that continues to increase its financial and non-financial value and improve its corporate value in a sustainable manner.



## Newly established "Vision of company" to link the Philosophy and Code of Conduct for sustainable value creation.



# Basic policy of the first medium-term management plan

## the First Medium-term Management plan (2021/4-2024/3)

Period for establishing a system to realize “Vision of company”.

## Basic Strategies and Priority Measures

We will build a management base that supports sustainable growth by investing in people, products, and information while maintaining high profitability and soundness.

### Maintain profitability

1

Expand sales by improving the quality of products and services

#### Products

- Development of differentiated products that surpass other companies

#### Sales with technology

- Strengthening of technical service

#### Customer Service

- Careful response to customers by expanding sales office

2

Strengthen low-cost and stable supply system

#### Raw material procurement

- Strengthen procurement of raw materials and energy

#### Rationalization and efficiency

- Aggressive investment in rationalization facilities
- Adequate staffing
- Promotion of DX

3

Developing new sources of revenue

#### Development System

- Strengthen the product development system for the next generation by restructuring the R & D system

#### External Cooperation

- Development of new products based on technological exchange with customers

### Promotion of ESG management

4

Building a management foundation through the promotion of ESG

#### Environment

- Construction of manufacturing processes that emit less carbon dioxide
- Capital investment for energy conservation and decarbonization

#### Society

- Improving employee vitality, organizational vitality, and productivity by promoting health management

#### Governance

- Reform of governance system and enhancement of effectiveness
- Enhanced information disclosure and dialogue with stakeholders

# Positioning of this medium-term management plan in the medium- to long-term strategy

## Vision of company

**A company that continues to improve its corporate value in a sustainable manner in harmony with society**

Maintain profitability and Promotion of ESG management

**The First Medium-term Management plan**  
(2021/4-2024/3)

**The Second Medium-term Management plan**  
(2024/4-2027/3)

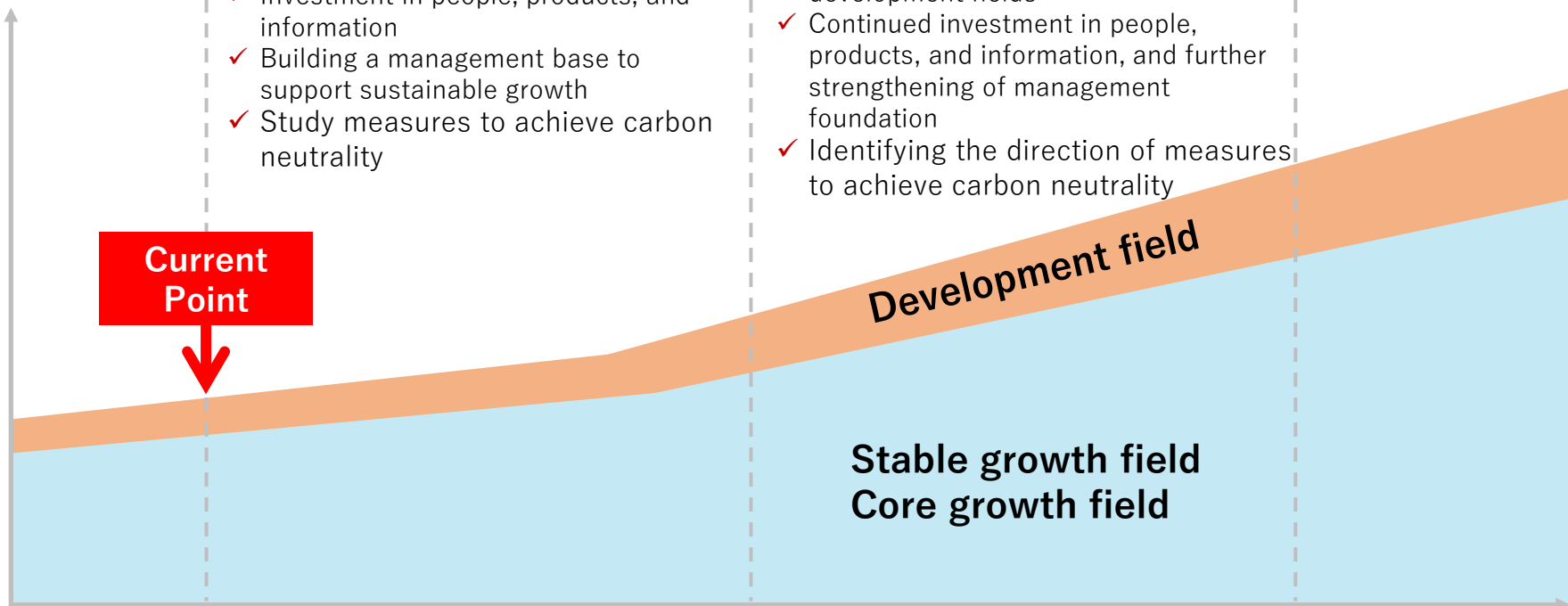
**Period for establishing a system to realize “Vision of company”**

- ✓ Obtain revenue from stable growth field and core growth field
- ✓ Investment in people, products, and information
- ✓ Building a management base to support sustainable growth
- ✓ Study measures to achieve carbon neutrality

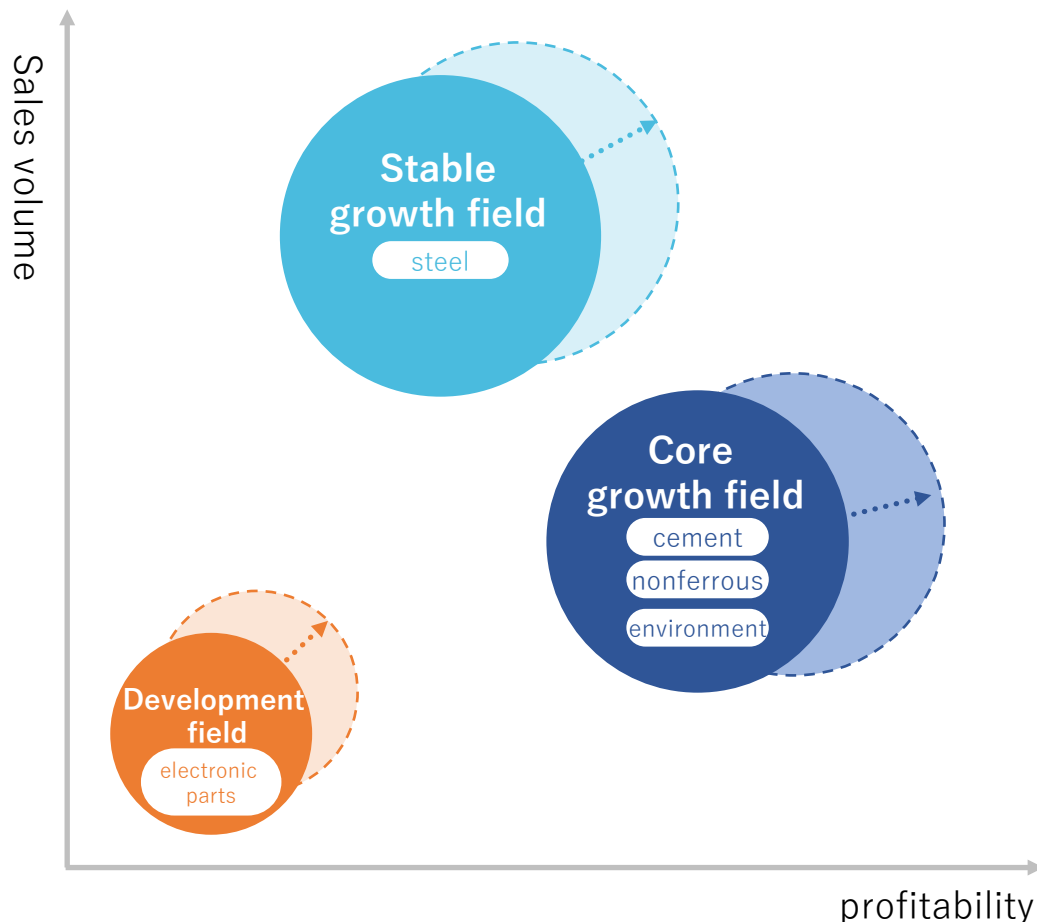
**Period of accelerated growth due to reaping of investment**

- ✓ Earning revenue from stable growth fields and core growth fields as well as development fields
- ✓ Continued investment in people, products, and information, and further strengthening of management foundation
- ✓ Identifying the direction of measures to achieve carbon neutrality

(Sales · Profit)



## Setting KPIs for each field and aiming to build a portfolio that can withstand environmental changes



### Stable growth field (steel)

Expand sales and improve profitability as an important stable revenue source.

#### Target KPI

- Sales growth rate (FY2021→FY2024) + 10%

### Core growth field (cement, nonferrous, environment)

Aggressively expand sales and improve profitability by capitalizing on the strengths that have been cultivated.

#### Target KPI

- Sales growth rate (FY2021→FY2024) + 10%

### Development field (electronic parts)

Build a foundation as a future growth business.

#### Target KPI

- Sales growth rate (FY2021→FY2024) + 30%

# Numerical targets of the first medium-term management plan

(millions of yen)

	FY2021	FY2024	Change with FY2021	
			Amount	Ratio
<b>Net Sales</b>	23,554	<b>26,000</b>	+2,446	+10.4%
<b>Operating Profit</b> (Operating Profit Margin)	2,921 (12.4%)	<b>3,500</b> (13.5%)	+578	+19.8%
<b>Ordinary Profit</b> (Ordinary Profit Margin)	3,021 (12.8%)	<b>3,600</b> (13.8%)	+579	+19.2%
<b>Profit attributable to owners of parent</b> (Net Profit Margin)	1,845 (7.8%)	<b>2,400</b> (9.2%)	+555	+30.1%
<b>ROE</b>	6.6%	<b>8%</b>	+ 1.4pts	—
<b>Consolidated dividend payout ratio</b>	20.1%	<b>30%</b>	+ 9.9pts	—

## Expansion of sales through a combination of products, sales, and technologies

### ■ Expanding sales of new high-value-added products

- For steel : Highly corrosion-resistant refractory (Magnesia chromium and chromia refractories)
- For cement : Brick for burning zone
- For all fields : Monolithic refractories and unsintered bricks

### ■ Strengthen technology sales and hire more for engineering business

- Development of new customers and maintenance of existing customers by strengthening proposal-based sales through technical service personnel
- Expanding orders for engineering business, for which demand has been expanding in recent years
- Acquisition of sales of refractories in the engineering business

### ■ Detailed sales support, including expansion of bases

- Increase mobility of sales staff through expansion of domestic and overseas sales offices
- Identifying customer needs and proposing new products through regular customer visits
- Strengthen customer response capabilities by introducing sales support systems

## Diversification of industrial furnace inspection methods

- Introduction of inspection technology through the introduction of drones, residual measurement devices, etc.
- Deepening transactions with customers by utilizing advanced inspection methods
- Development of inspection technology to electric furnace manufacturers

## Recruitment and development of personnel to support sales growth

### ■ Recruitment

- Aggressive hiring, staffing in growth areas
- Diversification of recruiting methods of scouting-type) (mid-career , appointment of external personnel, introduction of scouting-type)

### ■ Improving employees' skills through training

- Improving Talent Management by Creating and Implementing Skill Improvement Programs
- Revision and implementation of personnel evaluation system through development of human resource training program

### Specific capital investment plans

- Inspection drone ■ Sales support systems
- Personnel and labor management system

# (2) Strengthen low-cost and stable supply system

## Strengthen low-cost and stable production system

### ■ Initiatives in the Manufacturing process

- Continuously reduce costs (Factory automation and efficiency improvement, adequate staffing)
- Quality improvement through the introduction of a large high-pressure press, production efficiency improvement, vertical start-up of newly introduced equipment

### ■ Initiative in Logistics process

- Pursuit of transportation efficiency

### ■ Company-wide initiatives

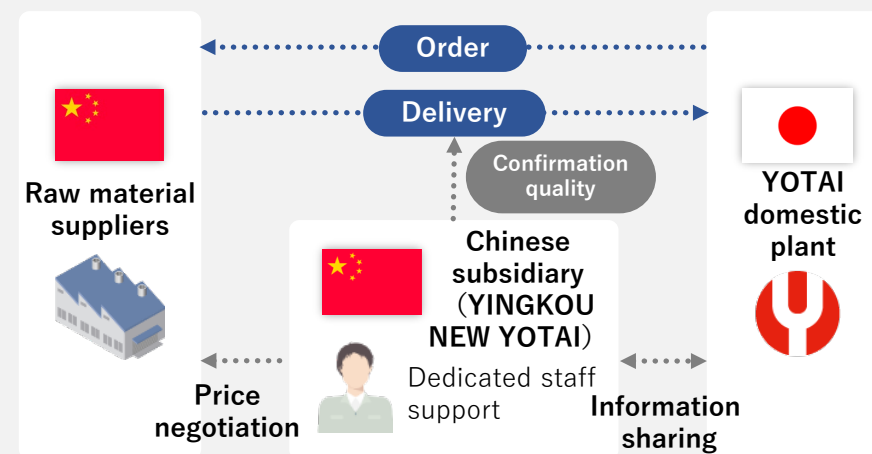
- Introduction of a core system
- Improving business efficiency through the use of advanced ICT such as RPA and AI-OCR

### Specific capital investment plans

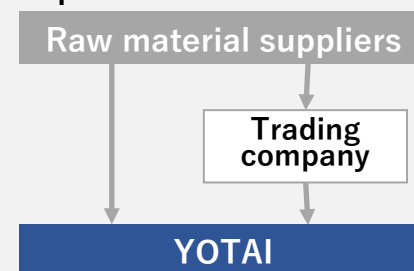
- Large high-pressure press (over 1,500 tons)
- Advanced devices such as RPA and AI-OCR
- Core system

## Establishment of a stable and sustainable raw material procurement system

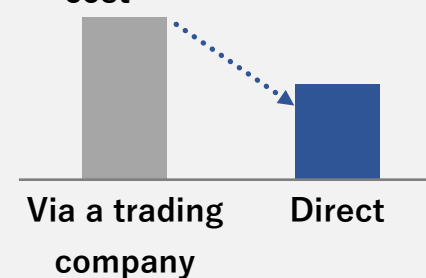
- Risk diversification by securing diverse procurement routes, mainly in China.
- Stable and low-cost procurement through the use of Chinese subsidiaries



### ■ Two methods of procurement



### ■ Image of procurement cost



## Structural Reform of R&D Structure

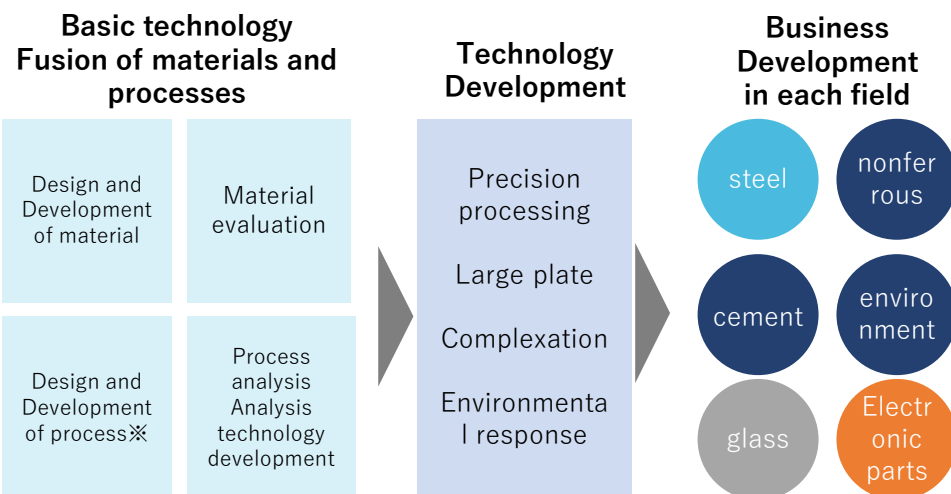
- Establish a training system for technical service personnel
- Medium- and long-term R&D theme initiatives
- Speed up development by enhancing new product development-related equipment
- Study of introduction of surface modification equipment to products for electronic parts
- New product development based on technological exchange with customers

### Specific capital investment plans

- Tissue analysis equipment
- Characterization equipment
- Surface modification equipment to products for electronic parts equipment

## Overseas Expansion

- Deepen existing business partners in fields where our company has strengths, particularly in steel, cement and electronic parts
- Proposals for stable furnace operation and longer maintenance periods through product differentiation
- Development of flexible sales activities for business partners by establishing overseas sales offices
- Development of new agency with mobility
- Strengthening sales through SV services in the Engineering Division



※Mixing, molding, sintering and processing



# (4) Building a management foundation through the promotion of ESG

## E Environment

- Introduction of electric vehicles
- Reduction of CO2 emissions through introduction of new power generation facilities
- Development of manufacturing processes with low CO2 emissions
- Promotion of development of monolithic refractories and unsintered bricks \*

\*Refractories with no sintering process and low CO2 emissions



## S Society

- Promotion of work style reform and improvement of motivation by improving employee treatment
- Utilizing the working hour management system and Improving the working environment to achieve a work-life balance
- Unification and utilization of personnel information and improvement of talent management
- Building the foundation to become an excellent health management corporation
- Contribution to regional revitalization through cooperation with local communities



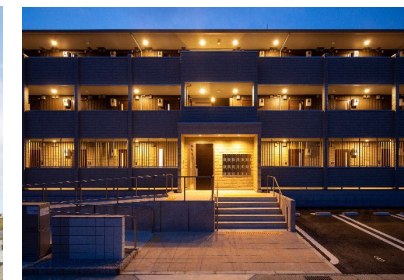
## G Governance

- Making decisions and implementing management strategies that contribute to sustainable enhancement of corporate value
- Establishment of Nomination and Compensation Advisory Committee
- Introduction of stock compensation system (RS)
- Compliance with the Revised Corporate Governance Code



### Contribution to SDGs

In line with the key issues set out in the 3-year Medium-Term Management Plan, we will continue our efforts to resolve the 2030 Agenda for Sustainable Development adopted at the UN Summit.



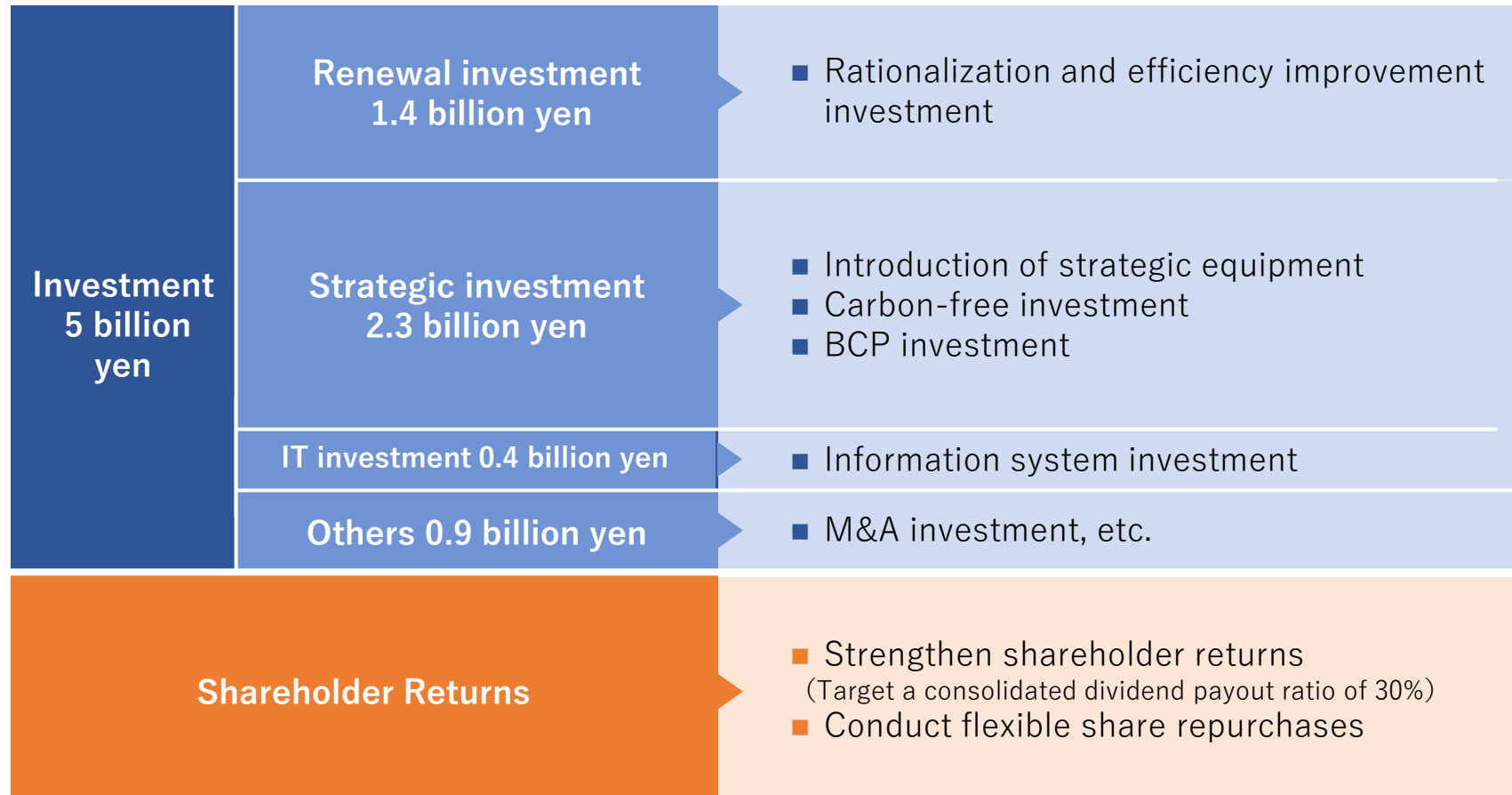
A company dormitory completed in December 2020 (Ako City, Hyogo Prefecture)

# Investment schedules of people, products, information, and other

■ preparation ■ execution

		2021/4-2022/3		2022/4-2023/3		2023/4-2024/3	
		2Q	4Q	2Q	4Q	2Q	4Q
<b>● People</b>							
Recruitment	Actively recruiting mid-career personnel	■	■	■	■	■	■
	Introduce a scout-based recruitment method	■	■	■	■	■	■
Training	Revision and implementation of the personnel evaluation system	■	■	■	■	■	■
	Creating and executing skill development programs	■	■	■	■	■	■
Management	Utilization of labor hours management system	■	■	■	■	■	■
	Unification and utilization of personnel information	■	■	■	■	■	■
	Promotion of health management	■	■	■	■	■	■
<b>● Products</b>							
Introduction of large presses	Installation of over 1,500 tons of presses	■	■	■	■	■	■
New product development facilities	Introduction of tissue analysis equipment	■	■	■	■	■	■
	Introduction of characterization equipment	■	■	■	■	■	■
	Study of introduction of surface modification equipment to products for electronic parts	■	■	■	■	■	■
Diversification of Industrial Furnace Inspection Methods	Introduction of drones for inspection of industrial furnaces	■	■	■	■	■	■
Reduction of CO2 emission	Installation of solar panels	■	■	■	■	■	■
	Introduction of electric vehicles	■	■	■	■	■	■
<b>● Information</b>							
DX Promotion	Improving business efficiency through the use of ICT such as RPA and AI-OCR	■	■	■	■	■	■
	Improving customer responsiveness by introducing a sales support system	■	■	■	■	■	■
	Work style reform by introducing a work hour management system	■	■	■	■	■	■
	Promotion of talent management by introducing a personnel management system	■	■	■	■	■	■
	Improving organizational strength by systematizing constant work in the Engineering Division	■	■	■	■	■	■
	Improving operational efficiency and productivity by upgrading core system	■	■	■	■	■	■
<b>● Others</b>							
	M&A investment in related fields, etc.	■	■	■	■	■	■

## Strengthen the allocation of funds to investments and shareholder returns

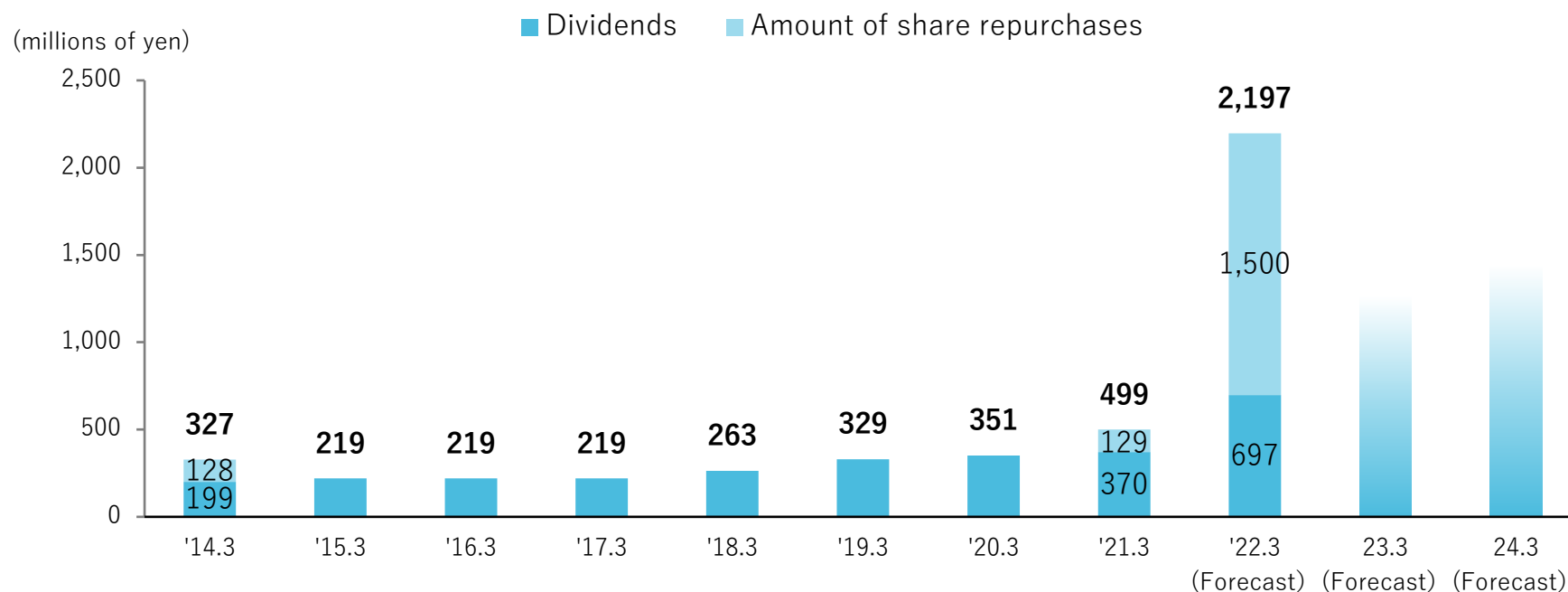


※We will also consider investments other than those mentioned above, after carefully examining the details and amounts.

## Target a consolidated dividend payout ratio of 30%

### Conduct flexible share repurchases

#### Dividends and Amount of share repurchases



	14.3	15.3	16.3	17.3	18.3	19.3	20.3	21.3	22.3	23.3	24.3
Annual dividend per share (yen)	9.0	10.0	10.0	10.0	12.0	15.0	16.0	17.0	32.0	—	—
Dividend payout ratio(consolidated)	25.2%	23.8%	23.5%	16.0%	10.1%	9.1%	12.6%	20.1%	31.7%	—	—

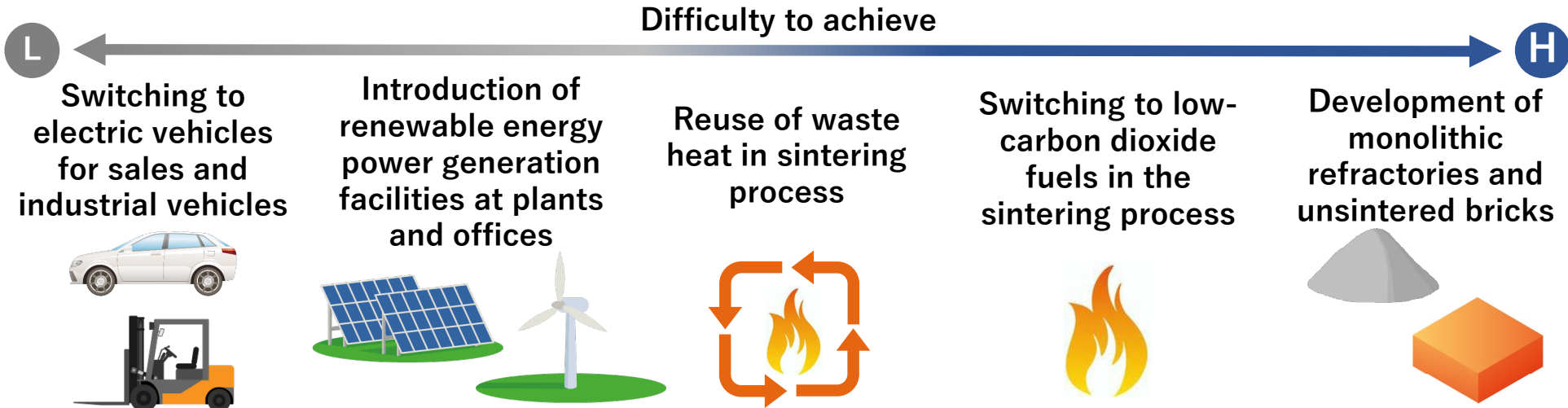
## Work to realize even difficult themes

### Manufacturing process for refractory bricks

The process with the highest carbon dioxide emissions



### Specific themes for consideration



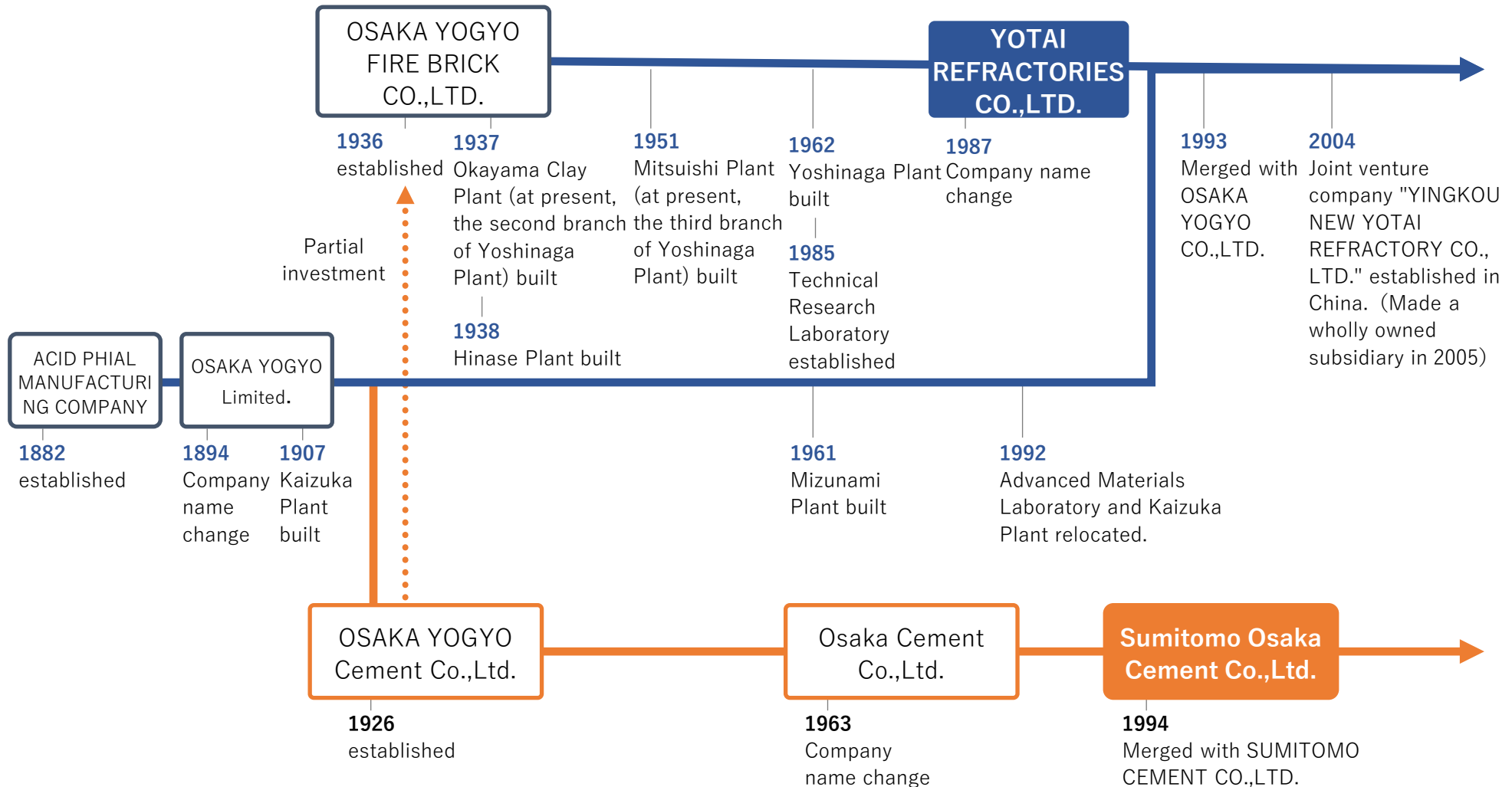


# Appendix

## Create the future with our refractories

Trade Name	YOTAI REFRACTORIES CO., LTD.
Established	August, 1936
Head Office	8-1, NISHIKINAKA-MACHI, KAIZUKA-CITY, OSAKA, 597-0093, JAPAN
Number of Employees	537 (as of March 31, 2021)
Common Stock	2,654 million yen (as of March 31, 2021)
Our Business	Production and sales of refractories and new ceramics as well as related engineering business
Philosophy	The Yotai Group aims to be a faithful company that creates new technologies and products in response to the demands of revolutionary times, enhances customer satisfaction, and contributes to society and using our unique technology and passing on the history and experience in long-standing refractory manufacturing technologies to the next generation.

## 2021 is the 85th anniversary of the establishment.



## Independent company

Strong position  
in multiple industries



Sincere and agile  
customer service

Structure that is not easily affected  
by trends in specific industries



## Thorough cost management

Pursuit of in-house  
production



Technical sales  
Multi-skilled work

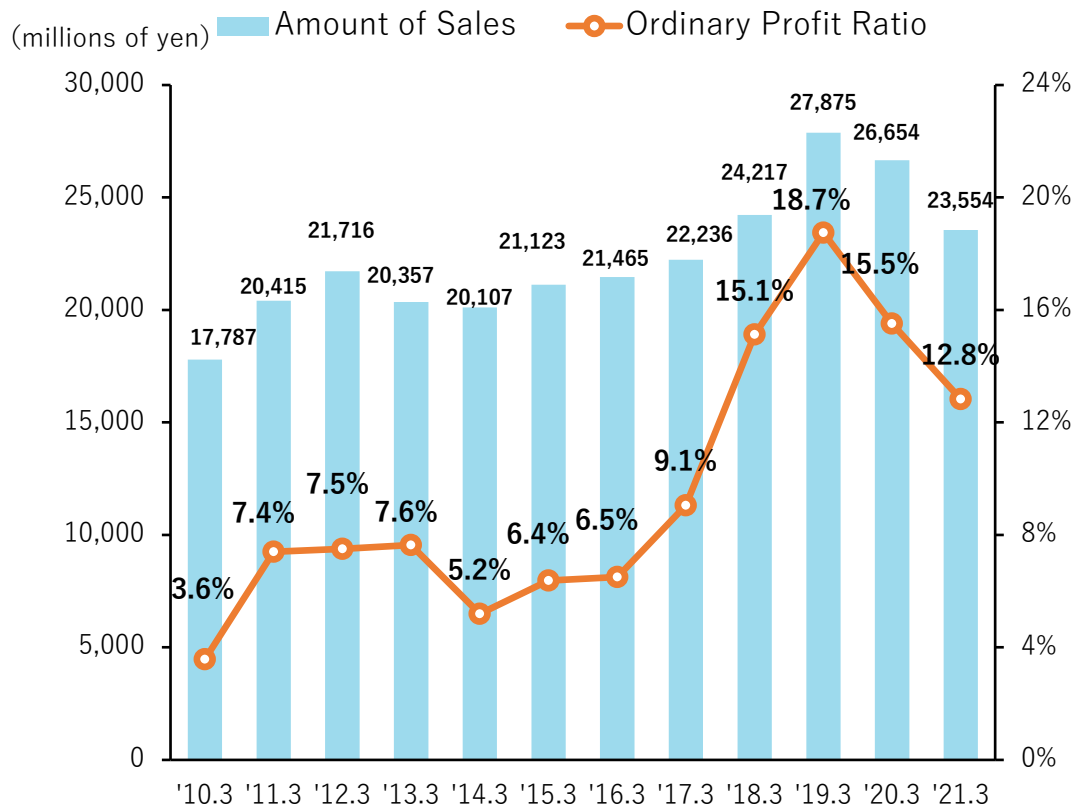
Industry-leading profitability



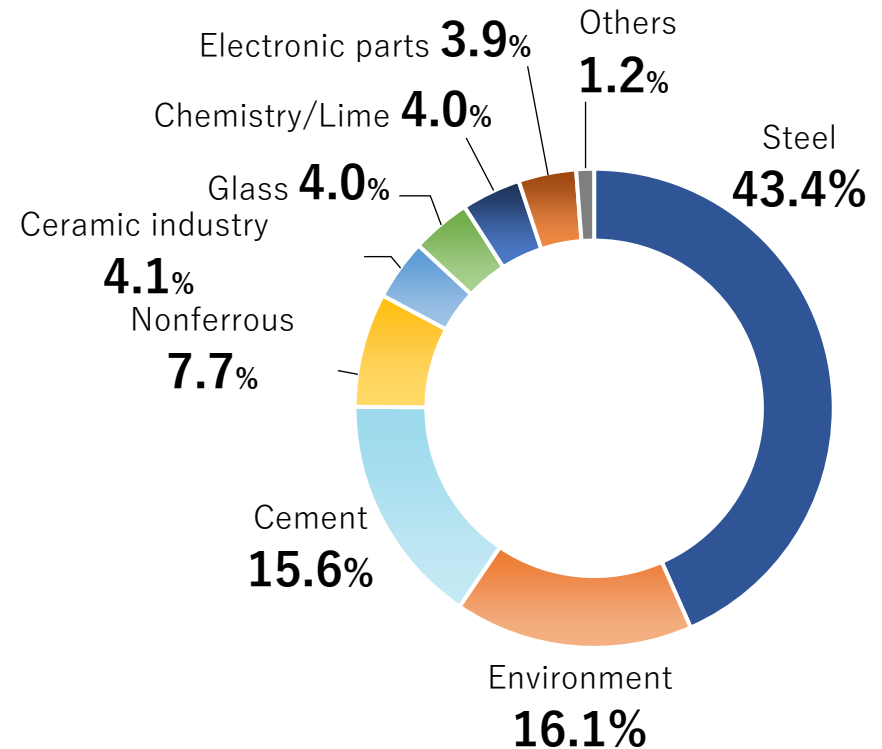
**Realize sustainable profit growth**

## Sustainable growth unaffected by recession in specific industries

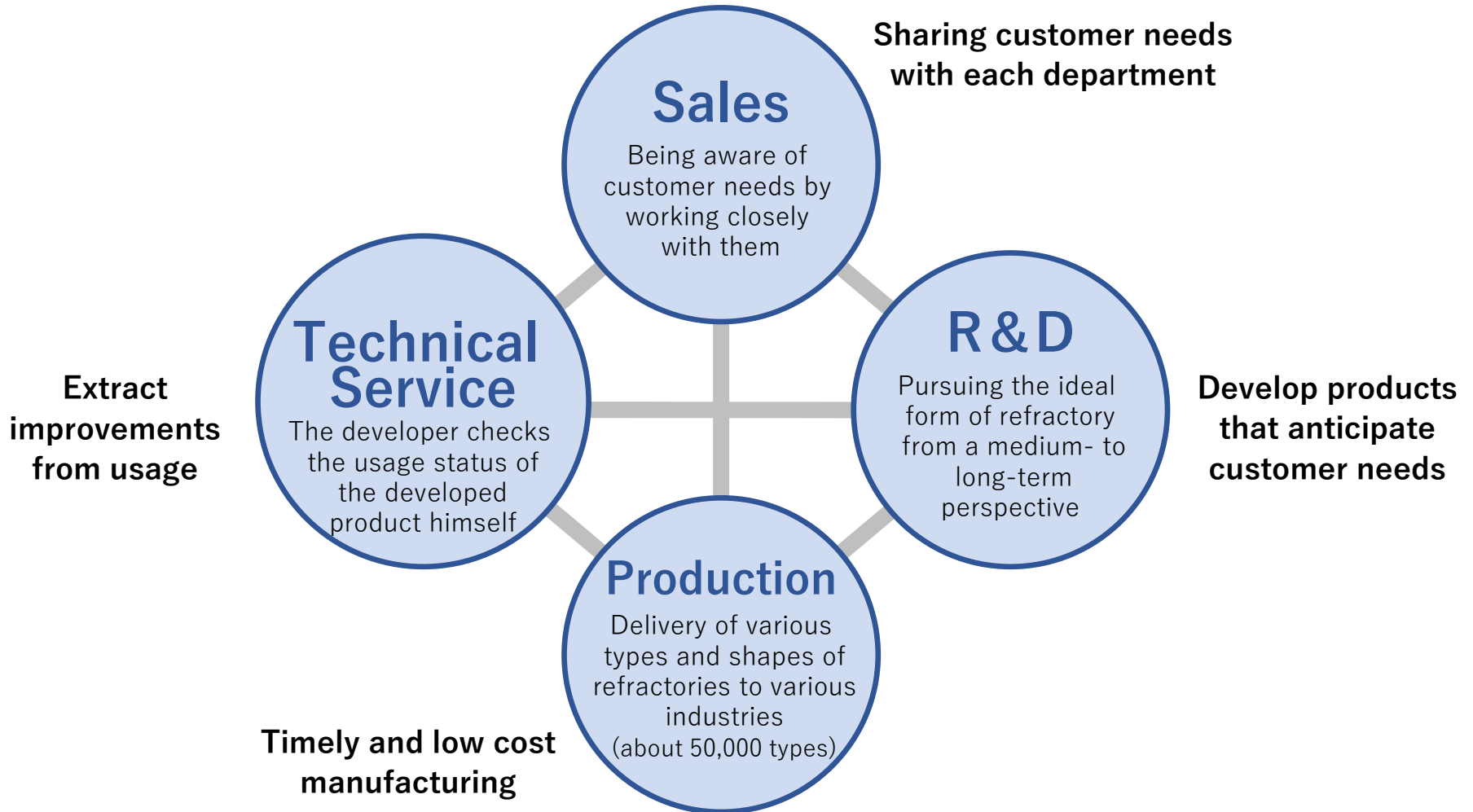
■ Trend of Sales and Ordinary Profit Ratio [Consolidated]



■ Sales Results by industry for FY2021 (amount ratio) [non-consolidated]



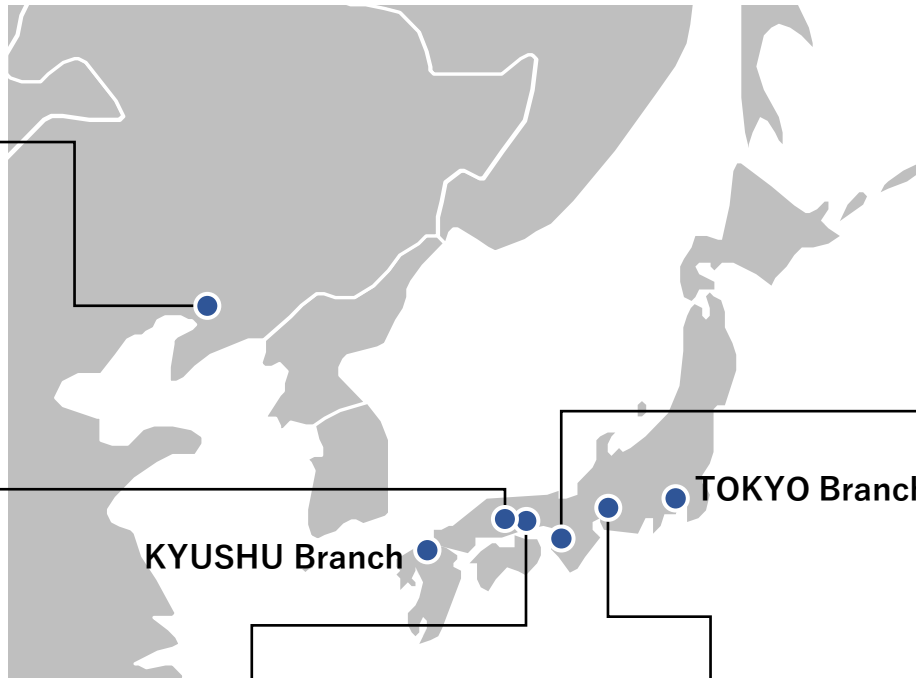
「Sales」 「R&D」 「Production」 「Technical Service」 will provide value together.



# Business locations



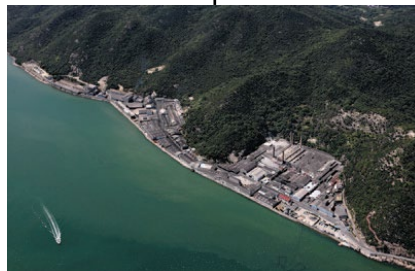
**YINGKOU NEW YOTAI REFRACTORIES CO., LTD.**  
(Liaoning, China)



**YOSHINAGA Plant**



**The second branch of Yoshinaga Plant**



**OKAYAMA Branch  
HINASE Plant  
Technical Research Laboratory  
Engineering Division**



**NAGOYA Branch  
MIZUNAMI Plant**



**Head Office**



**KAIZUKA Plant  
Advanced Materials  
Laboratory**

## Classification

## Brands

## Main applications

### Refractory bricks

Among refractories with a wide variety of shapes, such as block and plate. Refractory bricks are used in the various industries including the electronic parts industry, which is a growing field.



Spinel	Cement
Magnesia-carbon	Steel
Alumina-magnesia-carbon	Steel
Fire-clay	General purpose
High alumina	General purpose
other	General purpose
<b>Refractory bricks</b>	

### Monolithic refractories

Powder-type and rammed earth-type Refractories  
 Powder-type products are poured after being mixed with water on-site or sprayed for use. Rammed clay-type products are pressed or patted for use.



Castable	Environmental equipment,
other	steel, general purpose
<b>Monolithic refractories</b>	

## Disclaimer

Information in this document includes forward looking statements. These forward looking statements do not guarantee the financial performance in the future, and contain risks and uncertainties. Please kindly note that actual results could differ from these forward looking statements.