

Cover photo: View of Osaka Castle and surrounding area (City of Osaka)



# INTEGRATED REPORT 2023

## Yotai Refractories Co., Ltd.

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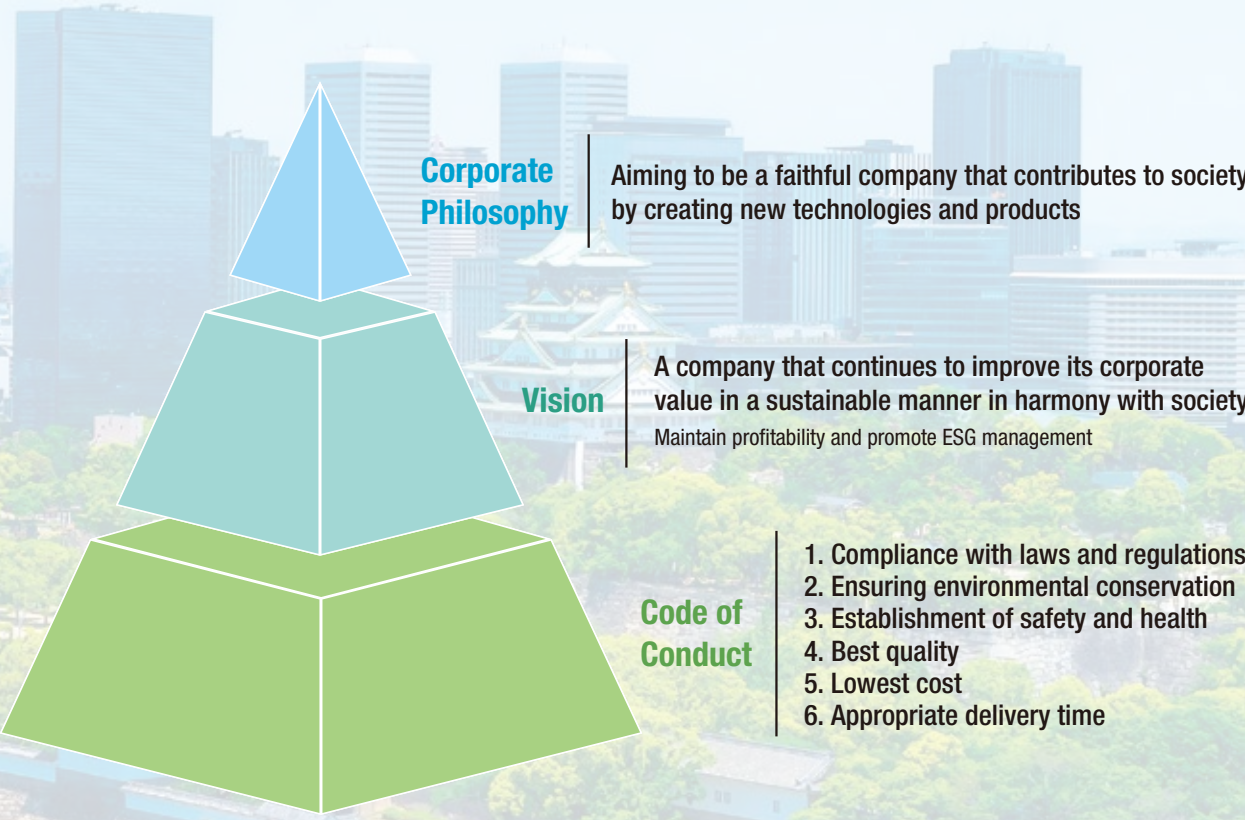


# CONTENTS

- 01 Corporate Philosophy**
- 02 How Yotai Creates Value**
  - 02 History
  - 04 Yotai Today
  - 06 The Value Creation Process
  - 08 Strengths and Competitiveness
  - 10 Financial and Non-financial Highlights
- 12 Initiatives to Enhance Corporate Value**
  - 12 Message from the President
  - 16 First Medium-term Management Plan Progress
  - 20 Business Strategy
    - Sales Department
    - Plant Department
    - R&D Department
    - Engineering Division
    - Administrative Department
    - Information System Department
  - 31 Yotai's DX Strategy
- 32 Initiatives Supporting Improved Corporate Value**
  - 32 ESG Management at Yotai
    - Environment
    - Social
    - Governance
  - 44 Compliance Risk Management
  - 45 Directors and Officers
  - 46 External Director's Message
- 48 Data and Corporate Information**
  - 48 Financial Review (Consolidated)
  - 50 Key Financial and Non-financial Data
  - 52 Company Profile

# Create the Future with Our Refractories

As a top manufacturer of refractory bricks, YOTAI REFRACTORIES CO., LTD., contributes to backbone industries in Japan and worldwide through business centered on “heat and the environment.”



Solar power generation system at the Kaizuka Plant  
(Operational Feb. 2022)



Solar power generation system at the Mizunami Plant  
(Operational Nov. 2022)



Solar power generation system at the Yoshinaga Plant  
(No. 1 Branch: Operational Aug. 2023; No. 2 Branch: Operational Jun. 2021)



Wing of Kaizuka Plant where Kaizuka City mascot “Tsugesan” was designed

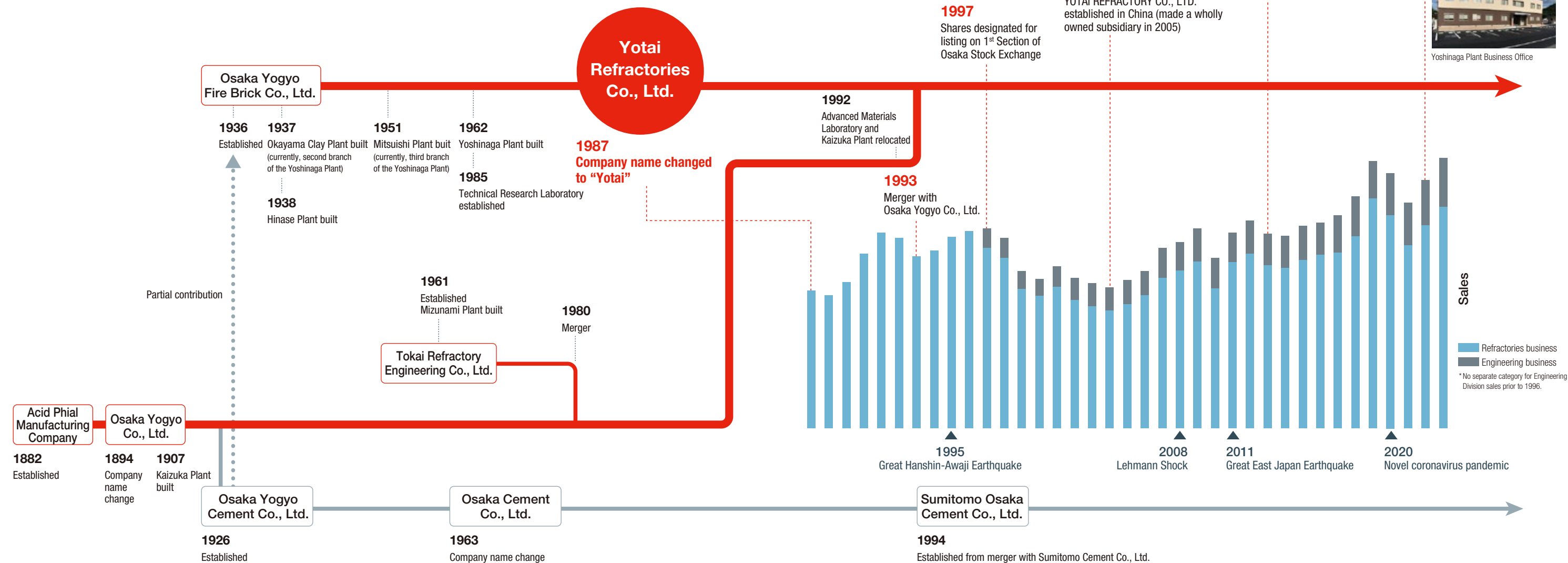
**Editing Policy**  
YOTAI REFRACTORIES CO. LTD. has published this Integrated Report to serve as a starting point for constructive dialogue by conveying information regarding the Company's business lines and initiatives to enhance corporate value in an accessible manner to investors, shareholders and all other stakeholders. This report was edited with reference to several guidelines, including the “Integrated Reporting Framework” from IFRS Foundation, and the Japan Ministry of Economy, Trade and Industry's “Guidance for Integrated Corporate Disclosure and Company-Investor Dialogue for Collaborative Value Creation.” Ultimately, the hope is that this report will provide readers with a deeper understanding of Yotai.

**Reporting Period and Companies**  
Reporting Period: April 1, 2022 to March 31, 2023  
Reporting Companies: YOTAI REFRACTORIES CO., LTD. and Group companies



## Continuous support of the advancement of heavy industries as Japan's overall top manufacturer of refractories

From its origins as Acid Phial Manufacturing Company in 1882, Yotai has engaged in the manufacture of high-quality refractories, growing in tandem with backbone industries in Japan and worldwide. More recently, Yotai has strived to enhance its own competitiveness further, including through acquisition of raw material manufacturing businesses from other companies and strengthening its own engineering business. Yotai is also actively committed to the research and development of next-generation refractories with low environmental impact, as it continues to grow flexibly and sustainably in step with changing times and requirements.



### History of Yotai

#### 1936-

##### Establishment of Osaka Yogyo Fire Brick Co., Ltd.

Yotai's predecessor, Osaka Yogyo Fire Brick Co., Ltd., was established to meet growing demand for fireproof bricks accompanying the rise of Japan's steel industry. Through establishment of new plants, steps were taken to expand production capacity and develop a structure for the stable supply of products.

#### 1955-

##### Start of mass production of high-quality refractories

During Japan's period of advanced economic growth, growth among steel producers fueled demand for the mass production of high-quality, low-priced refractories. Thanks to technology development and patents it obtained, our Company contributed to Japan's economic growth with the production of refractories across a host of application areas.

#### 1987-

##### Yotai Reborn

In 1987, under the corporate name YOTAI REFRACTORIES CO., LTD., we moved to restructure our rock-solid business foundation. Pushed by a changing social milieu, we expanded the production of refractories for electronic parts in answer to a rapid increase in semiconductor demand. Yotai has also made active strides in introducing energy-saving and alternative energy technologies since 2000.

#### 2010-

##### Aiming for sustainable growth

A raft of industries, the steelmaking and cement industries chiefly among them, are facing mounting pressure to achieve carbon neutrality. By providing products with low environmental impact and engineering technologies, Yotai is supporting its customers' businesses while aiming for sustainable growth for itself and society.

Social changes and issues

Pre-World War II, wartime, postwar

Period of advanced economic growth

Arrival of computerization and information society

Sustainability, ESG era

## Realizing sound growth through manufacture of high-quality refractories and related construction

Through the manufacture of high-quality refractories and related construction, Yotai is continuing to evolve in step with the times under a sustainable low-cost structure. In fiscal 2023, ended March 31, 2023, Yotai achieved record-setting sales and profits, particularly in its engineering business. This outcome reflected progress in strengthening the development and stable supply of new products offering low environmental impact, aggressive sales activities, and human resource recruitment and training.

### Refractories

#### Manufacturing a diverse array of refractories answering needs across a range of industries

Refractories are critical to high-temperature treatments such as melting and baking, two steps in the manufacturing processes for steel, cement and copper. At Yotai, we manufacture a diverse array of high-quality refractories able to meet the varying specifications and quality standards of each industry. We also produce refractories for the growth fields of environmental systems and electronic parts. With a multi-product, small-lot production system, Yotai carefully addresses the needs of a range of industries.

#### Types of Refractories

##### Refractory bricks



The term “Refractory bricks” refers to refractories that come in a variety of shapes, most notably blocks or plates. Refractory bricks are most commonly used in the field of electronic parts, a growth industry.

Yotai is top class in terms of production volume for refractory bricks in Japan.

##### Monolithic refractories



“Monolithic refractories” refers to powder- and clay-type refractories. Powder-type products are mixed with water and poured or sprayed in place onsite. Clay-type products are pressed or patted in place for use.

Image: “H2 Monolithic Plant” production facility for monolithic refractories at the Hinase Plant (Operational Aug. 2023)

#### Initiatives to reduce environmental impact

As calls to achieve carbon neutrality mount, Yotai is moving aggressively to manufacture and expand sales of low carbon-emitting monolithic refractories, non-sintered refractories and energy-saving refractories.

Refractory products sintered at 1700°C with 100% hydrogen fuel

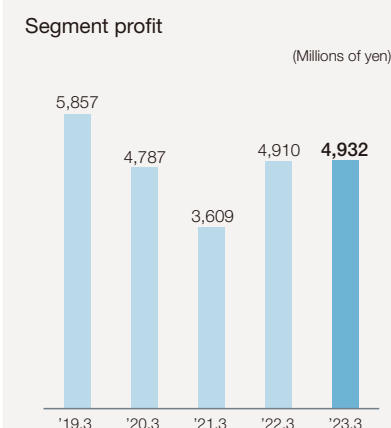
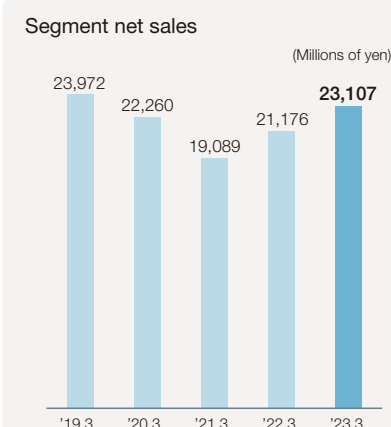


#### Principal industries for sales

Steel	Nonferrous	Cement
Glass	Environmental systems	Electronic parts

#### Segment performance

In fiscal 2023, ended March 31, 2023, performance in the refractories business was lifted by the continuation of increased demand from steel makers, along with increased orders from cement, environmental systems and other sectors, resulting in sales and earnings growth.



#### Fiscal 2023 Performance

Net sales  
**¥28,250**  
million

Operating profit  
**¥4,012**  
million

ROE  
**9.7%**

### Engineering

#### Addressing all refractory construction with sincerity and extensive track record for over half a century

Because refractories are constantly subjected to high temperatures, they experience damage over time. Product life can vary widely, from a few weeks to about one year in the steel industry, for example, to roughly two to ten years in the nonferrous industry. Expertise concerning maintenance is thus similarly varied. Yotai's Engineering Division has an extensive track record in design spanning more than half a century, earning customers' definitive trust with sophisticated design and construction work that foresees needs based on industrial furnace operating conditions through to post-construction maintenance service.

#### What is engineering?

##### Steel factory/ladle construction



The repair and upkeep of refractories for ladles (vessels used to transport and pour molten metal when casting) must occur on a schedule of just several days. Since this typically involves multiple facilities and equipment, construction operations happen almost daily.

##### Construction of monolithic refractories



Monolithic refractories are constructed using devices appropriate for various types of industrial furnaces and materials. With recent adoption of the dry-spray method, offering much easier construction, we are pushing for even greater work efficiency.

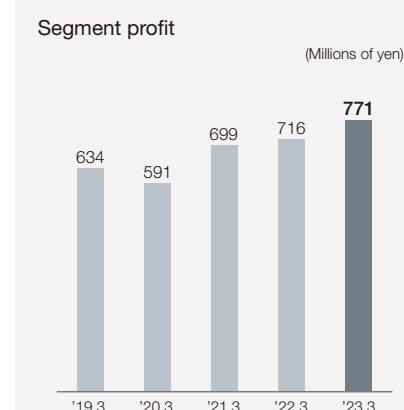
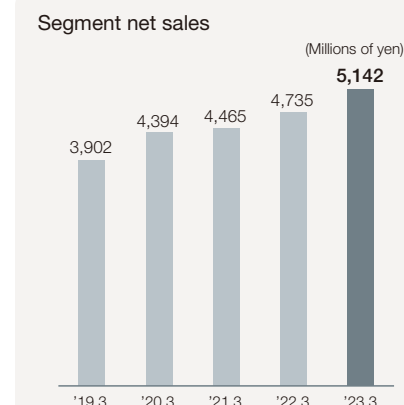
##### Adoption of mechanical construction method



Yotai employs the line chase construction method for rotary kilns used in the manufacture of cement in an effort to improve both work efficiency and construction precision.

#### Segment performance

In fiscal 2023, ended March 31, 2023, performance in the engineering business saw record sales and profit posted for the segment. Performance was lifted mainly by aggressive sales activities that leveraged Yotai strengths in material and construction integration, coupled with progress in recruitment and training of human resources in technology services, which led to orders for large-scale and new projects.



#### Principal services

##### Design



##### Furnace construction



##### Overseas supervisory services



Exist in harmony with society and continue to sustainably enhance value through business activities built on the motto, “Sincere and agile customer service.”

## Our Business Environment

- Maturity of the refractory market
- Rapid development of technology
- Demographic change
- Contributing to a sustainable society
- Responding to climate change issue
- Enhancing information security
- Strengthening corporate governance

## Corporate Philosophy (Purpose)

Aiming to be a faithful company that contributes to society by creating new technologies and products

## Source of Value Creation

### Utilizable Capital

#### Financial Capital

- (1) Net assets: ¥31,065 million
- (2) Equity ratio: 78.4%

#### Manufacturing Capital

- (1) Distinctive production equipment
  - Hinase Plant: 3,000T press, tunnel kiln, basic castable refractory plant
  - Yoshinaga Plant: 1,500T press and castable line
  - Kaizuka Plant: Shuttle kiln
  - Mizunami Plant: 850T press
- (2) Annual production capacity\*
  - Refractory bricks 72,720t
  - Monolithic refractories 41,592t

#### Intellectual Capital

- (1) R&D expenses: ¥225 million
- (2) Patent rights: 15

#### Human Capital

- (1) No. of employees: 578
- (2) Personnel system
  - Utilization of new personnel evaluation system adopted in April 2022
  - Promotion of diversity (Employees from China, India, Vietnam, Brazil, and others)

#### Social Capital

- (1) Partner companies: Approx. 200 companies
- (2) Robust product lineup: Approx. 50,000 items
- (3) Expansive client network: Over 300 companies
- (4) Highly cost-conscious, open corporate culture with skill-based delegation of jobs

#### Environmental Capital

- (1) Volume of key materials used: 103,305MT
- (2) Water usage: 73,295m<sup>3</sup>
- (3) Energy usage: 478,029GJ

Other than the following are as of March 31, 2023

\* First half of 2023- Includes production plans and external orders

### Yotai Strengths

#### Independent, Not Part of Any Particular Group

Business structure not easily affected by trends in any specific field  
Wide-ranging response capabilities

#### Thorough Cost Management

Industry-leading level of profitability

#### Material and construction integration

Response capabilities to fully undertake everything from design to construction and maintenance

## Materiality (Key Issues to Be Addressed)

### High Quality

- Reliably stable supply of high-quality products
- Constant provision of high-quality technical service
- Retention of technological capabilities for adapting to environmental change

### E: Environment

- Reduction of GHG emissions
- Switch to renewable energy
- Effective utilization of mineral resources

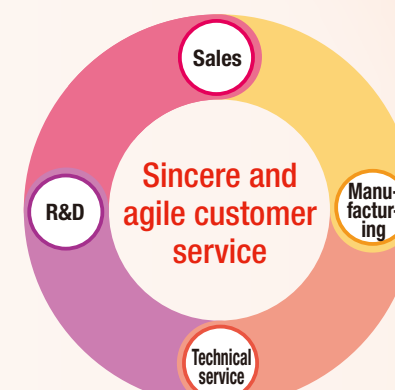
### S: Social

- Human resource development and utilization
- Promotion of health and productivity management
- Social contribution-based regional revitalization

### G: Governance

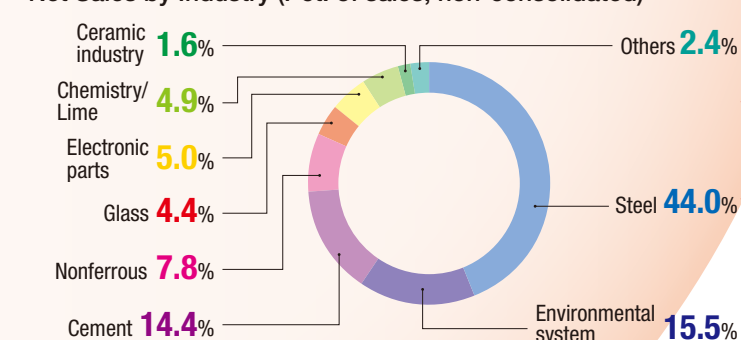
- Governance enhancement
- Dialogue with investors and proper information disclosure
- Tighter BCP for responding to crises

## Business Activities



## Generation of Products, Services (Output)

### Net Sales by Industry (Pct. of sales, non-consolidated)



## Mechanisms Supporting Value Creation

Disclosure of climate-related data based on TCFD declaration

Human capital-related strategy

DX strategy

Corporate governance

Risk management

## Vision

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

## Value to be created

### Customers

- Stable supply of refractories
- Improved industrial furnace longevity and operating cost reductions
- Reductions in GHG emissions

### Community

- Job creation
- Contribution to ocean and air preservation

### Employees

- Skill improvement and self-actualization
- Realization of diverse working styles

### Shareholders

- Improved medium- to long-term shareholder value and shareholder returns
- Highly transparent information disclosure



## Fine-tuning quality and structure for the stable supply of products with the motto “Sincere and agile customer service”

To win out against harsh competition as an independent refractory manufacturer, Yotai has grown by expanding its business dealings to a variety of industries. Yotai has gained a strong reputation as a company known for achieving low costs and faithfully delivering on schedule, no matter the customer. Going forward, Yotai remains committed to strengthening a sustainable business structure that supports stable operations at production sites across a wide range of fields.

### Competitiveness

1

## Ability to meet customer demands with sincerity and speed

To respond to the wide-ranging needs of its customers, Yotai has pursued an optimal production framework that included increasing internal production and the improvement of engineering technology. The commitment to “meet customer demands with sincerity and speed” is integral to Yotai’s corporate culture, and we hone our technological and production capabilities, and our cost competitiveness, at each of our work sites.

### Partnerships with Customers in an Array of Industries

No. of customers  
Over **300** companies

Size of product lineup  
Approx. **50,000** items

Yotai has a customer base of more than 300 companies. Depending on customer specifications and needs, orders can be made from the smallest lot possible – a single product – a responsiveness Yotai has used to build up robust partnerships.

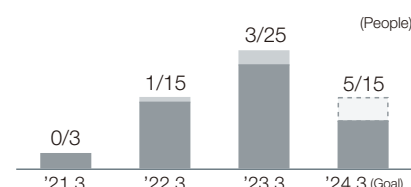
### Low-cost, Prompt Delivery Production Framework

Annual production capacity  
**114,312<sup>t</sup>**  
(Refractory bricks + monolithic refractories)

Four unique plants serve as production sites, with each involved in extensive cost-reduction activities and efficiency enhancements. An industry leader in adopting robotics in the production process, Yotai strives for greater automation and reduced labor.

### Proposing Solutions to Customer Issues Through Technical Sales Workforce

Technical sales workforce (incl. technical sales workforce/mid-career hires)



Yotai is striving to grow its technical sales workforce, capable of assessing customer concerns and issues to offer highly detailed service. The aggressive expansion of new high-value added products is another policy going forward as Yotai takes steps to enhance human resource capabilities by developing a training system for its technical sales workforce.

### Securing Ample Stockpile Space to Minimize Raw Material Procurement Risk



Mineral resources are the main raw material for refractories. One feature of the industry is its reliance on imports from China for the bulk of procurement. To stand prepared for geopolitical risk, at Yotai we have secured sufficient space to stockpile eight months-worth of core raw materials within the grounds of our production sites.

### Yotai Strengths

#### Independent from any particular corporate group

- Business structure not easily effected by any particular field
- Wide-ranging response capabilities

#### Thorough cost management

- Industry-leading profitability

#### Material and construction integration

- Response capabilities to fully undertake everything from design to construction and maintenance

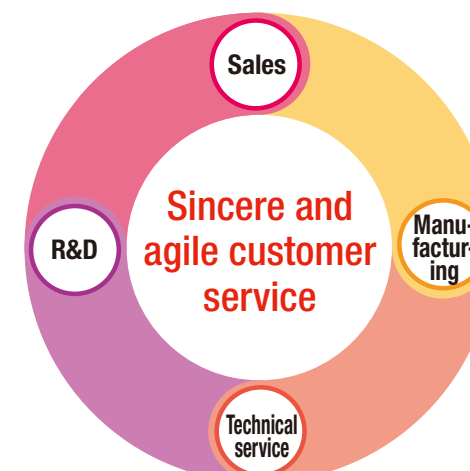
### Competitiveness

2

## Diligent structure enhancement supporting sustainable growth

In business activities, Yotai works to enhance structure in ways that allow the rapid reflection of issues, concerns and potential needs in products and services thanks to close ties between its sales, manufacturing, technical service and R&D departments. In recent years, this has culminated in the development of products with low environmental impact compatible with demands for carbon neutrality, and the adoption of technologies enabling more efficient construction, among other successes. These outcomes, in turn, are leading to improved competitiveness.

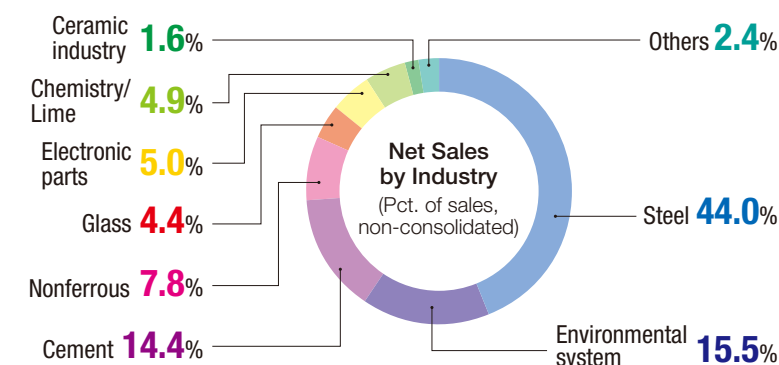
### ●Yotai Business Activities



### Select initiatives for strengthening structure in fiscal 2023

Sales	Sales base upgrade and expansion
Manufacturing	Improved productivity, greater rationalization and efficiency from adoption of large-scale presses, others
Technical service	Technical service workforce retention and training
R&D	Highly competitive new products and stronger development structure for new products with low environmental impact

### ●Generation of products, services (Output)



Contribute to

**Stable operations** **Lower operation costs**

at production sites across a wide range of fields

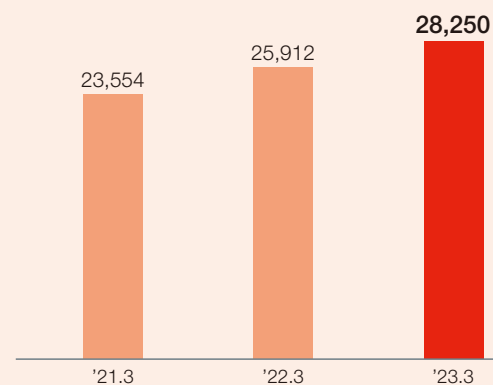
## Financial Highlights

For the fiscal year ended March 31, 2023, the Company reported a new record high for net sales, lifted mainly by robust demand from steel manufacturers, a mainstay business sector. Net sales per employee remained at a high level compared to the industry average, becoming a source of Yotai competitiveness.

Financial Review >>> p.48

Key Financial Data >>> p.50

### Net Sales (millions of yen)



## Non-financial Highlights

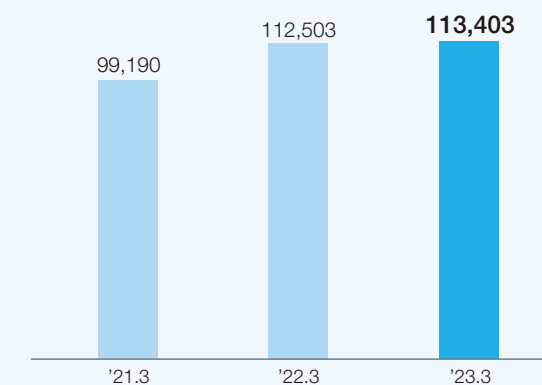
Yotai is engaged in aggressive capital investment to respond to climate change and to meet growing energy conservation and carbon neutrality demands. Maintaining a good balance in the age composition of its workforce is another Yotai strength, with continued efforts underway to build workplaces where all employees find it easy to work.

Initiatives Targeting Climate Change >>> p.33

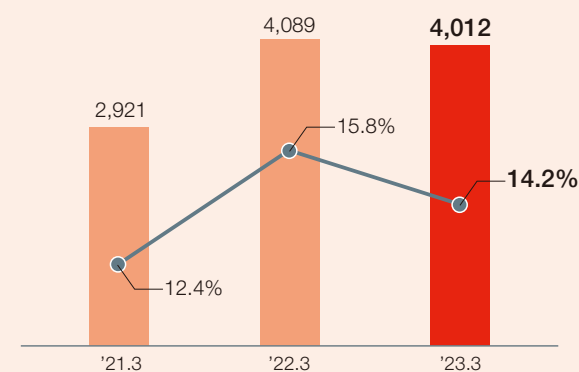
Human capital-related strategy >>> p.36

Environmental and Society-related Data >>> p.50

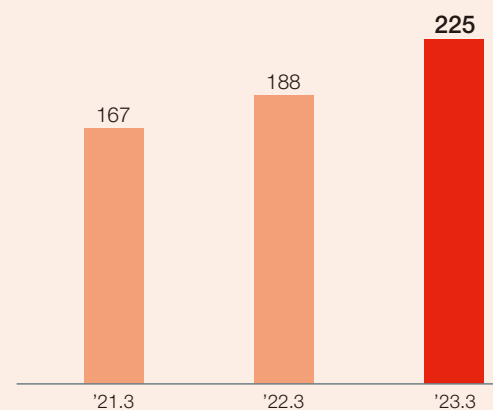
### Refractory Production Volume (t)



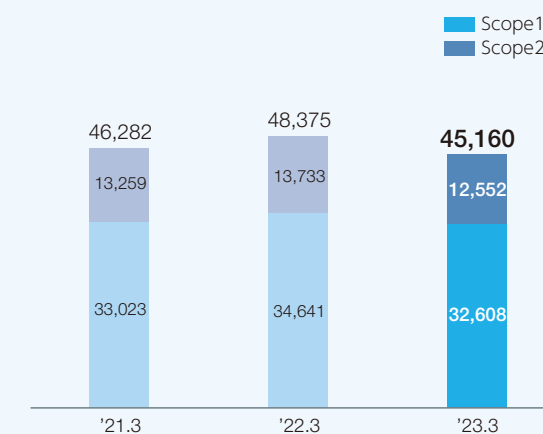
### Operating Profit (millions of yen) / Operating Profit Margin (%)



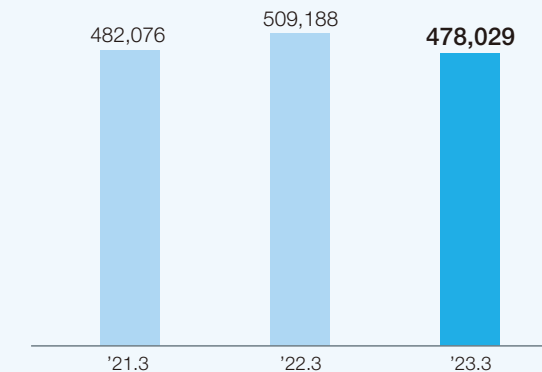
### R&D Expenses (millions of yen)



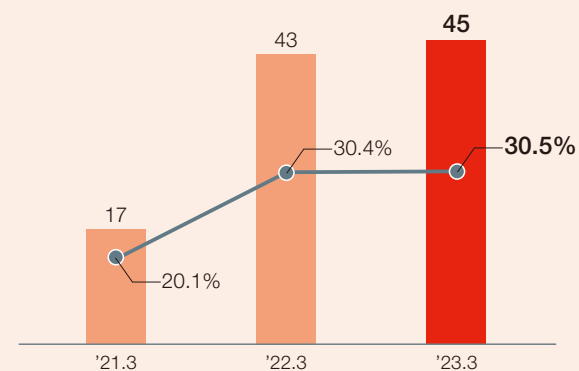
### GHG Emissions (t-CO<sub>2</sub>e)



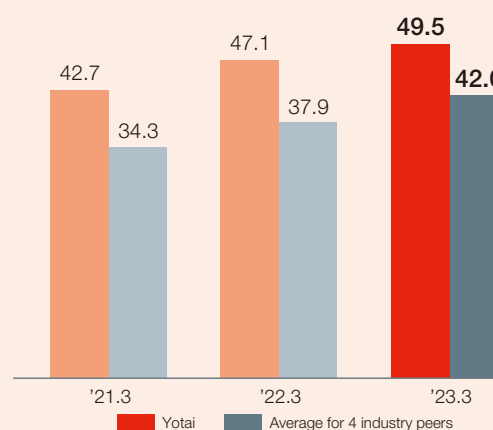
### Energy Usage (GJ)



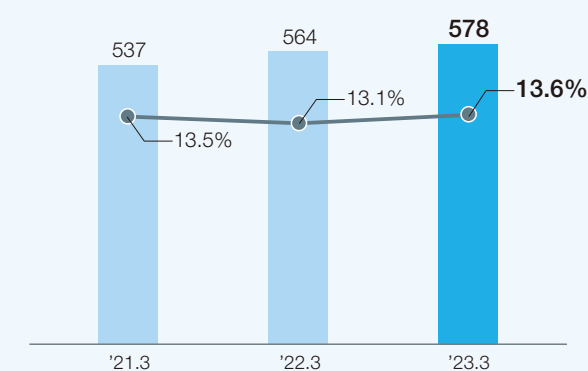
### Dividend per Share (yen) / Payout Ratio (%)



### Net Sales per Employee (millions of yen)

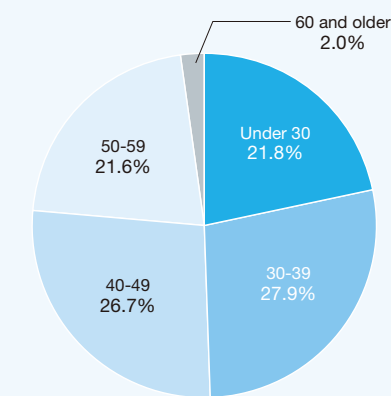


### No. of Employees (consolidated) / Pct. Female Employees (consolidated, %)



### Employee Age Composition

(non-consolidated/As of March 31, 2023)



# Contributing to industry development through the stable supply of refractories

**Mitsuo Taguchi**  
President



## Early achievement of First Medium-term Management Plan numerical targets

Under the First Medium-term Management Plan, our sights are set on “Becoming a company that continues to improve its corporate value in a sustainable manner in harmony with society.” In realizing this, we are working to maintain our earning capacity while continuing to stably supply high-quality refractories and services. By investing funds gained in the people, products and information vital to responding to future business environment changes, our aim is to develop a foundation for achieving sustainable growth.

In terms of business performance for fiscal 2023, ended March 31, 2023, the second year of the First Medium-term Management Plan, net sales rose 9.0% year on year to ¥28,250 million. Operating profit was down 1.9% to ¥4,012 million, while ordinary profit was up 0.5% to ¥4,134 million. With signs of an economic turnaround visible as the world emerges from the slump caused by the coronavirus pandemic, revenue increased on firm demand for products for steel manufacturers, one of Yotai’s core business clients. On the other hand, with respect to profit, operating profit was lower as sales price revisions, cost reductions and other steps failed to fully absorb the impact of high prices for raw materials and fuel triggered mainly by the situation in Ukraine and the yen’s depreciation. Ordinary profit was higher, largely atop proceeds from sales of shares held.

The business environment was definitely an adverse one, marked by rising geopolitical risks as well as significant volatility in raw material and fuel prices and currency markets. Nevertheless, thanks to the extraordinary effort of our employees, among other factors, business performance essentially surpassed initial numerical targets. This enabled Yotai to hit its goals for the final year of the medium-term plan a full year ahead of schedule.

## Record-high net sales and profit for the engineering business

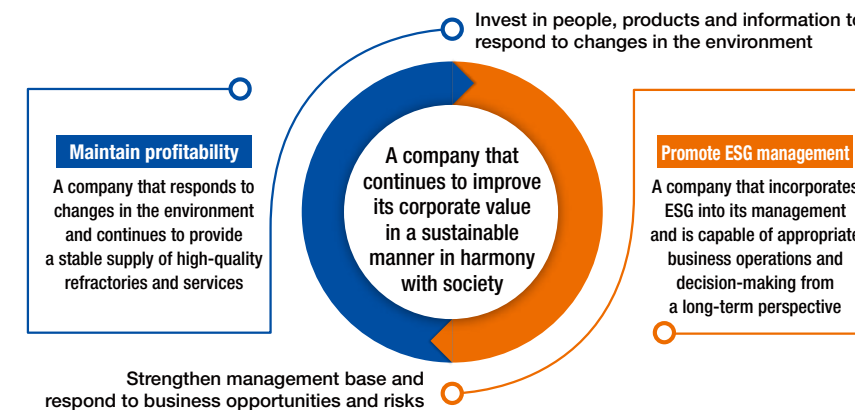
One success in fiscal 2023 was record-high net sales and segment profit reported for the engineering business. As customer capital investment recovers together with contraction of the coronavirus pandemic, we captured a number of new projects by bolstering our sales activities. Thanks to progress made in leveraging the capabilities of technical service personnel hired from the start of the First Medium-term Management Plan in April 2021, Yotai was able to smoothly execute on new large-scale projects won. Overall, there is a real sense that our project response capacity is definitely stronger now.

While the engineering business, on the one hand, is experiencing vigorous demand, labor shortages are also leading to opportunity losses. Earlier in my career, I spent nearly a decade working as General Manager of the Engineering Division. I was convinced that it was possible to spur business growth by taking steps to augment our workforce. Since the start of the First Medium-term Management Plan, we have shifted to aggressive recruitment, steadily enhancing Yotai’s fundamental strength by bolstering our training system, which includes the preparation of a training manual. This all contributed to expansion in business performance for the fiscal year ended March 31, 2023. Meanwhile, we anticipate that the engineering business, which is uniquely resilient with respect to currency exchange markets, will lead to greater stability in business performance.

## Robust demand for the refractory and engineering businesses also projected for fiscal 2024

The business environment surrounding Yotai faces a host of uncertainties, among them soaring prices for raw materials

■ Raise financial and non-financial value, become a company that continues to sustainably improve its value



and fuel, particularly against the backdrop of problems between Russia and Ukraine, coupled with volatility in the currency exchange markets. For these reasons, we are working tirelessly to firmly take stock our successes and issues to date, while moving to further build up our business performance.

For the refractory business, with signs of a turnaround in social and economic activity evident, robust performance is projected in fields such as steel, nonferrous, environmental systems and electronic parts. Among these, pressure is mounting for steel manufacturers, Yotai’s principal business partners, to address carbon neutrality. Accordingly, stable demand is anticipated from the standpoint of the industry having to deliver “green” steel.

In the engineering business, too, we have received orders for large-scale projects, and expect demand to remain firm. Leveraging our strength in integrated materials and construction, we are working to set Yotai apart by highlighting the total merit this offers for management and control with respect to quality, process and safety. At the same time, responding to the so-called “2024 Problem” in Japan’s construction industry is the greatest issue facing the engineering business. Japan’s construction industry is seeing the normalization of long working hours due to labor shortages brought on by a combination of societal aging and a decline in the working-age population. At the same time, the Work Style Reform Related Law is set to come into full force in April 2024, and will place caps on overtime work. Along with continuing to recruit and train personnel, we will minimize risks associated with delays in construction progress due to a lack of skilled laborers by communicating closely with customers in a bid to tackle construction work as quickly as possible, with “Safety First” as fundamental to everything.

## Stockpiling raw materials to hedge against geopolitical risks and strengthening the domestic production system

Refractories are used in a wide array of industries, and are viewed as high-demand items supporting heavy industry in Japan. Nevertheless, the entire refractory industry shares a common issue—high reliance on China for raw materials. As Japan’s top volume producer of refractories, Yotai views the stable supply of high-quality refractories, regardless of rising geopolitical risks, as its social mission, and is making strides in strengthening its stable production system in Japan. As part of this effort, Yotai has changed the layout of its Mizunami and Yoshinaga plants to secure space for raw material storage, where it now stockpiles an over eight-month supply of its principal raw materials. Further, in October 2022, we acquired the manufacturing business for refractory raw materials of Shibata Ceramic Raw Materials Co., Ltd., launching those operations now as the Toki Factory of the Mizunami Plant. We have also started engaging in evaluation testing for recyclable raw material-based production. From these steps, Yotai is now able to internally produce a portion of its raw materials, while also working to diversify the raw materials themselves. In addition, we are taking steps to boost production of cordierite and mullite, raw materials for kiln furniture used in sintering positive electrode materials used in lithium-ion batteries, ahead of anticipated growth in demand. At Yotai, we believe that ensuring stable supplies to customers is our No. 1 priority. With geopolitical risks today on the rise, we feel that strengthening our domestic production system is also garnering greater trust from our business partners.



## Fund allocation for sustainable growth and carbon neutrality

The refractory industry is maturing. To achieve sustainable growth, we are promoting DX through AI, IoT and ICT utilization, and need to further hone the efficiency of both our highly productive facilities and operations, two Yotai strengths. Concerns regarding sustainability are also rising, making contribution to SDGs and carbon neutrality a must. To address these issues, at Yotai we are actively investing in people, products and information. During the first three years of the First Medium-term Management Plan, we projected a total of ¥5.0 billion in investment, including ¥1.4 billion in renovation investment, ¥2.3 billion in strategic investment, ¥0.4 billion in IT investment, and ¥0.9 billion in other areas, which includes M&A activity. In the past two years, we carried out ¥650 million in renovation investment, ¥970 million in strategic investment, ¥80 million in IT investment, and ¥100 million in other areas, including M&A. Particularly in fiscal 2023, ended March 31, 2023, we successively carried out, among others, the adoption of large presses and high-efficiency presses at our principal plants to build a low-cost production system; installed solar power generation systems in a bid to achieve carbon neutrality; partially adopted electrical power from renewable energy sources; and introduced battery-powered lifts and EVs.

Furthermore, Yotai's new mission-critical system (known as "Mikumo") began full-scale operations from October 2023. We are also striving to strengthen our risk management structure by transitioning to a cloud-based solution for information systems.

In terms of initiatives addressing carbon neutrality, Yotai is aiming by fiscal 2030 to reduce its own greenhouse gas emissions (Scope 1+2) by 30% compared to fiscal 2014 levels. While achieving this end will require significant investment in areas such as energy conversion and CO<sub>2</sub> absorption, since the wave of technological innovation can be expected to outpace current predictions, it is also critical to ensure that the personnel, facilities and funds needed are also in place. On this front, we are giving top priority to adopting solar power generation systems, which are expected to have definite investment merit, and are also moving to utilize recycled fuel. Similarly, with future energy conversion on the horizon, we conducted ceramics firing tests (MAX 1600°C) using 100% hydrogen gas.\* We are also actively investigating areas accompanying infrastructure readiness and technological innovation, such the anticipated future use of ammonia and hydrogen, CO<sub>2</sub> absorption and methanation.

With respect to shareholder returns, under the First Medium-term Management Plan, we set a target consolidated payout ratio of 30%, coupled with a policy of flexibly repurchasing our own shares, to enact capital policies responsive to changes in the operating environment.

## Strengthening human and intellectual capital for sustainable growth

Given that one area for investment under the First Medium-term Management Plan is "people," we are moving to strengthen human capital, recognizing human resource retention, training and utilization as extremely important issues for Yotai's corporate existence. In addition to the launch from April 2022 of operation of a new personnel system based on sustainable growth-style remuneration system, we are introducing e-learning related to DX and management for those in the general employment pool. Additionally, we are conducting surveys to research the actual state of career advancement for women at Yotai, using AI-OCR and RPA to reduce working hours to create more welcoming workplaces, and moving to boost motivation by improving benefits, including by raising base pay, and increasing employee shareholding association incentives, among other steps. The number of young employees internally from the millennial generation or Gen Z has risen in recent years. With consciousness with respect to work styles and work itself changing, we are responding flexibly to differences in both generation and values.

At the same time, we are taking steps to bolster our intellectual capital. Ahead of the creation of new high-value-added products to lead growth, we are augmenting personnel with high-level specialized skills that "give shape to ideas" by boosting and training personnel at the Technical Research Laboratory and the Advanced Materials Laboratory. In conjunction, we are promoting research themes related to refractories that contribute to reductions in greenhouse gas emissions, the creation of recyclable raw materials, and the promotion of the switch to non-fossil fuels in the manufacturing process, among other areas.

## Enhancing corporate governance structure supporting swift and decisive management decision-making

In April 2022, Yotai opted to list on the Prime Market following a review of its market classification on the Tokyo Stock Exchange. The Prime Market faces a much greater level of scrutiny than ever before from shareholders, investors and other stakeholders. For this reason, to earn stakeholder trust in its business activities, Yotai takes ongoing steps to strengthen

\* Read the article from the front page of the July 23, 2023 edition of the Nikkan Kogyo Shimbun regarding joint research between Narita Co., Ltd., Narita Techno Co., Ltd. and Yotai.

▶ Article from the front page of the July 27, 2023 edition of the Nikkan Kogyo Shimbun: "Using hydrogen gas for ceramics firing - Narita Co., Ltd. finds alternatives to fossil fuel" (Japanese only)



▶ Article from the page 15 of the November 1, 2023 edition of the Nikkan Kogyo Shimbun: "Sintering refractories with hydrogen fuel - Yotai achieves basic technology needed" (Japanese only)



and reform its corporate governance structure—the foundation supporting swift and decisive management decision-making in response to business environment changes.

Previously, Yotai has taken a number of actions, including roll out of an executive officer system, establishment of a Nomination and Compensation Advisory Committee, and the introduction of a remuneration system offering transfer-restricted shares. Recently, Yotai offered a resolution to transition to a "Company with Audit and Supervisory Committee" governance model, which was approved by the General Meeting of Shareholders in June 2023. With external directors comprising more than half of its membership, the Audit and Supervisory Committee is responsible for auditing and monitoring the appropriateness and propriety of business execution. This will lead to even greater management transparency as we aim to build a structure that more accurately meets the expectations of our foreign and domestic stakeholders.

## Raising our industry profile through collaboration with small- and medium-sized peer companies

Yotai was established in 1936 with the goal of stably supplying high-quality refractories vital to steel and cement production, and to assist in modernizing the field in Japan. From there, Yotai expanded transactions with customers across a wide range of sectors, including nonferrous and environmental systems. Even looking back on the time since its founding, Yotai has grown against a backdrop of heavy industry advancement in Japan. In short, Yotai itself would not exist without the Japanese economy. In continuing to stably supply quality refractories, we remain committed to supporting the advancement of heavy industry in Japan. Although the Japanese economy continues to mature, an emerging trend in recent years is seeing a return of the manufacturing industry to the country. By strengthening dealings with enterprises of this kind and raising market share, we believe that even greater growth is possible.



In addition, a large number of small and medium-sized enterprises are facing succession problems that put their continued existence at a crossroads. As previously mentioned, Yotai acquired a manufacturing business for refractory raw materials from Shibata Ceramic Raw Materials Co., Ltd. We believe that through collaborations of this kind, we are further reinforcing our business base, thereby enabling Yotai to raise its industry profile.

Yotai is not part of the corporate group of any large steel manufacturer, giving it a high degree of management freedom; it also has an enterprise scale that allows for swift decision-making. Capitalizing on these features, while seeking on the one hand to further extend business performance, we are strengthening our business base through collaboration with other Japanese companies in striving to deliver sustainable growth.

## Image for the Second Medium-term Management Plan and what Yotai's existence means

With the end of the First Medium-term Management Plan approaching, Yotai will launch its Second Medium-term Management Plan from April 2024. Under the First Medium-term Management Plan, we sought to create a base for achieving growth through investments in people, products and information. Leveraging the base cultivated in doing so, under the Second Medium-term Management Plan, we hope to embody a dramatic vision as an all-new Yotai. In refractories, our principal business, we will contribute to the creation of bases for technology and production by spurring the advancement of production technology and maintaining supply stability. Similarly, in the engineering business, we are anticipating stable growth, and will add to the advancement of backbone industries through construction technologies that optimally preserve refractory performance. While our primary emphasis will remain the domestic market, it is essential that we also advance into rapidly growing overseas markets from a medium to long-term perspective. The retreat of the coronavirus pandemic has again made traveling overseas possible. Yotai is disseminating information for advancing into fields where it has advantages overseas.

In a changing society, we recognize that the meaning of Yotai's existence lies in confronting SDGs and contributing to them through business activities for developing a sustainable society. As always, we at Yotai stand united in our aim to improve corporate value, with a shared sense of urgency and professional awareness among senior management and all other employees alike. For our many stakeholders, we ask for your continued understanding and kind support of our efforts.

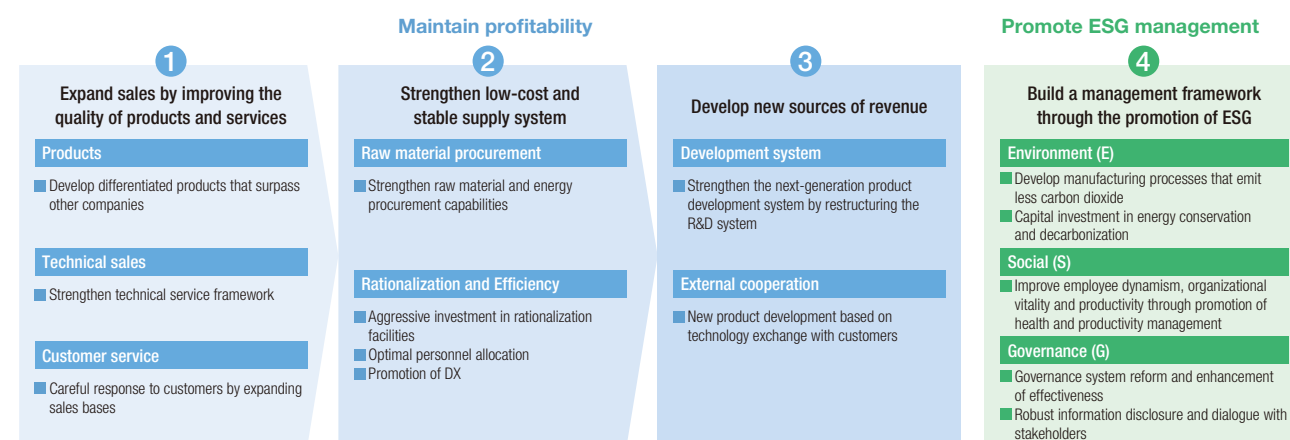


## Steady enactment of each measure of the plan, for a baseline surpassing numerical targets

In the push to clarify its target vision of “Becoming a company that continues to improve its corporate value in a sustainable manner in harmony with society,” Yotai formulated its First Medium-term Management Plan. In striving to be a company capable to responding to both environmental changes and social demands, we set about creating structures needed.

### ● The First Medium-term Management Plan Basic Policy

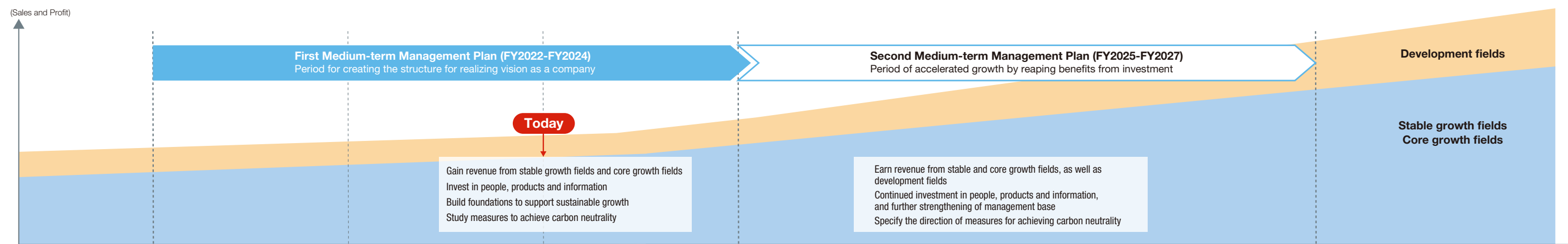
Promoted from fiscal 2022, ended March 31, 2022, to the end of March 2024, the First Medium-term Management Plan is positioned as a time to create structures for realizing Yotai’s vision. While maintaining both high profitability and financial soundness, we are concentrating investment in people, products and information as we make strides in building the management base to support sustainable growth. Specifically, we are implementing measures in two directions: “maintain profitability” and “promoting ESG management.”



### ● Highlights from Year 2 of the Medium-term Management Plan

Progress in steady enactment of priority measures, baseline trends exceeding numerical targets	▶▶▶ P. 48: Financial Review
Progress on investment in people, products and information also largely as planned People: Augment personnel of technical sales, strengthen training system, adopt new evaluation system Products: Adoption of large presses, solar power generation systems and other equipment with highly effective investment Information: Adoption of new mission-critical system and promotion of AI-OCR and RPA utilization	▶▶▶ P. 39 Schedule and progress for investment in people, products, information and other areas
Conduct inventory stockpiling from a BCP perspective to hedge against geopolitical risks	▶▶▶ P. 22: Business strategy Plant Department
Acquisition of business from Shibata Ceramic Raw Materials Co., Ltd., with launch of those operations as the Toki Factory of the Mizunami Plant. Also started engaging in evaluation testing for recyclable raw material-based production.	▶▶▶ P. 25: Business strategy Plant Department Mizunami Plant ▶▶▶ P. 26: Business strategy R&D Department

### ● Position of First Medium-term Management Plan in medium- to long-term strategy



### ● Strengthen fund allocation for investment, shareholder returns

We are planning for a total of ¥5.0 billion in investment under the current medium-term management plan. For shareholder returns, we set a target consolidated payout ratio of 30%; this figure was 30.5% for the fiscal year ended March 31, 2023. Additionally, to enable implementation of capital policies in response to changes in the operating environment, we are also planning to flexibly repurchase own shares going forward.

Cumulative for the 3-year period		Details	Mar. 2022 Actual	Mar. 2023 Actual	Mar. 2024 Target
<b>Investment</b> ¥5.0 billion	Renovation investment ¥1.4 billion	Streamlining, efficiency investment	¥0.33 billion	¥0.65 billion	¥0.31 billion
	Strategic investment ¥2.3 billion	Adoption of strategic equipment Decarbonization investment BCP investment	¥0.52 billion	¥0.97 billion	¥1.12 billion
	IT investment ¥0.4 billion	Information system investment	¥60 million	¥80 million	¥0.27 billion
	Other investment ¥0.9 billion	M&A investment and investment not included above	—	¥0.1 billion	—
<b>Shareholder returns</b>		Strengthen shareholder returns (Target consolidated payout ratio of 30%)	30.4%	30.5%	32.7% (Planned)
		Flexible repurchase of own shares	¥1.5 billion	¥1.5 billion	¥1.5 billion (Planned)

### ● Performance trends

In the fiscal year ended March 31, 2023, all targets, including net sales, operating profit, and ROE, were achieved ahead of schedule. Steps are underway to build up performance even further in fiscal 2024, the final year of the plan.

	FY2021 Actual	FY2022 Actual	FY2023 Actual	FY2024 Estimate
Net sales (Millions of yen)	23,554	25,912	28,250	29,000
Operating profit (Millions of yen)	2,921	4,089	4,012	4,100
ROE	6.6%	10.0%	9.7%	—



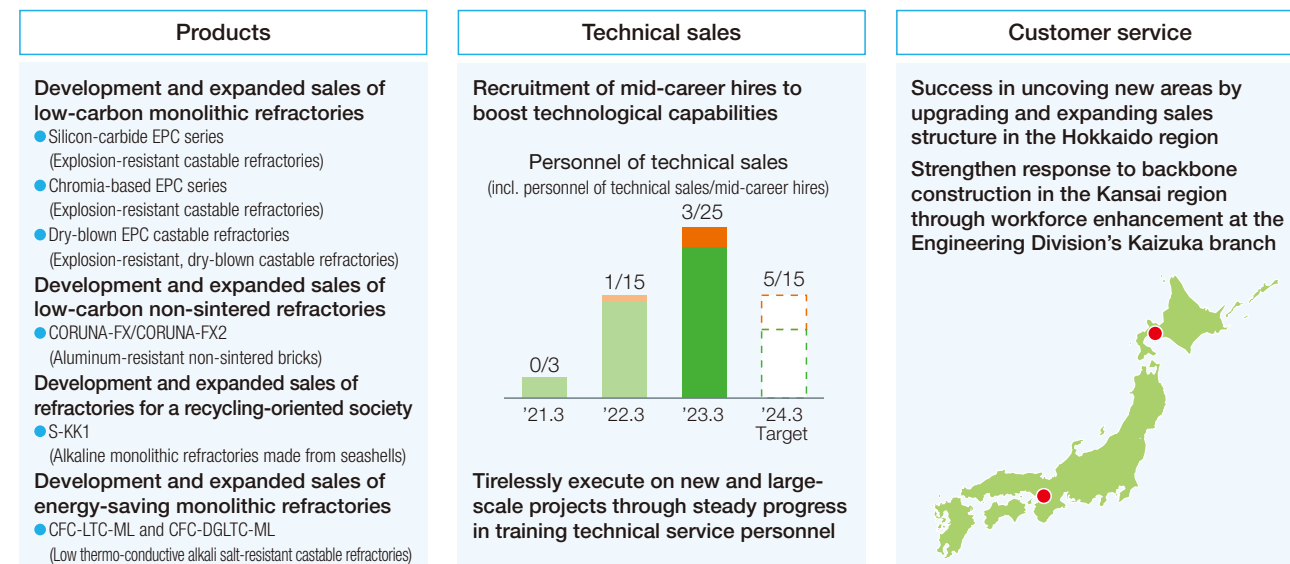
## Key successes of the First Medium-term Management Plan in FY2023

In fiscal 2023, the second year of the medium-term management plan, we marked a steady stream of successes from every angle in building up Yotai's management base. These included improving product and service quality, bolstering our low-cost, stable supply system, creation of a new development framework for cultivating new revenue streams, and ESG promotion.

### Major Successes (1)

#### Expand sales by improving the quality of products and services

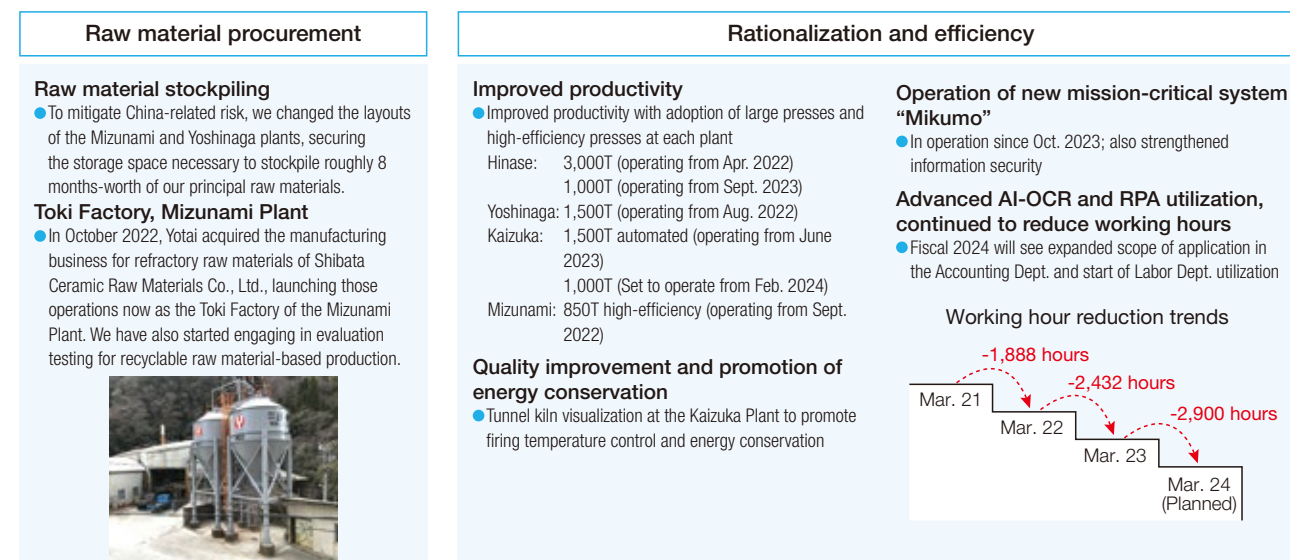
In answer to calls for carbon neutrality, Yotai is working to develop products with low environmental impact. Yotai has also worked diligently to recruit technical service personnel and strengthen training systems ahead of future sales expansion.



### Major Successes (2)

#### Strengthen low-cost and stable supply system

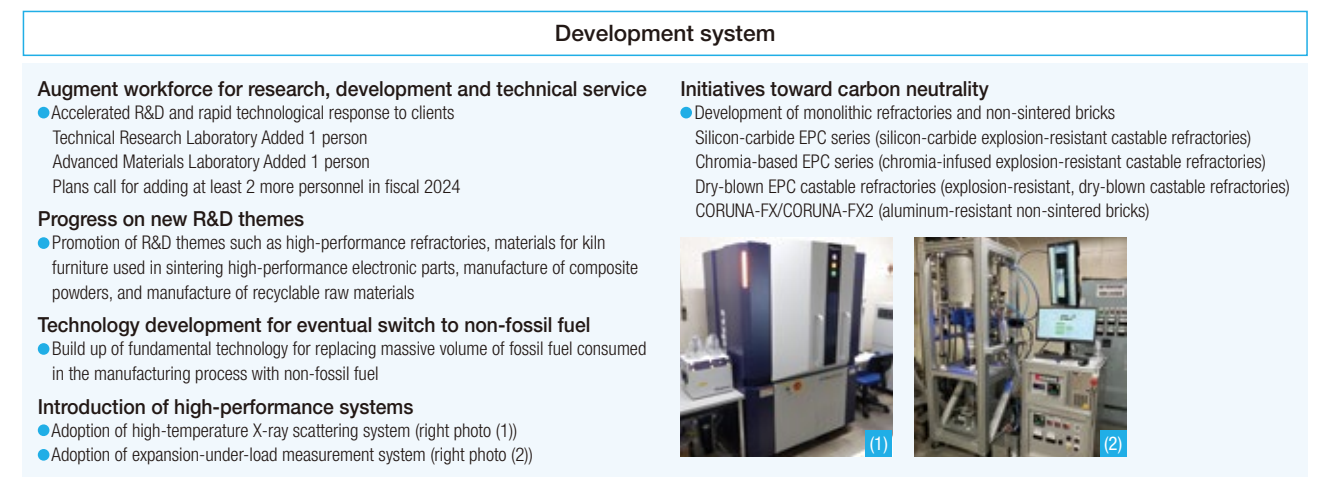
To mitigate China-related risk in raw material procurement, Yotai has stockpiled roughly 8 months-worth of raw materials by changing its plant layout. In terms of initiatives for boosting rationalization and efficiency, along with ongoing cost reduction activities in the manufacturing process, we adopted large and high-efficiency presses in a bid to improve quality and enhance productivity efficiency.



### Major Successes (3)

#### Develop new sources or revenue

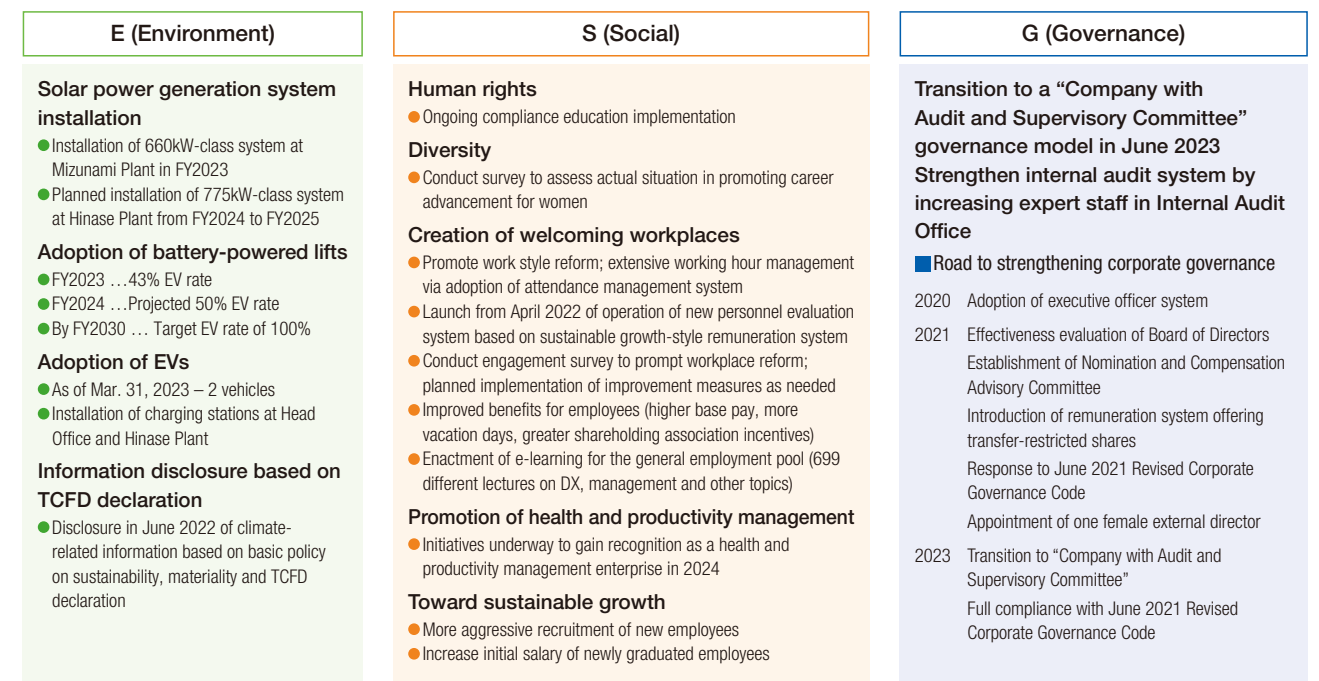
Yotai conducted structural reforms to raise its R&D capabilities for highly competitive new products. To accelerate R&D and respond quickly to customer demands, we took various steps to level up, including augmenting personnel at the Technical Research Laboratory and the Advanced Materials Laboratory, coupled with the adoption of high-performance systems.



### Major Successes (4)

#### Build a management framework through the promotion of ESG

Along with promoting a raft of carbon-reduction initiatives, Yotai advanced measures targeting work styles and digital transformation (DX). On the governance enhancement front, in June 2023, Yotai transitioned to a "Company with Audit and Supervisory Committee" governance structure, and moved to augment its internal audit system by increasing the number of expert staff in the Internal Audit Office.





Sales Department

Backed by knowledge of a broad range of industries, rather than exclusive focus on a single industry, as a strength, the Sales Department plays a key role in linking customers and Yotai departments together. Closely monitoring trends in customer industries and the refractory sector leads to definitive orders and sales expansion.



**Yorisada Matsumoto**  
Director; General Manager,  
Tokyo Branch

**Steady progress in strengthening sales capabilities centered on personnel retention and training; sales activities utilizing drones also highly rated**

**Sales Department characteristics and roles**

In addition to steel, Yotai has captured high market share in many industries, boasting transactions with customers across sectors ranging from nonferrous and cement to environmental systems and electronic parts. The business environment surrounding the refractory industry is constantly changing, while customer issues and needs are becoming more diverse and sophisticated. Beyond the need to address automation and labor-saving in furnace construction due to labor shortages, the number of customers interested in diversifying the sources of their raw material procurement from the standpoint of mitigating geopolitical risk is also increasing. The Sales Department accurately grasps customer issues and needs, taking steps together to find solutions.

A major strength of Yotai’s Sales Department is its knowledge of a wide range of industries, rather than exclusive focus on a single sector. Refractories are products that link directly to stable operations in customer production activities. Starting from proposing the best materials for the operating conditions, and occasionally even providing prototypes, advancing persistent sales activities that reflect meticulous improvements based on use conditions, all while earning customer trust, is critical. Another important Sales Department function is correctly conveying customer needs and requirements to the Plant Department, R&D Department and other areas.

Strengthening sales capabilities is indispensable to Yotai’s sustainable growth, which is why human resource development is a focus of the Sales Department. In addition to rich insight regarding trends in customer industries and the refractory sector, the department works to train human resources who can identify solutions to customer issues from a technological perspective.

**Fiscal 2023 Results**

In terms of strengthening sales capabilities, we recruited two mid-career hires in fiscal 2023. The ability of these recruits to articulate things like Yotai’s market position, future potential and target vision, as well as the merits of its openness in-house, all led to their hire. Their training continues via OJT after recruitment. Gaining entry to the worksites of a diverse array of customers enables the department to grasp trends and needs from a wide range of industries, which it seeks to quickly turn into valuable assets.

Among sales activities, those utilizing drones have won particularly strong praise from customers. Since 2021, Yotai has adopted the use of drones to inspect inside industrial furnaces. The use of drones in this way makes it possible to accurately confirm furnace internal conditions without the need for footholds. This, in turn, is expected to allow for shorter inspection times and reduce foothold-related expenses.

The Sales Department is also continuing to tackle the introduction of new digital tools. In fiscal 2023, it joined forces with the Engineering Division to adopt a remote support device system on a trial basis. The setup involves using a wearable camera to remotely assess customer conditions on the ground, and is being considered for use to cope with future reductions in manpower and for human resource development.

**Initiatives to answer needs for reduced environmental impact**

Most of Yotai’s customers are under pressure to address efforts to reduce their environmental footprint, centered mainly on achieving reductions in greenhouse gas (GHG) emissions. In the environmental systems field, for example, there is a move afoot to search for new energy recycling approaches that will contribute to further reductions in impact. There is a possibility that the main approach currently in play, thermal recycling—a method whereby heat energy from the incineration of waste is recovered and utilized—will give way to approaches like chemical recycling, in which chemicals and fuel are produced from waste. Plant manufacturers are moving ahead with examining the technological reliability of these methods using experimental furnaces on site, and Yotai is conducting sales activities to have its refractories adopted for use in these efforts. If the full-scale introduction of these experimental furnaces as part of garbage incineration facilities happens in the future, there is a higher possibility that Yotai can become the preferred choice in orders for related refractories. What kind of refractories contribute to solving customer issues? While soliciting feedback on this concept in-house, we seek to convert what we learn into products.

**Future outlook**

Because the manufacturing sector in Japan is continuing to mature, overseas expansion is critical to Yotai’s sustainable growth. In parallel with research ahead of establishing sales bases overseas, Yotai is currently planning to conduct surveys that will bring into view greater diversity among suppliers for raw material procurement. This move is also expected to diversify procurement sources that exhibit high dependence on China.

In responding to high prices for raw materials, while we have made progress in revising some prices, trends in both customers industries and the refractory sector remain shrouded in uncertainty. In addition to soaring logistics costs and high prices for fuel and raw materials, we are also monitoring the so-called “2024 Problem,” which will see regulatory caps placed on overtime work in the construction and logistics industries in Japan. Accordingly, we will clearly communicate with customers regarding issues like construction times, delivery times and base costs as we adjust to these changes.

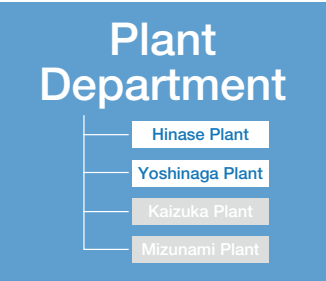
Achievements in the second year of the Medium-term Management Plan

- Steady progress on mid-career hire recruitment and training to enhance sales capabilities
- High marks for industrial furnace inspection and accurate verification of condition using drones
- Adoption on a trial basis of remote support devices and other IT tools

Future outlook and targets

- Full-scale research activities ahead of overseas base establishment to bring greater diversity in sources for raw material procurement into view
- Continuing efforts to address soaring prices for fuel and logistics, as well as the “2024 Problem” (construction/ logistics industries)





At Yotai's four production bases, we leverage the distinct characteristics and strengths of each to stably and efficiently manufacture high-quality refractories to meet customers' multifaceted and diverse needs. Together with cost reductions at each base through rationalization and other means, we are responding to carbon neutrality and promoting BCP measures in line with site location and facilities.



**Tadashi Taniguchi**  
Director; Plant Manager,  
Hinase Plant

**Hinase Plant**    **Largest class of refractory brick production capacity in Japan**  
**Began operating a 3,000T press to improve brick-forming efficiency**

**Strengths of the Hinase Plant**

The Hinase Plant first began operating in 1938, and has the longest history as a Yotai production site. The plant has two tunnel kilns for alkaline bricks, and boasts the largest class of production capacity for refractory bricks in Japan. The site is also involved in the production of large clay-made and high alumina-made bricks used primarily by glass manufacturers.

**Fiscal 2023 Results**

A major feature of the 3,000T press introduced last year is the ability to form bricks automatically or manually. High brick-forming pressure is making it possible to stably form large products,

while the ability to choose manual or automatic formation depending on the number of products ordered is improving forming efficiency. Together with an automated formation-dedicated 2,500T press for mass production, this is contributing to improved operational efficiency for the entire plant.

In terms of BCP measures, in fiscal 2023 we completed the installation of drainage pump for use as a measure in response to storm surge caused by typhoons or concentrated torrential rains. We are also breaking down and renovating obsolete facilities and structures, and completed a new building wing in May 2023. We intend to spend roughly ¥0.1 billion in updating electricity reception and transmission equipment by the end of fiscal 2024.

Where initiatives for carbon neutrality are concerned, we switched to LEDs for over 95% of lighting for the entire plant, with plans to have all lighting provided by LEDs sometime in fiscal 2024. We also completed adoption of EVs, and are moving ahead with plans to convert all forklifts over to electric.

**Future outlook**

To strengthen the cost competitiveness of products for steel manufacturers, a key Yotai client, we are increasing the production lines for alkaline monolithic refractories. Full-scale operation of a dual production-line system has taken place since September 2023. Since becoming a two-line system, stage replacement work, including the switch out of raw materials, has declined, while facility efficiency has improved. Going forward, we are concentrating the production of alkaline monolithic refractories at the Hinase Plant, with improved production efficiency leading to lower costs and greater cost competitiveness.

Raw materials for refractories have high dependency on China. Supplying refractories in response to client needs, however, requires stable procurement of raw materials. Accordingly, during the fiscal year under review, we stockpiled our raw material inventories, delivering a structure capable of responding even to sudden changes. Relatedly, we plan to build a new warehouse for raw materials sometime in fiscal 2024. In addition, we are moving to diversify procurement sources to hedge against geopolitical risks.

In light of strides by steel manufacturers in changing blast furnaces over to electric furnaces as part of decarbonization efforts, we are seeking to augment production capacity for magnesia-carbon refractory bricks for electric furnaces.

Achievements in the second year of the Medium-term Management Plan	Future outlook and targets
<ul style="list-style-type: none"><li>● Improved production efficiency from full-scale operation of 3,000T press</li><li>● Systematic promotion of BCP measures</li><li>● Switch to LEDs for over 95% of lighting</li></ul>	<ul style="list-style-type: none"><li>● Improved production efficiency and competitiveness from dual-production line system for alkaline monolithic refractories</li><li>● Augmented production capacity for products for electric furnaces</li><li>● Adoption of 775kW-class large solar power generation system</li></ul>

**Yoshinaga Plant**    **Definitively answering ever-changing needs with strengths in high-value-added monolithic refractory products in the environmental field**

**Strengths of the Yoshinaga Plant**

This plant has a number of manual presses and lots of skilled labor. We are also building a structure that can cope with high-value-added small-lot, multi-product refractory orders. A strength for the plant is monolithic refractories for environmental systems, which are found within industrial furnaces and in which a significant number of monolithic refractories are used.

**Fiscal 2023 Results**

For the 1,500T press in operation since August 2022, to extend the useful life of refractories we did a comparison with our previous 630T press, manufactured high-quality refractories containing fewer gaps, and are currently verifying customer usage conditions on site and collecting evaluation data. Looking ahead, we hope to expand sales of high-quality refractories based on evaluation data. Furthermore, the adoption of an automated 1,500T press will enable even shorter times for formation work. Along with boosting productivity, this will lead to an improved work environment in several ways, including by reducing the labor burden and work noise.

In terms of initiatives for carbon neutrality, we are adopting both solar power generation systems and electric vehicles (EVs). At the Second Branch of the Yoshinaga Plant, the main production site for monolithic refractories, we have taken steps to transition all vehicles at the site to EVs.

As for BCP measures, in tandem with continuing a variety of drills and similar efforts in collaboration with the local fire department, we built a new disaster-ready warehouse and stockpile food, water and other essentials, with the aim of being a plant that can function for the sake of employees and community members in the event of a disaster.

Furthermore, through partnership between the Hinase and Yoshinaga plants, we promote social contribution activities in the Okayama district. At a new office building to commemorate the 60th anniversary of the plant's founding, we have installed AED equipment in the security station that is accessible to the local community. To make for a more welcoming work environment, we have also installed barrier-free equipment and incorporated elements of universal design.

**Future outlook**

In the field of environmental systems, trends point to the replacement of traditional gasifying and direct melting furnaces with stoker furnaces, just as municipality-run garbage treatment businesses spread wider geographically and treatment facilities grow more concentrated. The Yoshinaga Plant supplies high-quality refractories for gasifying and direct melting furnaces and stoker furnaces alike. However, given the projected switch to stoker furnaces going forward, plant makers are pushing ahead with the development of new furnace types offering even higher performance and efficiency. Furnace changes, in turn, will trigger commensurate changes in desired refractory performance. To ensure that the Yoshinaga Plant can meet these changing needs, we are allotting development technicians within the plant, and conducting rapid technology development in collaboration with the Technical Research Laboratory.

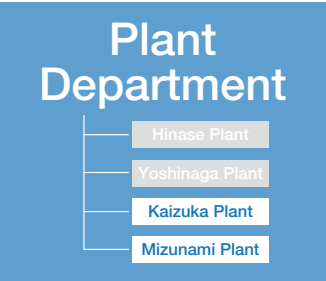
Personnel retention and training are emerging as pressing issues. To address these, in addition to continuing to aggressively recruit local graduates, we are working to reform the mindset of onsite employees and deepen inter-employee communication, as we steadily promote improved employee autonomy and initiative, and raise skill levels. Looking forward, labor and management will continue to cement relationships of trust in faithfully conducting fundamental plant operations.

Achievements in the second year of the Medium-term Management Plan	Future outlook and targets
<ul style="list-style-type: none"><li>● Operational start of 1,500T press</li><li>● Adoption of solar power generation systems and EVs</li><li>● Locally embedded plant operations</li></ul>	<ul style="list-style-type: none"><li>● Rapid technology development via collaboration with the Technical Research Laboratory</li><li>● Personnel training and employee mindset reform</li></ul>



**Koji Matsumoto**  
Executive Officer,  
Plant Manager, Yoshinaga Plant





**Naoyuki Nishimura**  
Executive Officer,  
Plant Manager, Kaizuka Plant

**Kaizuka Plant**

**Focus on improved quality and production efficiency, with a close eye on changing trends in the electronic parts field**

**Strengths of the Kaizuka Plant**

At the Kaizuka Plant, Yotai manufactures refractories used primarily in sintering electronic parts. Roughly half of the products from this plant are sent overseas. In answer to both technological innovation in the industry and cost competitiveness globally, we are introducing new facilities and actively upgrading existing ones.

**Fiscal 2023 Results**

Electronic parts and semiconductor-related fields are areas of anticipated medium and long-term market expansion. Compared to the other three plants, the Kaizuka Plant is smaller in scale, making improved production system efficiency critical to firmly connecting growing demand to orders received. In June 2023, we installed a robot to a 1,500T press, a move that completely automated everything, including post-formation palletizing (stacking of bricks on pallets). To achieve even greater production efficiency, plans call for introducing a new high-speed 1,000T automated press.

Elsewhere, in January 2023, we carried out tunnel kiln visualization (DX). Here, through construction for collecting and analyzing data on the internal condition of each tunnel kiln, including furnace pressure and oxygen concentration, work formerly performed by highly skilled laborers to adjust combustion conditions within the furnace based on experience is done with greater precision. In doing so, we aim to improve product quality and reduce fuel consumption.

In initiatives toward carbon neutrality, a 750kW-class solar power generation system has been online since February 2023, providing 33% of the electrical power the plant uses. In conjunction here with changes in the plant’s contract plan with its power company, we are promoting the use of carbon-free electricity derived from renewable energy, with the aim of achieving effectively zero carbon emissions from electric power usage.

Regarding the securement of raw materials, we embarked on construction of a new warehouse. With the completion of a new warehouse in December 2023, Yotai can secure roughly a full year’s worth of inventory.

**Future outlook**

Regarding the inspection process for kiln furniture used in sintering electronic parts, we will use greater DX to reduce inconsistency in work performed by humans and introduce automated lines for sorting work, with sights set on lifting treatment volume.

The electronic parts and semiconductor industries are undoubtedly set to expand further. Moreover, given the rapid pace of technological change, vigorous capital investments are taking place at related manufacturers. Similarly, at the Kaizuka Plant we are matching this speed by collaborating with the R&D Department to develop new products. Many customers in the electronic parts field are enterprises that are advancing business globally. This means that the Kaizuka Plant’s products must also be competitive overseas. In addition to revising plant layout and promoting improved production efficiency through more automation, we are seeking to both enhance our response capabilities through introduction of a new material line and improve quality.

Achievements in the second year of the Medium-term Management Plan	Future outlook and targets
<ul style="list-style-type: none"><li>● More efficient production system for front-end and back-end processes</li><li>● Promotion of use of carbon-free electricity derived from renewable sources from solar power generation system operation and electric power plan changes</li><li>● Stockpiling of raw material inventories; securement of new procurement partners, research and cultivation of new procurement partners to reduce costs</li></ul>	<ul style="list-style-type: none"><li>● Improve production efficiency in preparation for increased electronic parts demand, continue initiatives to ensure quality</li><li>● Build a new warehouse to stockpile even more inventory</li><li>● Consider a new material line in collaboration with the Advanced Materials Laboratory</li></ul>

**Mizunami Plant**

**Build the optimal production line for the intended production lot, and further enhance the flexible, multi-product, small-lot production system that is a Yotai strength**

**Strengths of the Mizunami Plant**

At this plant, an efficient production system for the small-lot, multi-product manufacture of refractory bricks and monolithic refractories alike is a key strength. For OEM products—a Yotai earnings source—the Mizunami Plant functions as a delivery and gathering hub, helping to reduce logistics costs.

**Fiscal 2023 Results**

Thanks to the operation of a 850T press introduced in 2022, the plant achieved a roughly four-fold improvement in efficiency compared to a manual press. The system in place allows relatively large-lot products, such as general and simply shaped products, to be produced by the 850T press rather than by hand, with products in even smaller lots relegated to the manual press. This division of work is requiring fewer laborers for production lines overall, while also enabling the development of an efficient production system responsive to lot size. Going forward, we will take steps to uphold greater mass production and the creation of products with high added value. Since the formation of refractories for electronic parts, a field where future expansion in demand is anticipated, has also become possible, we will conduct tests for establishing a production system.

Furthermore, with needs on the rise for refractories for sintering raw materials for EV batteries, Yotai products are winning praise and garnering inquiries from repeat large customers. Accordingly, we are exploring options for lifting up our supply capacity.

Initiatives targeting energy conservation, decarbonization and moving toward carbon neutrality are also continuing to gain momentum. In addition to raising the proportion of recycled oil used in tunnel kilns to roughly 30%, we made improvements to drying furnaces to reduce heat energy loss. We also achieved a nearly 25% reduction in the volume of electricity purchased thanks to solar power generation system adoption.

Equipment from Shibata Ceramic Raw Materials Co., Ltd., acquired through a business transfer in October 2022, is now operating as the Toki Factory of the Mizunami Plant. At this same site, it is also possible to manufacture cordierite and mullite raw materials for sintering positive electrode materials used in lithium-ion batteries. Leveraging these characteristics, we will strengthen the creation of a flexible production system.

**Future outlook**

Concerning initiatives for achieving greater operational efficiency and automation, as part of efforts to further improve manual press productivity in fiscal 2024, we will install a 300T press that should improve forming efficiency by nearly double. We also hope to automate sorting processes going forward. Specifically, we will introduce an automated sorting system for general products and large-lot products in simple shapes, resulting in a framework with a process requiring a single operator instead of the three currently needed.

As a decarbonization initiative, we will explore options for switching from heavy oil and recycled oil for tunnel kiln fuel to gas fuel, which emits far less carbon.

With respect to BCP, we will prioritize countermeasures for dealing with landslides, floods and other natural disasters to stay prepared for the risk of an operational shutdown. We will also investigate responses to risks posed by fires and blackouts caused by lightning strikes.

Achievements in the second year of the Medium-term Management Plan	Future outlook and targets
<ul style="list-style-type: none"><li>● Achieved roughly four times greater efficiency through operation of an 850T press</li><li>● Addressed large-lot orders for refractories used in sintering raw materials for EV batteries</li><li>● Continued initiatives targeting energy conservation, decarbonization and carbon neutrality</li></ul>	<ul style="list-style-type: none"><li>● Adoption of automated systems for sorting processes</li><li>● Greater facility efficiency at the Toki Factory, establishment of a mass production framework</li><li>● Strengthen BCP measures targeting landslides, flooding, lighting strikes and other events</li></ul>



**Kinya Yamamoto**  
Executive Officer,  
Plant Manager, Mizunami Plant



## R&D Department

The R&D Department is responsible for R&D operations and technical service operations. On a daily basis, department technicians are involved in business negotiations with customers and dispatched to perform actual furnace inspections, assessing needs while focusing on the development of high-value-added products.



**Kazunari Imai**

Executive Officer;  
General Manager,  
Quality Assurance Department,  
Advanced Materials Laboratory,  
Technical Research Laboratory

### Focus on product reform and development that contributes to areas like energy savings and fuel switchover, and accelerate R&D through tie-ups with other companies

#### Trends in customer needs and technology development

Because Yotai products are used under a wide variety of conditions, technicians in the R&D Department directly verify usage under actual furnace conditions, allowing them to grasp customer needs and conduct R&D into possible upgrades and new products.

We are pushing ahead with the commercial development of monolithic refractories, which we anticipate will offer simpler construction and shorter construction times compared to refractory bricks. To this end, we are bolstering our lineup of products with improved resistance post use to cracking and peeling, or shattering at high temperatures. In monolithic refractories for steel, Yotai's primary client base, taking cost performance into account, we are developing products using recycled raw materials. As an example, in the City of Bizen, home to Yotai's Hinase Plant and famed for its oysters, we have entered a cooperative agreement with local

Hinase Fisheries Association to explore research into using discarded oyster shells as raw material for refractories.

In refractories for electronic parts, an area where future expansion in demand is expected, we are developing high-porosity, high-strength setters (kiln furniture materials) as products that can contribute to energy savings in our customers' business activities. Using setters with these characteristics allows for an increase in the volume of products that can be sintered at one time, thereby saving energy.

We also continue to develop non-sintered refractories as part of initiatives for reducing Yotai greenhouse gas (GHG) emissions. Among steel manufacturers, some customers have announced intentions to replace traditional sintered magnesia chrome-made products with non-sintered versions made from magnesia carbon, offering superior durability and fewer carbon emissions. We are pursuing development to ensure Yotai can meet this demand.

#### Initiatives for switching to non-fossil fuels and next-generation fuels

We are also advancing research and development for switching away from fossil fuels in favor of non-fossil fuels and next-generation fuels when manufacturing refractories. Based on joint research with a business partner, in July 2023 we developed a test high-temperature furnace burning at 1,700°C using 100% hydrogen gas. Future plans call for sintering Yotai products in this test furnace and evaluating performance.

#### Future outlook

In addition to collaboration with other companies and regional communities, examples of development pursued through industry-academia partnerships are also emerging. We remain committed going forward to pursuing the same kinds of joint research.

In personnel retention and training, our efforts are centered on gaining the human resources vital to development of products that will become future pillars for Yotai, along with recruitment and training of personnel who can do technical sales. Given the rapid changes that occur in markets such as kiln furniture for sintering positive electrode materials for lithium-ion batteries, we are training specialized personnel who can respond in kind.

#### Achievements in the second year of the Medium-term Management Plan

- Promotion of R&D for monolithic, energy-saving and non-sintered refractories
- Joint development of high-temperature test furnace using hydrogen as fuel
- 5 patents filed (incl. 2 under evaluation)

#### Future outlook and targets

- Acceleration of R&D from tie-ups with external companies and industry-academia partnerships
- Personnel retention and training, including those able to respond to specialized fields

## Engineering Division

The Engineering Division is involved in every step of industrial furnace development, from design to construction and maintenance, using refractories manufactured at Yotai plants. Backed by its strength in integrated materials and construction, Yotai is answering wide-ranging customer needs across all types of industrial furnace.

### Contributing to sales and profits backed by strength in integrated materials and construction Promoting human resource development, passing on of technology and greater DX ahead of medium- to long-term growth

#### Strengths of the Engineering Division

The Engineering Division is the unit largely responsible for concept of "integrated materials and construction," fully integrating everything from industrial furnace design through to construction and maintenance. Along with engineering technology honed over decades, the division counts its network of over 40 partner companies as a strength, making meticulous responses to its customers possible. Customers give high marks to Yotai's sophisticated construction technology and proven track record, with the division also winning new orders for environmental systems and large-scale upgrade projects in recent years.



**Motokatsu Kume**

Executive Officer  
General Manager,  
Engineering Division

#### Fiscal 2023 Results

In fiscal 2023, the Engineering Division reported record sales and ordinary profit. This outcome was the result of several factors, among them an aggressive drive in collaboration with the Sales Department to gain orders, and its robust responsiveness to new construction projects and upgrade and maintenance construction for large-scale backbone facilities. To address vigorous order gains, the division worked through the Sales Department to meticulously adjust schedules, and worked tirelessly to deepen relationships with partner companies.

In recruitment activities, the division made strides in cooperation with Administrative and Plant departments, focusing on OJT on the training side in a bid to get personnel up to speed quickly.

#### Future outlook

Japan's construction industry, of which Yotai is a part, is facing a serious labor shortage brought on by societal aging, and must also urgently confront the so-called "2024 Problem." For its part, the Engineering Division is working to retain and train personnel, promote the passing on of Yotai technology, and achieve more efficient operations through DX and other means in aligning toward sustainable growth.

In personnel retention and training, the division will continue to promote wide-ranging recruitment activities and careful training, underpinned by collaboration with the Head Office and production plants.

Regarding the passing on of Yotai technology, the division is continuing to push ahead with the development of educational tools and an educational training system, all from a base of engineering expertise amassed over decades in the form of construction blueprints and technical calculation software.

On the DX front, the division began offering on a trial basis support for onsite supervisors through remote support devices. Looking ahead, expanding and enhancing back-office personnel responsible for remote support is also becoming more urgent. Meanwhile, the division will also take steps to more effectively utilize 3D-CAD and line chase machinery used for rotary kilns expanded last year.

#### Achievements in the second year of the Medium-term Management Plan

- Achieved record business segment sales and profits
- Strengthened collaboration with partner companies

#### Future outlook and targets

- Personnel retention with sights on "work style reform" in April 2024
- Achieving educational tools and systems for human resource development and passing on Yotai technology



Administrative Department

The formulation of Yotai’s First Medium-term Management Plan made it possible to address issues based on a medium- to long-term perspective. In fiscal 2023, the second year of the plan, along with strategic investment for sustainable growth, we made progress in bolstering our organizational structure for ESG promotion, including establishing various subcommittees under the Sustainability Committee. Striving to be a partner in supporting the development of customers across various industries, the Administrative Department will advance both cross-departmental collaboration and personnel retention and training efforts.



**Shinichiro Takebayashi**  
Managing Director,  
General Manager,  
General Affairs Department,  
Head Office

Steady advancement of strategic investment and organizational structure enhancement

Role of Head Office General Affairs Department

Collaboration between departments and divisions in charge of sales, production plants, engineering and R&D is crucial to the efficient production and stable delivery of Yotai’s over 50,000 types of multi-product, small-lot refractories. While holding a bird’s-eye view of the entire Company, the role of the Head Office General Affairs Department is to innovate systems, create mechanisms and allot funds companywide to support each department and division in operating smoothly. This, in turn, underpins improvement in corporate value for Yotai. In implementing the First Medium-term Management Plan, aside from preparing for adoption of “Mikumo,” the mission-critical system that will become the core of DX promotion, actions included pursuing greater operational efficiency through RPA and AI-OCR utilization, creating more welcoming workplaces, and embarking on system development for appropriate personnel evaluation.

Fiscal 2023 Results

Enhancing foundations via strategic investment

The drafting of medium-term management plans makes it possible to conduct business operations and decision-making from a longer-term perspective, and to steadily enact strategic investment that goes beyond simple investment in updates or renovation. Specifically, we adopted large and high-efficiency presses at each plant for greater production system rationalization and efficiency, introduced high-performance analytic systems to enhance R&D capabilities, and adopted both solar power generation systems and EVs as part of decarbonization efforts. In the back office, along with operation of the “Mikumo” mission-critical system, we utilized “kintone” groupware and business card management software to strengthen our customer response capabilities, and introduced a workhour management system and a raft of IT tools to improve operational efficiency and support work style reform.

Better visualization of management-level thinking

In addition to medium-term management plan formulation, the publication of “Integrated Report 2022” enabled better visualization of both the direction in which Yotai is headed and management-level thinking. This move is making it easier to picture future employee treatment and knowledge of operations that should be learned, thus raising the sense of security employees feel. And while the main purpose of the Integrated Report is information disclosure for shareholders and investors, there is a real sense that publication has had a ripple effect reaching employees as well.

Build a management framework through the promotion of ESG

Under the First Medium-term Management Plan, one of the basic strategies is management foundation development through ESG promotion, for which measures are steadily being enacted.

**E:** In the area of “Environment,” we launched an Environment Subcommittee, and began debating specific measures for reducing greenhouse gas (GHG) emissions at the CNV (Carbon Neutral Vision) Council under this structure. As long-term measures, we are building up basic technology for replacing fossil fuels with non-fossil alternatives, as well as exposing the merits and demerits of the switch to non-fossil fuels, among other moves.

Regarding climate-related information disclosure, we implemented a scenario analysis process within the fiscal 2023 securities report, identified climate-related risks and opportunities, specified priority risks and opportunities, established scenarios and evaluated their business impact, and disclosed the drafting of countermeasures. We also disclosed the process by which risks and opportunities are managed, climate-related indicators and targets, and progress status. We are also making progress in preparing for disclosure of Scope3 data in the fiscal 2024 securities report.

**S:** In the “Society” field, we launched a Human Capital Subcommittee, and defined both “3 Pillars of the Yotai Personnel Strategy” and “The Five Desired Human Resource Portraits.” At present, we are examining the effectiveness of each

measure, and exploring options for even more effective human resource development measures.

Concerning career advancement for women, we launched the Female Career Advancement Project as a suborganization under the Human Capital Subcommittee, aligning issues and drafting action plans based on the results of survey research.

In creating welcoming workplaces, we conducted an engagement survey designed to spur workplace improvement. While there were some slight differences in temperament between business offices, the results were favorable overall. As a point for improvement, there was a request, especially among younger employees, to improve the fairness of personnel evaluations. One factor here may be that not enough time has elapsed since the personnel evaluation system based on a sustainable growth-style remuneration system began operating in April 2022. However, with an eye to seeking mutual understanding through sustained communication, as the notion of fair evaluation gains traction, we believe that related numbers will gradually improve.

**G:** With respect to “Governance,” in June 2023, we received approval at the General Meeting of Shareholders to transition to a “Company with Audit and Supervisory Committee”-based governance structure. This move will improve management transparency and prompt faster decision-making.

Additionally, we augmented personnel inside the Internal Audit Office and otherwise took steps to reinforce our internal audit system. In line with operation of our “Mikumo” mission-critical system in October 2023, we carefully monitor operational task content and flow and expose risks, including making problem points and issues more apparent by soliciting feedback from frontline employees. We will also strengthen risk responsiveness by improving the in-house status of internal audit operations.

Future outlook

While on the one hand, the direction in which Yotai is headed and management-level thinking are becoming more visible, there is room for improvement in ensuring that both the rationale behind the medium-term management plan and specific initiatives gain further traction among employees. If there is a real sense that efforts to address the work of each employee are directly tied to improved business performance and to raising Yotai’s reputation among clients and society at large, this, we believe, will enable employees to tackle their daily tasks with even higher levels of motivation. The First Medium-term Management Plan was drafted as a management-led plan. However, with the Second Medium-term Management Plan set to start from April 2024, we would like to strengthen the involvement of our employees in plan formulation and enable each employee to take more initiative in implementing the plan.

Furthermore, we recognize that expectations around making capital policies clearer are growing. Under the First Medium-term Management Plan, we championed a policy of aggressive investment in people, products and information to usher in sustainable growth, articulating a target consolidated payout ratio of 30%. At the same time, we fielded numerous requests from shareholders and investors for disclosure of more precise capital policies. Accordingly, we will continue to explore options regarding what Yotai’s stance should be with respect to capital policies, taking input into account notably from a newly appointed external director with expert knowledge of finance and accounting, as well as external experts.

Achievements in the second year of the Medium-term Management Plan

- Strengthened organizational structure for ESG promotion, including establishment of subcommittees under the Sustainability Committee
- Greater visibility of management-level thinking from publication of the integrated report
- Transitioned to a “Company with Audit and Supervisory Committee” governance structure and strengthened internal audit system

Future outlook and targets

- Formulate Second Medium-term Management Plan
- Consider more precise capital policies
- Stable operation and further evolution of “Mikumo” mission-critical system



## Information System Department

Thanks to the incorporation of “DX strategy” under the First Medium-term Management Plan, we pursued various initiatives aimed at digitalization. As part of the project for transitioning to the “Mikumo” mission-critical system, among other outcomes, more revitalized communication began to emerge among employees thanks to log utilization.



**Yasuhiro Inoue**

General Manager,  
Head Office General Affairs  
Department Information System  
Group

### Progress on the second project from operation of the “Mikumo” mission-critical system – achieving “client-originated DX”

#### What is DX at Yotai?

DX at Yotai involves sparking innovation by leveraging digital technology to respond to business environment changes. Being cognizant of the ways in which digital technology should be used in business promotion, as well as the kinds of technology to select and apply to which operational tasks, are important points for DX at Yotai.

#### DX based on client-originated concepts

When it comes to DX promotion, client-originated concepts are essential, even while holding fast to the importance of boosting productivity and the value of pursuing profit as an enterprise rooted in manufacturing. The role of the Information System Department is to database customer-related information gathered in the course of normal business activities, along with industry trends, statistical

data and other publicly available information to share in-house. This information is then linked to areas such as Yotai orders, shipments and other supply chain management data, and quality control in manufacturing. Driving this work are ideas from the management team and individual directors and employees regarding the kind of value that Yotai can provide to its customers. If, in leveraging this information, we can promote strategic sales activities that expand orders, achieve shorter production lead times and greater efficiency, and promote both product improvements and new product development, then DX at Yotai will have been fully realized.

#### Progress on the “Mikumo” mission-critical system operation project

In October 2023, we completed the transition to and launched the full-scale operation of “Mikumo,” Yotai’s new mission-critical system. In addition to project management and other necessary functions, the goal of the transition is to promote cloud environment utilization and a shift to paperless operations. As a new initiative, with respect to UAT,\* we recorded in groupware and worked to better visualize all logs, including improvement requests, employee requests, and error reports, and reflected these as much as possible in system improvements. As a result, employee motivation regarding system improvement is also rising. Along with employees having their own conversations on additional system improvements after viewing these logs, evidence has emerged that they are becoming more aware of points for improvement. The right approach to DX will differ for every enterprise. For Yotai, there is a sense that utilizing our compiled data to change operational flow and the flow of goods may be an important first step in its own DX journey.

Today, we are pressing ahead with a version upgrade project as the second phase of “Mikumo,” moving to implement items to address that were pushed back at the initial operational launch of the system.

\* User Acceptance Test: Refers to tests conducted by clients/end users to determine whether a software product operates in line with client conditions and expectations, or to confirm if user needs are being properly met.

#### Future outlook

By incorporating DX strategy into the First Medium-term Management Plan, DX and information system-related agenda items were raised at the Management Meeting and meetings of the Board of Directors. Under the Second Medium-term Management Plan, scheduled to start in fiscal 2025, we are aiming for systemization and digitalization that can contribute to sustainable growth for Yotai.

In pursuit of the right DX for Yotai, we will work diligently to attract DX personnel, as well as convert regular employees to those specializing in DX.

#### Achievements in the second year of the Medium-term Management Plan

- DX strategy promotion under First Medium-term Management Plan
- New mission-critical system “Mikumo”
- Log recording, utilization under UAT

#### Future outlook and targets

- Promotion of second project from operation of “Mikumo”
- Systemization and digitalization contributing sustainable growth
- Securement of DX personnel, conversion of employees to DX personnel

## Yotai's DX Strategy

With Yotai's DX strategy, the goals are to spur innovation in sales styles to gain new clients, and to extend management through greater supply chain and value chain sophistication. One concrete DX strategy initiative advanced currently is the full-scale operation and version upgrade of “Mikumo,” Yotai's new mission-critical system.

#### About DX at Yotai

Leveraging digital technology, spark innovation by responding to business environment changes

#### What can DX make possible?

Sales style innovation to gain new clients  
Management expansion from increased supply chain, value chain sophistication

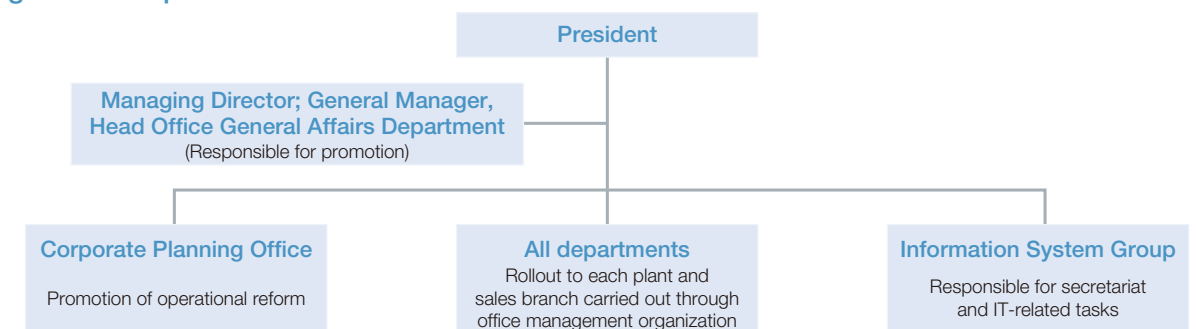
#### Specific measures

Mission-critical system innovation  
Digitalization via cutting-edge ICT

Innovation via information foundation development and data utilization

Development of welcoming workplaces for employees through IT devices and IT systems

#### Diagram of DX promotion structure



#### About the “Mikumo” mission-critical system

In October 2023, we initiated the full-scale operation of “Mikumo,” the new mission-critical system serving as our companywide network, with the main purpose of promoting improved operational efficiency across Yotai. Today, while verifying the operational status of Mikumo, we are embarking in parallel on a project for reaching the next version of this system. Meaning “Future-oriented cloud system,” the name was decided by in-house submissions, and comes from a combination of the Japanese words for “future” (mi) and “cloud” (kumo). With the development of a cloud-based system, our aim is to realize more stable system operations, while also enhancing our responsiveness to information security and BCP measures.

#### Thought process behind DX promotion and Mikumo operation

Business environment change happens at light speed, while SDGs and population decline are inescapable realities that must be confronted. Internally, Yotai has proud traditions in the development, manufacture and sale of products—the core work of the manufacturing industry—as well as frontline capabilities. At the same time, operational expertise has tended to rely on individual employees. This experience, knowledge and information are a trove of invaluable assets for Yotai. Converting these to digital information will enable the development of new products and services, Q (quality), C (cost) and D (delivery) optimization in manufacturing, and improved levels of client satisfaction.



#### What kind of innovation will DX bring?

Amass digital information spanning development, production and sales, centered on Mikumo

Expert analysis of digital information and better visualization for units in charge of operations

Utilizing digital information in daily tasks, achieve faster decision-making and better onsite operational efficiency

Rather than bottle up digital information in-house, take steps to share it with customers, suppliers and other relevant partners for co-creation



## ESG management at Yotai

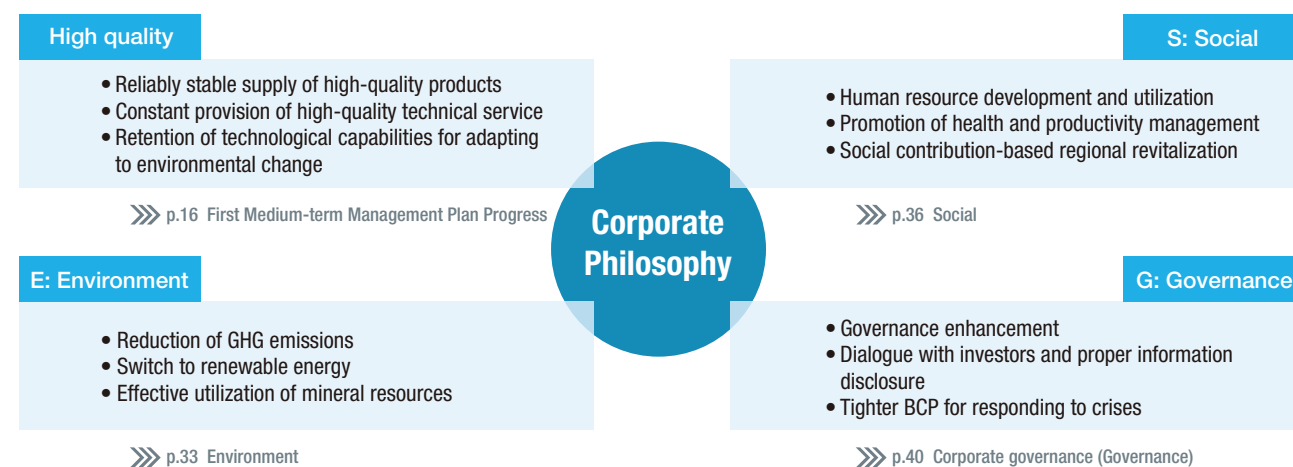
Guided by requirements stated in the Corporate Governance Code, Yotai has defined a basic policy on sustainability that further promotes initiatives in this area, coupled with establishment of a Sustainability Committee as a crosscutting organization functioning companywide. Additionally, Yotai has specified important issues to prioritize in addressing companywide (materiality), promoting business activities through these that will enable sustainable growth.



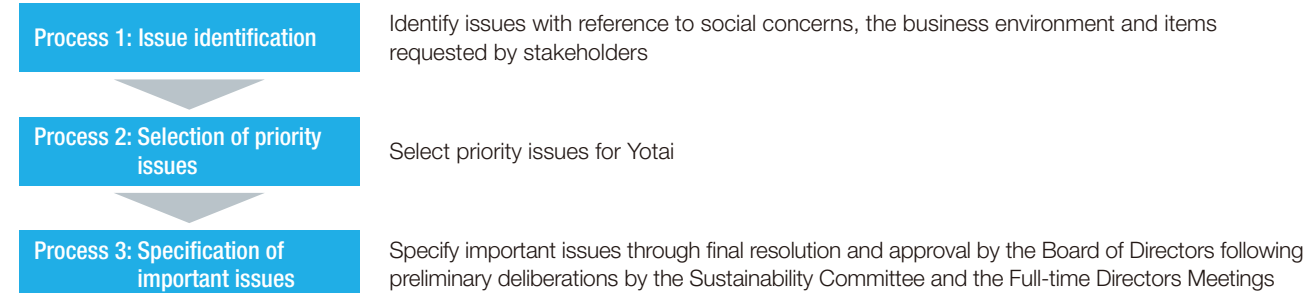
### Basic policy on sustainability

As its corporate 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, using our unique technology and passing on the history and experience in long-standing refractory manufacturing technologies to the next generation.” Together with striving to resolve social issues by putting this philosophy into practice, Yotai will push ahead going forward with initiatives for delivering its own sustainable growth.

### Materiality (Important issues)



### Processes for specifying materiality



## Environment

### TCFD declaration-based climate-related disclosure

In August 2023, along with clarifying its endorsement of the declaration from the Task Force on Climate-related Financial Disclosure (TCFD), Yotai opted to join the TCFD Consortium. Subsequently, Yotai declared a reduction in greenhouse gas (GHG) emissions as one of the important issues it is prioritizing. Today, Yotai is using its endorsement of the TCFD declaration and participation in the TCFD Consortium as opportunities to further advance initiatives and explore options for more robust disclosure.



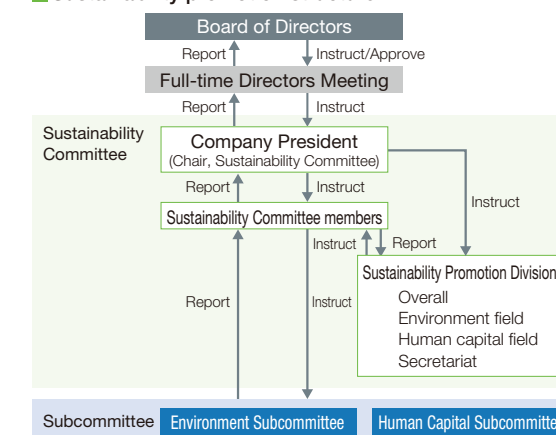
### Governance

#### 1. Management system

Yotai has installed a Sustainability Committee, chaired by the President, as a body to promote climate- and human capital-related initiatives. Under guidance from the chair, the Sustainability Promotion Division formulates action plans, while subcommittees addressing the environment and human capital outline and devise annual activities in areas such as information gathering, risk conceptualization, countermeasure planning and in-house education in promoting concrete activities.

Following deliberation and review by the Sustainability Committee, these plans are reported to and deliberated twice yearly by the Full-time Directors Meeting, and reported once annually to the Board of Directors. The Board of Directors is responsible for setting goals with respect to sustainability-related initiatives and monitoring the status of progress each year.

#### Sustainability promotion structure



#### 2. Role of managers in risk and opportunity evaluation and management

While serving as chair of the Full-time Directors Meeting, the President also bears ultimate responsibility for management decision-making pertaining to sustainability. Details deliberated by the Full-time Directors Meeting and discussed by the Sustainability Committee are finally reported to the Board of Directors.

The membership of the Sustainability Committee consists of directors, executive officers and select business office heads appointed by the President. The committee formulates basic policies for sustainability management, and along with implementing and checking on sustainability-related matters in the medium-term management plan, carries out initiatives pertaining to sustainability issues.

#### Sustainability meetings

Meeting name	Chair	Main topic	Meeting frequency
Sustainability Committee	Company President	Study of climate-related risks and opportunities Study of human capital-related risks and opportunities	Twice yearly
CNV (Carbon Neutral Vision) Committee	Company President	Study of methods for reducing Scope1/2 GHG emissions	Monthly
Cost Down Meeting	Company President	Study of adoption of renewable energy systems Study of adoption of eco-friendly production systems	Monthly
Plant Meeting	Plant Group managers	Horizontal advancement of new system for adoption (renewable energy systems/eco-friendly production systems) among production plants	Four times yearly
Materials Meeting	Company President	Effective utilization of mineral resources Study of methods for measuring Scope 3 GHG emissions	Six times yearly
Development Meeting	Company President	Study of technologies for reducing GHG emissions (development of monolithic refractories/non-sintered bricks)	Monthly
HR Strategy Meeting	Director in charge	Specification of human capital-related risks and opportunities; study of appropriate measures	Six times yearly
Career Advancement for Women Meeting	Director in charge	Formulation of action plans; plan proposal to management and progress management	Four times yearly

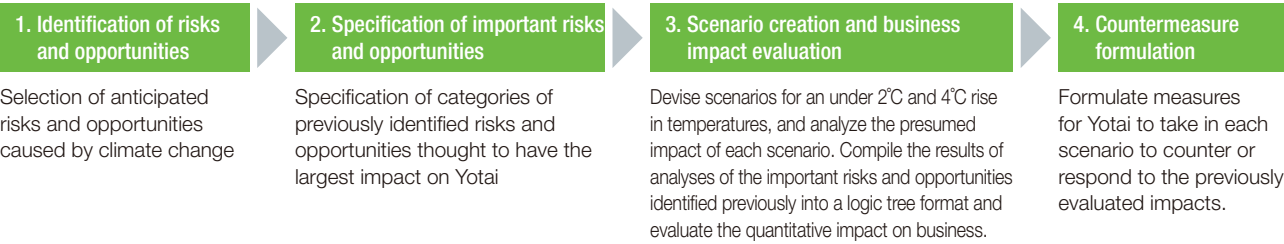
Environment

Climate-related strategy

1. Recognition of organizationally sorted short-, medium- and long-term climate change risks and opportunities

In terms of how climate change will impact Yotai, we have analyzed scenarios imagined over short-term (1 to 3 years), medium-term (through 2030) and long-term (after 2030) time horizons. Risks posed by climate change are divided into risk associated with transitioning to a low-carbon society (transition risk) and physical impact (physical risk). We have also devised scenarios in which the average global temperature stays under 2°C compared to pre-Industrial Revolution levels, including 1.5°C and 2°C scenarios, and those in which temperatures rise to or above 4°C. We then clearly identified those risks and opportunities thought to carry the highest level of impact.

Scenario analysis process



2. Likely impact of climate-related risks and opportunities on organization’s businesses, strategies and financial planning

A rating of risk importance revealed 20 risk and opportunity items. Of these, six listed in the chart below are considered to be of “major” importance.

Chart of potential risks and opportunities, financial impact (quantitative analysis), response measures and timelines for items rated as “major” risk importance

(Financial impact: ○– Major impact, △– Modest impact, ×– No impact)

Type	Risk/opportunity category		Importance rating	Potential risk/opportunity	Degree of impact		Response measure	Timeline
	Broad category	Smaller category			Under 2°C	4°C		
Transition risks	Policy/regulation	Carbon tax/ carbon price	Major	Molded products have drying and firing processes that use fuel oil, LNG and electricity. Molded products are classified as either fired or unfired products; fired products have a firing process that consumes a substantial amount of energy. Various policies currently being explored for adoption to combat climate change, including carbon taxes and higher energy conservation standards, will require significant additional costs.	○	×	● Investments in energy conservation, switch to renewable energy and switch to carbon-free energy ● Per-unit reductions in fuel and electricity ● Installation of storage batteries	Long term
		GHG emission targets/policies in each country	Major	The international community is moving forward rapidly with initiatives to drive decarbonization. Failure to meet ensuing social demands could run the risk of lower sales. Conversely, if more stringent targets are established in response to these demands, this could require more countermeasures than those for currently established targets at the below 2°C standard. This, in turn, will entail expenses for new countermeasures. Yotai is establishing GHG reduction targets for fiscal 2031, and pushing ahead with introduction of solar power and other renewable energy. While reductions in future energy costs from the installation of such facilities will emerge, financial risk will rise during facility adoption.	○	×	● Investments in energy conservation, switch to renewable energy and switch to carbon-free energy ● Per-unit reductions in fuel and electricity ● Installation of storage batteries	Long term
		Stronger emission reporting obligations						
	Market	Changes in energy mix	Major	Growth in fuel prices is directly linked to increases in manufacturing costs, a direct expense. However, there is concern that manufacturing costs could rise if the levy on renewable energy power generation based on the electricity feed-in tariff increases in step with the widespread uptake of renewable energy going forward.	○	×	● Switch to renewable energy ● Further per-unit reductions in fuel and electricity	Long term
Physical risks	Acute	Environmental regulations in each country	Major	Raw materials for refractories are sourced mainly from China. China has also pledged to become carbon neutral in 2060, with domestic environmental regulations in China predicted to intensify going forward. High raw material prices that result from a decrease in supply volume are viewed as an ongoing risk.	○	×	● Discovery of new sources for purchase of raw materials ● Domestic production ● While currently focused on China, seek stable procurement at appropriate prices via multiple purchase points, including outside of China ● Raw material recycling	Long term
		Greater frequency and seriousness of abnormal weather patterns (torrential rains, flooding, etc.)	Major	Costs are likely to increase from hindered operations and increased restoration costs predicted from damage to manufacturing bases and supply chain disruptions caused by more frequent large-scale typhoons, torrential rains and other weather.	△	△	● Production site dispersal in response to BCP	Long term
Opportunities	Products and services	Changes in consumer preferences	Major	Given strengths in the manufacture and sale of refractories for electric furnaces, the replacement of blast furnace products with low carbon, recyclable steel materials, coupled with anticipated growth in the scale of demand for such materials in the future, could lead to opportunities to expand product sales. Low-carbon refractory bricks, unfired bricks and monolithic refractories will contribute significantly to the scale of this market.	○	○	● Expanded sales of refractories for electric furnaces	Medium term

3. Results of scenario analysis

Established scenarios

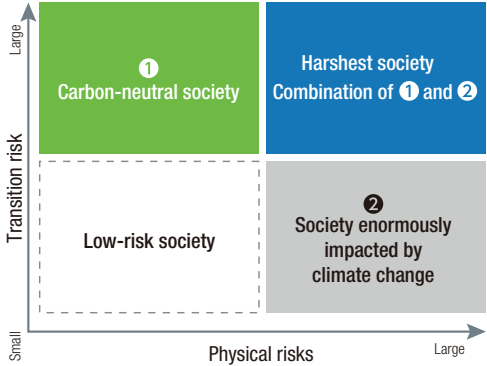
(1) Scenario with significant transition risk (below 2°C scenario)

“①Carbon-neutral society” - scenario in which regulations, particularly governing greenhouse gases, grow stricter, and social systems transition to climate change mitigation (External scenario reference: RCP2.6, SDS/NZE2050)

(2) Scenario with significant physical risk (4°C scenario)

“②Society enormously impacted by climate change” – scenario requiring physical adaptation to combat fierce natural threats (External scenario reference: RCP8.5, STEPS)

From the study of results of analysis of in-house scenarios, by devising countermeasures, such as investment in energy conservation, energy-saving conversions and expanded sales of refractories for electric furnaces, this will heighten the resilience of Yotai businesses with respect to future risks. For the harshest social scenario, a combination of scenarios ① and ②, risk can be reduced by amalgamating countermeasures separately devised for each scenario.



Climate-related risk management

1. Process for sorting and evaluating climate-related risks and opportunities

The Sustainability Committee studies climate-related risks and opportunities and, following deliberations by the Full-time Directors Meetings, reports its findings to the Board of Directors. After receiving reports on climate-related risks and opportunities, the Board of Directors ultimately specifies and evaluates companywide climate-related risks, exploring options with close attention to the regulatory environment. Standards for deciding the relative importance of climate-related risks in comparison to other risks follow below.

- (a) Identify risks and opportunities believed to impact materiality as defined by Yotai
- (b) Evaluate importance of measures/countermeasures from degree of impact of identified risks and opportunities on stakeholders
- (c) Study from quantitative and qualitative perspectives, confirm importance relative to climate-related risks

Climate-related indicators and targets

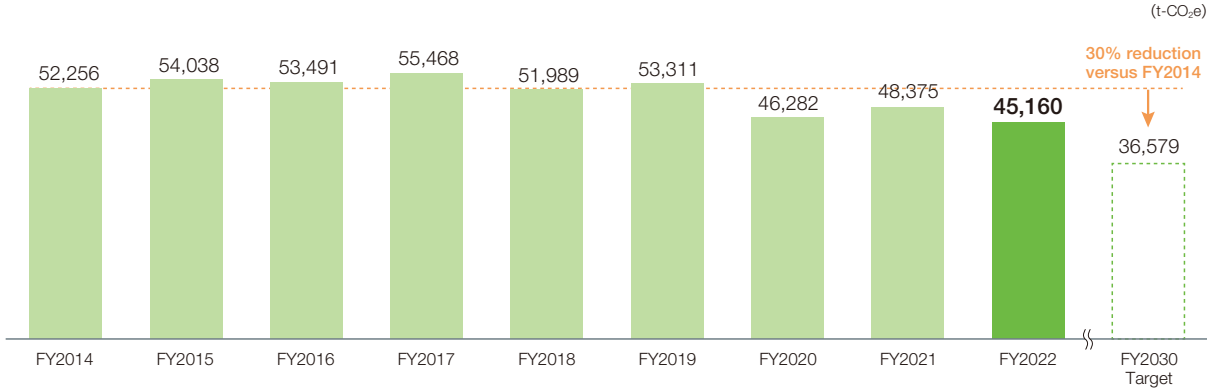
① Indicators for evaluating climate-related risks and opportunities

Yotai has defined GHG emissions Scope 1/2 and the percentage of electricity usage in business activities accounted for by renewable energy as two indicators for managing climate-related risks and opportunities.

② Disclosure of Scope1, Scope2 GHG emissions

Total t-CO<sub>2</sub> conversion of Companywide Scope1 +2 GHG emissions for FY2014 to FY2022 and targets for FY2030 (Japan business sites only; incl. 5.5 gas)

Scope1, Scope2 GHG emissions





Social

Human capital-related strategy

Yotai's vision is "Becoming a company that continues to improve its corporate value in a sustainable manner in harmony with society." Along with respect for the fundamental human rights of all employees, and prefaced on energetic environments where they find it easy to work, Yotai is positioning its personnel strategy as a mechanism supporting value creation. As the declaration of "human resource development and utilization" as part of materiality suggests, Yotai's most important form of capital is its human resources; making improvements in corporate value is impossible without employee growth. This is why Yotai believes it important for employees and companies to grow together.

3 Pillars of the Yotai Personnel Strategy

Take on challenges

Each employee takes on challenges without fear of failure, viewing difficult situations as opportunities for growth.

Individual autonomy and independence

The environment companies face is constantly changing. Whether in new product development, facility upgrade and improvement, response to decarbonization or DX promotion, address these changes while fervently believing in one's own potential.

Respond to growing technological sophistication

Viewing employee expertise as a source of added value, address materiality as expressed in "Reliably stable supply of high-quality products," "Constant provision of high-quality technical service" and "Retention of technological capabilities for adapting to environmental change."

Basic HR development policy

Yotai strives for human resource development capable of realizing the three pillars of its personnel strategy – "Take on challenges," "Individual autonomy and independence" and "Respond to growing technological sophistication."

The Five Desired Human Resource Portraits

- a. Human resources able to adapt to business environment changes by gaining sophisticated technological capabilities necessary for new product development, facility upgrade and improvement, responding to decarbonization and DX promotion; those who can turn ideas into reality
- b. Human resources who can act proactively and are self-directed in building a career, and those with a desire for growth and a strong sense of self-efficacy
- c. Human resources who are problem-solvers able to execute with passion without falling to adversity
- d. Human resources with high-level communication skills who can move proactively
- e. Human resources capable of being self-starters, ready to take on the challenges of value creation and reform with spirit

Initiatives for human resource development (including plans)

Recruitment

Amid increasingly fierce competition to attract personnel due to labor shortages caused by falling birth rates and societal aging, Yotai aims to be the enterprise of choice for human resources. To this end, the Company equally provides opportunities to talented human resources who are right for Yotai, recruiting those outstanding individuals possessing high-level knowledge, along with a strong desire to tackle challenges and who are capable of independent, autonomous action. Meanwhile, Yotai works throughout the year to recruit new graduates, mid-career hires and global hires to secure professional human resources with the expert skills to make new product development, facility upgrade and improvement, responding to decarbonization and DX promotion possible.

Allocation

Yotai human resource allocation is designed to place the right resources in the right place, taking into account individual skills and aptitude, as well as future career paths. For outstanding technical skill and clerical positions, Yotai seeks to create both opportunities for further advancement and a worthwhile range of duties, introducing a system allowing employees to convert back into the general employment pool.

Retention

Each year, Yotai conducts its "Employee Engagement Survey" as an approach to raising its retention rate. Based on the results, we promote improvements in organizational capacity to heighten engagement and advance corporate culture changes. Among others, this has led to more robust social welfare offerings, the introduction of diverse and flexible work styles, work-life balance promotion, and a fairer personnel evaluation system.

Development

a. Occupational level-based training seminars

Throughout the year, Yotai conducts training seminars designed to supplement the management capacities and skills required for each occupational level, as well as specialized trainings for acquiring knowledge critical to business execution.

b. In-house study sessions

In a bid to boost skills, veteran employees serve as lecturers for study sessions across an array of fields, ranging from specialized knowledge pertaining to refractories and related construction, to safety, quality and DX. All employees are invited to take part in the sessions, regardless of their home department.

c. e-learning (online training seminars)

Yotai introduced e-learning from fiscal 2022. Going forward, Yotai will enhance the lineup of courses available based on employee feedback, with an eye to further fueling the desire to learn among employees and helping them to upskill.

Evaluation system

Since April 2022, Yotai has operated a talent management system following the adoption of new personnel remuneration evaluation and goal management systems. Aimed at key and general employment pool occupations, this system seeks to promote fairer evaluations as well as goal achievement through dialogue between supervisors and subordinates.

For technical skill occupations, Yotai plans to revise its merit-based remuneration system from April 2024.

Promotion of diversity and inclusion

To optimally showcase the respective skills of diverse human resources, Yotai positions diversity and inclusion as a priority management measure. In addition to offering a wide range of opportunities for advancement to diverse personnel ready to take on challenges, Yotai seeks to create environments that spark value creation. Through the recruitment of new graduates, mid-career and global hires, and post-retirement rehires, Yotai is welcoming a variety of human resources, each with ways to advance while highlighting their own individual personality and strengths. Yotai is also actively working to promote both the recruitment of new female graduates into the general employment pool and the appointment of female managers. The sharing and mutual acknowledgement of viewpoints between personnel with diverse values and outlooks, regardless of sex, nationality or work history, will lead to personal growth and further

advancement for Yotai.

The Human Capital Subcommittee, under the Sustainability Committee, has established a "Career Advancement for Women Meeting" in which the female external director also participates. By compiling key topics, and through the formulation and execution of action plans, Yotai is striving to create work environments in which women can advance and thrive.

Health and productivity management

At Yotai, we firmly believe that the best way to ensure a sound enterprise is through the physical and mental wellbeing of every employee. To this end, we vigorously conduct employee health promotion activities. Industrial physicians are appointed or in place at every business site, with whom employees have face-to-face meetings once a month. Among other benefits, this enables early discovery of physical and mental health issues, and an opportunity for the physician to provide guidance for maintaining health. Accordingly, we are building the foundations needed to aim for health and productivity management certification (large enterprise category) by Japan's Ministry of Economy, Trade and Industry in the fiscal year ending March 31, 2024.

Establishment of safety and health

With "Putting safety first above all else" as our motto, the Yotai President himself establishes hazard avoidance standards to prevent workplace accidents and injuries, coupled with the promotion of comprehensively planned prevention measures. These include accountability structure clarification and the devising of mechanisms to encourage autonomous action. At each business site, plants have health and safety patrols. Additionally, through mutual patrols instituted between four plants and the convening of safety and health committees, Yotai is ensuring employee safety and health, and encouraging the formation of comfortable work environments.

Personal statement system

Once each year, key and general employment pool employees have the opportunity to personally raise issues pertaining to their work duties, ways to improve treatment and any concerns directly with the President. This system also allows the President himself to gain an understanding of an employee's grasp of skills, as well as problem points and issues in the workplace. The President and employees hold periodic get-togethers to find solutions to issues raised by the personal statements, working actively to nurture their communication.

Work style reform

a. DX utilization

Yotai is reducing staffing needs and striving to shorten overtime work hours by

taking advantage of AI-OCR and RPA to automatically deal with simple tasks across all departments and division.

b. Region-locked employee and job transfers

For key and general employment pool occupations, Yotai is studying the adoption of region-locked system for employees in general employment pool occupations who are unable to transfer outside of the region due to personal circumstances. In parallel, we are making progress in exploring a system that allows outstanding human resources involved in clerical occupations to transfer their job into the region-locked general employment pool, preventing the outflow of talent while also contributing to more women in managerial occupations.

c. Telecommuting

As a freer approach to work that avoids actual commutes or being at an office, Yotai is studying adoption of a telecommuting system for the Sales Department, General Affairs and other back-office departments and divisions.

d. Reward system for continuous years of service

For all employees, Yotai grants commemorative prizes and special holidays for years of continuous service at 10-, 20-, 30- and 40-year milestones. This creates opportunities for employees to refresh themselves physically and mentally by using the time off and prizes for family vacations, hobbies and other pursuits.

e. Promotion of annual paid leave (annual leave) use

Annual leave can be taken in full-day, half-day and quarter-day increments, providing an environment that makes taking annual leave easy.

Provision of challenging opportunities

a. Cost Reduction Meeting

Here, proposals can be submitted and budgetary support gained to improve facilities around themes such as enhanced productivity and quality.

b. Kaizen proposal system

To assist in improvements around themes such as enhanced productivity and work efficiency, Yotai has established a "Kaizen (corporate improvement)" proposal system designed to encourage employees to propose improvements beneficial to the work they perform.

Scholarship fund for gaining qualifications

This system serves not only to retain individuals with official qualifications necessary for corporate management, but promotes self-awareness and encourages employees to upskill by gaining official and private-sector qualifications such as Energy Manager (heat, energy), Pollution Prevention Manager (Type I, Type II), and Occupational Safety and Health Manager (Type I).

Human capital-related indicators and targets

The Yotai Group employs the following indicators regarding the three pillars of its personnel strategy. Targets and achievement for the respective indicators are found below.

■ FY2026 Targets

Indicators	"Three Pillars" categories	Targets	Actual results (FY2023)
Annual leave utilization rate	Individual autonomy and independence	Aim for 76% or higher.	72%
Saving work-time labor using AI-OCR, RPA	Take on challenges Individual autonomy and independence Respond to growing technological sophistication	Aim for a cumulative reduction in work hours of 10,000 hours between April 2023 and March 2027.	Cumulative reduction of 4,320 hours from April 2021 to Mar. 2023
Total time held for e-learning courses (back-office depts.)	Individual autonomy and independence	Aim for annual time taken for e-learning courses of 10 hours or more per person.	18 hours companywide from Feb. 2023 to Mar. 2023 (2 months)
No. of workplace accident incidents (off-time + worktime)	Take on challenges	Aim for fewer than 7 incidents (0 off-time, 7 worktime) per year.	11 incidents (0 off-time, 11 work-time)

■ FY2030 targets

Indicators	"Three Pillars" categories	Targets	Actual results (FY2023)
Appointment of female managers	Take on challenges	At least 10% of all managers, or at least 10 individuals	2 people as of March 31, 2023
Appointment of non-Japanese managers	Take on challenges	At least 10% of all managers, or at least 10 individuals	2 people as of March 31, 2023
Appointment of mid-career hires as managers	Take on challenges	Of mid-career hires, at least 10% or at least 10 individuals appointed to manager as a target for FY2023 to FY2030	1 person from Apr. 2022 to Mar. 31, 2023

Social

Female career advancement project

NEW

As one plank in promoting diversity and inclusion, in September 2023, Yotai launched a project designed to promote the advancement of female employees. Owned by the President, with the female external director serving as advisor, this project compiled relevant issues and formulates an action plan. This diligent effort to create work environments where women can flourish is leading to personal growth and Yotai's own advancement.

Female career advancement project - “Sunrise Project”

Background and objective

With the coming into force of the “Act on the Promotion of Women's Active Engagement in Professional Life” in April 2016, enterprises of a specific size or larger were required to formulate, submit and publicly announce action plans, including numerical targets, for female career advancement. Due to rising labor shortages caused by falling birthrates and societal aging, alongside growth in the number of working women, a transformation in consciousness among women toward an emphasis on careers is gaining momentum. Yotai also set sights on cultivating a corporate culture enabling the retention and advancement of women, improving the management consciousness and skills of female employees themselves, and improving recruitment rates for female graduates and the number of women in management. These efforts culminated in the launch of this project. The name of the project, “Sunrise Project,” was decided by internal submissions.

Project overview (planned for Sep. 2023 to Apr. 2024)

From September 2023 to April 2024, Yotai is holding regular monthly meetings. Drafts are devised by the project and labor leaders, and discussed by the project members. Feedback from female employees in technical skill positions is taken up by labor leaders at each production plant for submission and debate at the meetings. Our aim is to formulate an action plan for submission to the relevant labor bureau in April 2024.

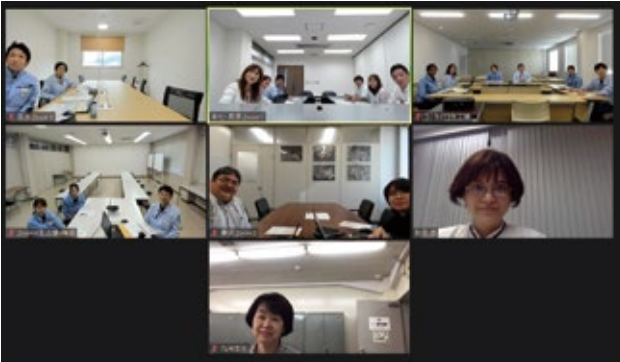
Having an organizational structure and systems in place for female employees who want to continue working, and creating a framework for human resource development that proactively grants growth opportunities, are essential for increasing both the recruitment rate for new female graduates and the percentage of women in management. In drafting the Second Medium-term Management Plan (running from fiscal 2025 to fiscal 2027), we will incorporate targets for the career advancement of women, with the entire Company working together to achieve them.

Example themes from the project	Sep. 2023	Oct.	Nov.	Dec.	Jan. 2024	Feb.	Mar.	Apr.
Project kickoff								
Shared targets								
Analysis of survey research								
Issue identification								
Countermeasure drafting								
Action plan formulation and submission								

Results and analysis of “Consciousness Survey on Female Career Advancement 2023”

At the kickoff meeting for the project in September 2023, we reported a summary and results of the “Consciousness Survey on Female Career Advancement 2023” conducted in July the same year. The survey was distributed to 67 female employees in Yotai's general employment pool, and those in clerical and technical skill occupations, with an effective response rate of 77.6%. The 2023 survey asked if respondents felt any issues with respect to engagement and retention of female employees. The most common finding was more than 20% responding that “there are no (or few) female role models within the Company” (20.7%).

External Director Shinobu Akiyoshi is also participating in the project, and will advance effective measures and initiatives for cultivating an organizational culture enabling women with the ambition to do so to thrive.



Project members from sites across Japan took part in the Sunrise Project online meeting. External Director Shinobu Akiyoshi (right step, second from top) also took part.

Schedule and progress for investment in people, products, information and other areas

		…Preparation time window				…Start of operations		
		Fiscal 2022		Fiscal 2023		Fiscal 2024		Promotion status
		First half	Second half	First half	Second half	First half	Second half	
People								
Recruitment	Aggressive career human resource recruitment							Progress largely as planned
	Adoption of scouting-style recruitment approaches							Progress largely as planned
Training	Personnel evaluation system revision and implementation							Enacted from Apr. 2022
	Skill improvement programs creation and implementation							Preparation begun from FY2023
Management	Working hour management system utilization							Progress largely as planned
	Personnel information consolidation and utilization							Enactment from FY2023
	Promotion of health and productivity management							Ongoing preparation
Products								
Adoption of large high-pressure presses	Installation of presses 1,500 tons and over							Progress largely as planned
Equipment for new product development	Adoption of organization analysis systems							Progress largely as planned
	Adoption of property evaluation equipment							Progress largely as planned
	Study introduction of surface modification equipment for electronic part products							Continued consideration
Diversification of industrial furnace inspection methods	Adoption of industrial furnace inspection drones							Progress largely as planned
GHG emission reduction	Installation of solar panels							Progress largely as planned
	Adoption of electric vehicles and electric forklift trucks							Progress largely as planned
Information								
DX promotion	Improve business efficiency through the use of advanced ICT, such as RPA and AI-OCR							Progress largely as planned
	Improve customer response capabilities via introduction of sales support systems							Progress largely as planned
	Work style reform through working hour management system adoption							Progress largely as planned
	Promotion of talent management through personnel management system adoption							Progress largely as planned
	Organizational capacity improvement through systemization of manual work in the Engineering Division							Continued consideration
	Improve operational efficiency and productivity via mission-critical system renovation (Mikumo)							Operational Oct. 2023
Other areas								
	M&A investment in related fields							Continued consideration

Initiatives for SDGs

**Donations to the City of Bizen's “Town-People-Jobs Revitalization Fund Utilization Project”**  
In partnership with the City of Bizen (Okayama Prefecture, Japan), home to the Hinase and Yoshinaga plants, aim for continued business activities in coexistence with the region

**Support for emergency assistance to earthquake victims in Turkey**  
¥1 million in donations following the February 2023 earthquake in Turkey

**Signing of support agreement with Hinase Fisheries Association**  
Signed support agreement involving preparation of sites for growing eelgrass, often referred to as a “blue carbon ecosystem,” which creates abundant fishing grounds (Photo: Sowing eelgrass seeds)



Governance

Development of an efficacious, fair and highly transparent corporate governance structure

Overview of Yotai’s governance structure

Rationale for adoption of current structure

Following a resolution approved at the 125th Ordinary General Meeting of Shareholders on June 22, 2023, Yotai transitioned from a Board of Corporate Auditors to a “Company with Audit and Supervisory Committee”-based governance structure. By enhancing the supervisory function of the Board of Directors and otherwise strengthening corporate governance, this transition seeks to further improve management transparency while also making faster decision-making possible. Principal bodies at Yotai related to corporate governance are highlighted below.

Directors and Board of Directors

Yotai has eight Directors, three of whom serve as External Directors. The Board convenes regularly each month, with special meetings held as necessary. The Board of Directors is charged with deciding important management-related matters, along with monitoring business execution.

Audit and Supervisory Committee

The Audit and Supervisory Committee is comprised of four Directors who serve as its members. Three of these Audit and Supervisory Committee members are External Directors. Along with exchanging and shaping opinions with respect to audits through monthly Audit and Supervisory Committee meetings, we strive to ensure robust audit and supervisory functions, including through attendance of the full-time Audit and Supervisory Committee member at the Full-time Directors Meeting and other

important gatherings. Furthermore, in a bid to collaborate on audits by the accounting auditor and internal audits, the Audit and Supervisory Committee exchanges opinions regularly with the accounting auditor and the Internal Audit Office in striving to enhance audit and supervisory functions. Audit and Supervisory Committee member and External Director Yusuke Otsuka, as a certified public accountant and tax accountant, has considerable insight related to finance and accounting.

Nomination and Compensation Advisory Committee

The Nomination and Compensation Advisory Committee is established as an advisory body to the Board of Directors. Independent External Directors comprise more than half of its membership, with the committee itself responsible for ensuring the fairness, transparency and objectivity of procedures pertaining to the nomination and compensation of Directors.

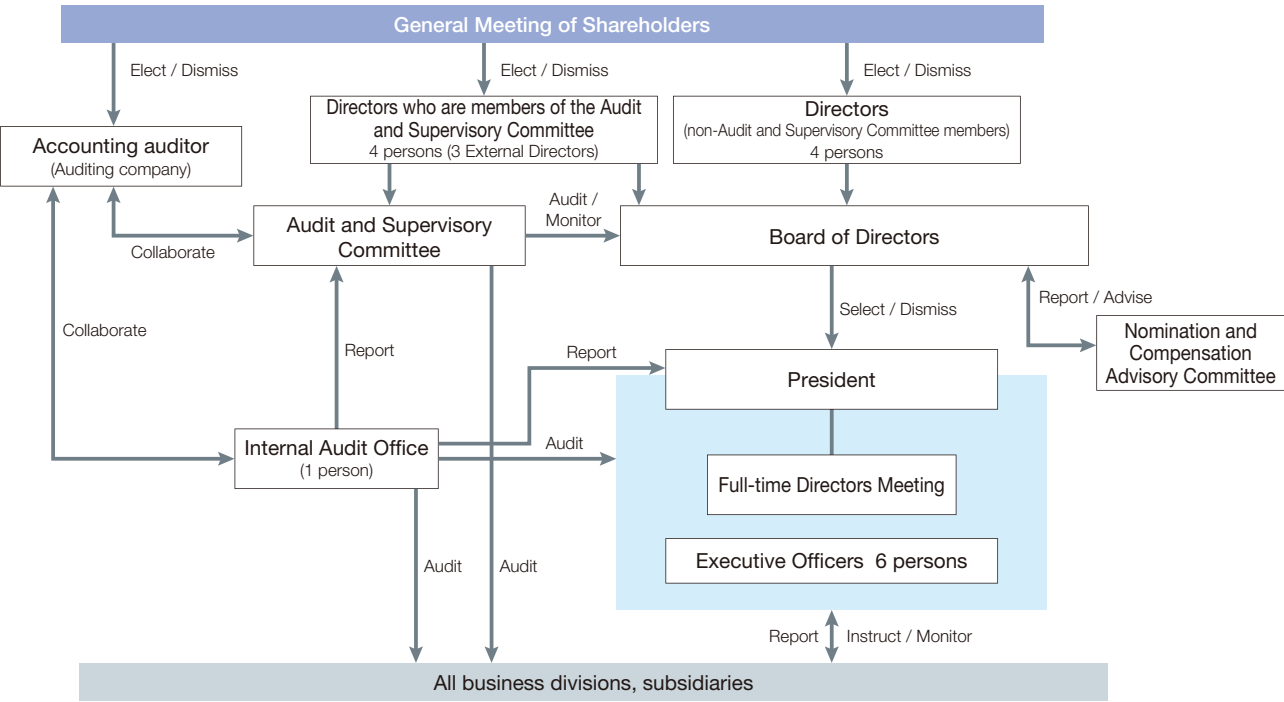
Full-time Directors Meeting

The Full-time Directors Meeting is held regularly each month, and serves as a venue for deliberating management plans and related business execution from a variety of angles.

Executive officer system

Yotai introduced an employment-style executive officer system from July 2020. In addition to laying the groundwork for shifting to a structure that puts an emphasis on monitoring functions within the Board of Directors, the adoption of an executive officer system seeks to enhance business execution functions.

Corporate governance structure, including internal control system overview



Initiatives for a more robust governance structure

Effectiveness evaluation of the Board of Directors

Each year, Yotai conducts an analysis and evaluation of the overall effectiveness of the Board of Directors. In fiscal 2023, analysis and evaluation of the Board’s overall effectiveness was based on the results of signed questionnaires submitted by all Directors and Corporate Auditors. In addition to the reporting of evaluation results to the Board of Directors, Yotai confirmed both the status of improvements versus the previous year’s evaluation and future issues to address. As a result, the Board of Directors was evaluated as having retained its effectiveness. As an issue to address going forward, Yotai also confirmed the need to further enhance the reporting and discussion by the Board of Directors of certain matters, most notably pertaining to sustainability. Based on the results of the effectiveness evaluation and various input from each Director and Corporate Auditor, Yotai will take steps to further enhance the functionality of the Board of Directors going forward.

Director and Corporate Auditor training

Yotai is continuing to provide Directors (excluding those serving as Audit and Supervisory Committee members) and Directors serving as Audit and Supervisory Committee members with opportunities to acquire the knowledge necessary to fulfill their respective roles and duties. Our basic policy is to offer necessary support in this area, including assuming responsibility for any related expenses. For External Directors, Yotai creates opportunities, as needed, to conduct plant inspections and otherwise deepen their understanding of business operations. Newly appointed Directors, meanwhile, take part in seminars sponsored by external bodies to further understanding of their respective roles and duties.

In fiscal 2023, outside organizations held themed seminars on responses pertaining to cross-shareholdings and insider trading aimed at all Directors, auditors and executive

officers. The theme of another seminar for all Directors and auditors provided an overview of the “Company with Audit and Supervisory Committee”-based governance structure.

Constructive dialogue with stakeholders

Yotai recognizes dialogue with shareholders as essential to sustainable growth and improving its corporate value over the medium to long term. To this end, the Head Office General Affairs Department serves as a point of contact for fielding requests from shareholders and all other stakeholders. In particular, certain Directors and other officers are assigned to answer requests for individual meetings and telephone interviews with shareholders and institutional investors.

IR and SR activity results

Results briefing for institutional investors 1 time  
IR and SR individual meetings 30 times

Major themes and points of interest from conversations

Outcome of exercise of voting rights at the General Meeting of Shareholders, business summaries, capital policies, shareholder returns, ESG-related issues

Status of implementation of feedback to the management team and Board of Directors on shareholder opinions and concerns learned from conversations

As appropriate, the Board of Directors offers feedback on questions from participants in result briefings and details from individual conversations.

Matters taken up in light of conversations and subsequent feedback

Yotai carried out a cancellation of its own shares in April 2023. Extensive effort is made to prevent the authorized leak of insider information in conversations with Yotai shareholders.

Response for achieving capital cost- and share price-conscious management

Along with ample analysis and evaluation of current status by the Board of Directors and exploration of policies and targets, all guided by an accurate grasp of capital cost and capital profitability, plans call for disclosing such information as quickly as possible.

Enhancements and changes in corporate governance

	2019	2020	2021	2022	2023
Changes in institutional design					Transition to “Company with Audit and Supervisory Committee”-based governance structure
Board of Directors Figure in ( ) is number of External Directors		5 (1)	6 (2)	6 (2, 1 woman)	8 (3, 1 woman)
Voluntary committee			Establishment of Nomination and Compensation Advisory Committee		
Director and other officer compensation			Adoption of remuneration system offering transfer-restricted shares		
Other			Introduction of Executive Officer system		
		June 2018 revised CG Code Full compliance	Compliance with June 2021 revised CG Code		Revised CG Code Full compliance
			Board of Directors effectiveness evaluation enactment		

Governance

■ Composition of Board of Directors, skill matrix

	Name	Internal/ external	Independent officer	Sex	Rank and responsibilities within Yotai	Skill									Board of Directors meeting attendance (FY2023)
						Management	Technology/ R&D	Sales	Personnel/ Labor	Finance/ accounting	Legal/risk management	Audits (operations/ accounting)	ESG	IT systems	
Directors (excluding those who are Audit and Supervisory Committee members)	Mitsuo Taguchi	Internal		Male	President Chair, Nomination and Compensation Advisory Committee	○	○	○					○		Board of Directors: Attended 14/14 times Nomination and Compensation Advisory Committee: Attended 4/4 times
	Shinichiro Takabayashi	Internal		Male	Managing Director; General Manager, Head Office General Affairs Department	○			○	○			○	○	Board of Directors: Attended 14/14 times
	Tadashi Taniguchi	Internal		Male	Director; Manager, Hinase Plant	○	○						○		Board of Directors: Attended 14/14 times
	Yorisada Matsumoto	Internal		Male	Director; General Manager, Tokyo Branch	○	○	○					○		Board of Directors: Attended 10/10 times
Directors who are members of the Audit and Supervisory Committee	Takashi Umezawa	Internal		Male	Audit and Supervisory Committee member (full-time)	○	○					○	○		Board of Directors: Attended 12/14 times
	Shinobu Akiyoshi	External	○	Female	Audit and Supervisory Committee member (external) Nomination and Compensation Advisory Committee	○					○	○	○		Board of Directors: Attended 14/14 times Nomination and Compensation Advisory Committee: Attended 4/4 times
	Katsuhiko Omoto	External	○	Male	Audit and Supervisory Committee member (external) Nomination and Compensation Advisory Committee	○	○	○	○		○		○	○	—
	Yusuke Otsuka	External	○	Male	Audit and Supervisory Committee member (external) Nomination and Compensation Advisory Committee	○				○	○	○	○		—

The above chart is not an exhaustive account of all skills, experience, capabilities, other knowledge or accomplishments possessed by the individual Directors listed.

Compensation for Directors and officers

At the 125th Ordinary General Meeting of Shareholders on June 22, 2023, Yotai transitioned to a “Company with Audit and Supervisory Committee”-based governance structure. In the wake of this move, Yotai is determining policies related to Director compensation, specifically the monetary amount and calculation methodology.

Basic policy

For the remuneration of Yotai Directors (excluding Directors serving as Audit and Supervisory Committee members), the Company has opted for a remuneration system linked to shareholder profits, allowing it to function amply as an incentive for sustained improvement in corporate value. When making decisions regarding the remuneration of individual Directors (excluding Directors serving as Audit and Supervisory Committee members), the basic policy is to set such at a standard appropriate in light of the Director's specific duties and responsibilities. Specifically, Director remuneration consists of basic compensation as fixed remuneration, performance-based compensation, and non-monetary remuneration.

Policy (including policy with respect to determining timing and terms for granting of compensation) **determining the amount of individual compensation with respect to basic compensation (monetary remuneration)**

The basic compensation of Yotai Directors (excluding Directors serving as Audit and Supervisory Committee members) is decided based on a fixed monthly remuneration and comprehensive consideration of other factors such as rank, assigned duties, number of years in the position, performance in each business term, and balance with respect to employee salaries.

Policy (including policy with respect to determining timing and terms for granting of compensation) **for determining details, amounts and numerical calculation methods regarding performance-based compensation and non-monetary remuneration**

Performance-based compensation is designed to heighten awareness of the need to improve performance each fiscal year. It consists of cash compensation reflecting performance, the amount of which is calculated based fundamentally on total dividends and ordinary profit each fiscal year, and is paid as a bonus given at a set time annually. For the fiscal year under review, performance-based compensation totaled ¥35 million.

Non-monetary remuneration involves the offering of transfer-restricted shares, and is granted as an incentive to encourage sustained improvement in corporate value, as well as to further promote shared interest with Yotai shareholders. Yotai Directors (excluding Directors serving as Audit and Supervisory Committee members) are given monetary claims granting transfer-restricted shares, for a total amount capped at ¥50 million per year; Yotai can issue or dispose of up to 100,000 shares of common stock annually (however, in the event of a split of Yotai shares of common stock (including the gratis allotment of such shares) or a stock merger, depending on the split or merger ratio, the total number of such shares is adjusted within a rationale scope, as needed). These claims are dispensed at a set time annually. For the fiscal year under review, the Company paid non-monetary remuneration totally ¥14 million in monetary claims treated as contributed assets, and allotted 10,464 shares. As warranted, this system is reviewed upon request from the Nomination and Compensation Advisory Committee.

■ Total Remuneration for Fiscal 2023

Director/Officer	Total compensation (Thousands of yen)	Total compensation by type (Thousands of yen)			Eligible Director/Officer (Persons)
		Basic compensation	Performance-based compensation	Non-monetary remuneration	
Directors (excl. External Directors)	166,700	118,011	34,090	14,599	5
Corporate Auditors (excl. External Corporate Auditors)	18,327	18,327	—	—	2
External Directors	24,740	23,040	1,700	—	5

Notes: 1. Total compensation for Directors does not include the employee salary paid to Directors serving concurrently in key personnel roles.  
2. Total compensation for Directors includes a provision for bonuses of directors of ¥35 million for the fiscal year under review.  
3. Total compensation for Directors (excluding External Directors) includes amounts paid to one Director who retired at the conclusion of the 124th Ordinary General Meeting of Shareholders held on June 23, 2022.

Internal control systems and risk management structure

The Board of Directors had defined the basic policy below regarding development of the Company's internal control systems. Based on this policy, Yotai and its subsidiaries work to ensure the suitability of their operations, while constantly reviewing the status of their current systems to achieve ongoing improvements, with the goal of building a more effective internal control systems going forward.

1. **System for ensuring the Directors and key personnel of Yotai and its subsidiaries execute duties in conformance with the law and the Articles of Incorporation**  
(1) Yotai has defined a corporate philosophy, code of conduct and ethical guidelines, extensively spreads awareness of these among all Yotai Group Directors, officers and employees, and complies with laws and internal regulations in line with its basic rules regarding compliance.  
(2) Based on internal audit regulations, the Internal Audit Office collaborates with the Audit and Supervisory Committee and others to conduct internal audits for examining whether the Yotai Group is in conformance with laws and internal regulations.  
(3) The Yotai Group seeks to prevent situations in which the execution of duties by Directors and key personnel is in violation of laws, the Articles of Incorporation or internal regulations, or are lacking in legitimacy; the Group also fulfills its social responsibility as a corporation by ensuring the reliability of financial reporting and providing appropriate information. Together with monitoring regulations designed to contribute to the maintenance and improvement of the Group's social trust, Yotai strives to discover and correct wrongdoing as early as possible.
2. **System for storage and management of information pertaining to execution of duties by Directors**  
(1) For information below pertaining to the execution of duties by Directors, such information is stored and managed in line with the law and internal regulations.  
1. Minutes from the General Meeting of Shareholders 2. Minutes from meetings of the Board of Directors 3. Minutes from the Full-time Directors Meeting 4. Other information  
(2) Yotai maintains such information so that it is readily viewable by Directors.
3. **Regulations and other systems for managing the risk of losses for Yotai and its subsidiaries**  
(1) Based on the current status of regulations regarding the risk management system, the Group maintains a risk management system that clarifies responsibilities and authority.  
(2) The Group clarifies acute and latent risks, and rates the impact such risks pose to management.  
(3) For risks believed to pose a significant impact for Yotai Group management, the Group maintains a monitoring system and a system for minimizing losses caused by risks that materialize.  
(4) The identification and evaluation of risks to the Yotai Group are periodically reviewed.
4. **System for ensuring efficient execution of duties by Directors of Yotai and its subsidiaries**  
(1) The Board of Directors, based on Board rules and the operating guidelines of the Full-time Directors Meeting, strives to enhance management efficiency without injuring the soundness of the Company itself.  
(2) The Board of Directors decides management targets based on management policies, and spreads awareness extensively to key personnel through the Management Meeting, consisting of Directors and personnel in charge of each department and division.  
(3) The Board of Directors, in principle, meets at least once monthly. In conducting efficient management, the Board evaluates goal achievement status and works to review management driven by rapid decision-making.  
(4) In parallel with the election of Independent External Directors and preparing to shift to a system that emphasizes the supervisory functions of the Board of Directors, Yotai is introducing an Executive Officer system in a bid to strengthen operational execution functions.  
(5) Yotai has established the Nomination and Compensation Advisory Committee, with Independent External Directors comprising over half the membership, as an advisory body to the Board of Directors. The Committee is entrusted with ensuring the fairness, transparency and objectivity of procedures pertaining to the nomination of and compensation for Directors.
5. **System related to reporting to Yotai of matters pertaining to the execution of duties by Directors of subsidiaries**  
Yotai's operating manuals for its Production Meeting and Management Meeting mandate the periodic reporting of subsidiary operating results, financial condition and other important information to the Company.
6. **Matters regarding key personnel assisting the Audit and Supervisory Committee**  
Key personnel to assist Audit and Supervisory Committee in the performance of their duties are allocated as needed upon request by the Audit and Supervisory Committee, with personnel chosen based on specialized skills for the task.
7. **Matters related to ensuring independence from Directors (excluding those who are Audit and Supervisory Committee members) of the aforementioned key personnel and efficacy of instructions given to such personnel**  
The appointment, transfer, period of assistance and other decision-making matters regarding personnel authority pertaining to key personnel assisting the Audit and Supervisory Committee requires the prior consent of the Audit and Supervisory Committee to ensure independence from the Directors (excluding those who are Audit and Supervisory Committee members).
8. **System for reporting by Directors and key personnel to the Audit and Supervisory Committee and system for prohibiting mistreatment of reporters**  
(1) Directors and key personnel are to immediately report, upon discovery, any events that could have a significant or dramatic impact on Yotai Group management, or any such matters conveyed to them from outside the Company, to the Audit and Supervisory Committee.  
(2) Upon request from the Audit and Supervisory Committee, Directors and key personnel are to report, without delay, on any matters pertaining to the status of execution of their duties.  
(3) In accordance with internal reporting regulation, any retaliatory behavior against a reporter is prohibited.
9. **Matters related to policy pertaining to advance payment of expenses arising from execution of duties by Directors who are members of the Audit and Supervisory Committee, reimbursement procedures and other expenses arising from said execution of duties and treatment of debt**  
When requested by Directors who are members of the Audit and Supervisory Committee to pay in advance for expenses arising from the execution of their duties, following deliberation by the relevant department or division, the requested expenses or debts are dealt with immediately, with the exception of cases in which these are recognized as unnecessary.
10. **System for ensuring the effective conduct of other audits by the Audit and Supervisory Committee**  
(1) The Audit and Supervisory Committee meets regularly with the President to exchange opinions and information.  
(2) The Audit and Supervisory Committee has access to all important management-related information, and consistently monitor management.  
(3) The Audit and Supervisory Committee has the authority to directly request reexamination based on the results of internal audits reported by any division or department.
11. **Basic approach to and status of other preparations for dealing with anti-social forces**  
(1) Eliminating anti-social forces from civil society is both necessary and important from a corporate social responsibility perspective. Accordingly, as stipulated in its ethical guidelines and basic regulations on compliance, the Yotai Group has no relationships whatsoever with anti-social forces and promotes compliance management.  
(2) As an integrated response department, the Company has installed personnel responsible for preventing inappropriate requests at the Head Office General Affairs Department. These staff members work in partnership with police and other external specialists to respond firmly to inappropriate requests from anti-social forces.

Policy regarding cross-shareholding

Yotai views the maintenance and development of relationships of trust and collaborative relationships cultivated with a wide range of business partners through business activities over the years as extremely important, from the perspective of both sustainable growth and medium- to long-term improvement in corporate value. Yotai will pursue such shareholding whenever it is deemed to maintain or strengthen transactional relationships with the business partners, enhance the profitability of both companies, or when doing so will contribute to improvement in Yotai's own corporate value. Each year, Yotai considers each individual shareholding qualitatively to determine whether it contributes to improvement in the Company's corporate value, and quantitatively to determine if it is commensurate with capital cost. After a comprehensive determination is made, stocks deemed to offer little significance in holding further are sold off, while paying close attention to the market impact of doing so. In reviewing shareholding significance, the first evaluation is made by the Full-time Directors Meeting, with final decisions on the suitability of cross-shareholding made by the Board of Directors in light of this initial determination.



Compliance

Basic Compliance Rules

Yotai’s “Basic Compliance Rules” define compliance as adherence to laws and regulations (including administrative notices and guidelines), internal rules, and our corporate philosophy, and serve as our basic management policy. Employees shall not only faithfully observe laws and regulations, but shall also be fully aware of our corporate philosophy and code of conduct, and shall perform their duties with common sense and responsibility as members of society.

Promotion System

In order to ensure that all employees are fully aware of their responsibilities, the Director in charge of the General Affairs Department serves as the promotion officer, with the head of each business site designated as the person in charge of promotion. The department in charge of promotion is the Head Office General Affairs Department.

All Directors, officers and employees work constantly and diligently to improve compliance awareness. An internal compliance

consulting helpline has also been established to better enable business execution based on a compliance mindset.

Training Program

As needed, we strive to raise awareness of compliance and provide correct knowledge by posting notices in our internal newsletter and on our website, as well as holding training sessions.

Internal Reporting System

We have established an “Internal Reporting System” for reporting to the Company the details of violations of internal rules, laws and regulations, and other violations of corporate ethics in the workplace. The Compliance Control Department is the internal contact point for reporting compliance violations, with an external consultation organization as the external contact point for reporting violations.

The General Manager of the Compliance Control Department is the officer in charge of the Head Office General Affairs Department. The member of the Compliance Control Department is appointed and composed by the General Manager of the Compliance Control Department.

Risk Management

Risk Management Regulations

The Company has established “Risk Management Regulations” regarding the development of a management system to prevent the occurrence of risks, and to respond to any risks that may occur at the Company. Risks are the following factors that may impede the performance of operations.

- 1. Compliance-related matters
- 2. Financial reporting-related matters
- 3. Information system-related matters
- 4. Research activity-related matters
- 5. Business procedure-related matters
- 6. Environment-related matters
- 7. Disasters, incidents and other related matter
- 8. Other matters related to the Company’s business

Risk Management Committee

The Risk Management Committee works closely with each department to develop a comprehensive system for the Company’s risk management. The committee consists of the following members. The committee is convened at least once a year by the chairperson.

Chairperson: Director of Head Office General Affairs Department  
Committee members: Heads of each division (Head Office (department), offices, branch offices, business divisions, plants)

Information Security Management

The Company has defined “Information Security Management Regulations” designed to ensure the Company’s business activities occur normally and smoothly, and to prevent incidents involving employees, by properly safeguarding information from customers, business partners and others handled in the course of business, as well as the Company’s own information assets and employee data, from threats of every kind. These regulations are supervised by the Head Office General Affairs Department, with responsibility designed to the Director in charge of the Head Office General Affairs Department.

Information Security Management Structure

The Information Security Management Committee has been established as an umbrella organization for information security. The committee promotes thorough information security based on the Information Security Policy and oversees the overall information security of the entire Company, including the establishment of decision criteria for matters not stipulated in the Information Security Policy.

The committee is chaired by the Director in charge of the Head Office General Affairs Department, and the information management manager appointed by the chairperson checks the status of information security as necessary.

Initiatives for Personal Information Protection

We have established “Personal Information Management Rules” to prevent unauthorized acquisition, use and disclosure of personal information, as well as other illegal activities involving personal information.

The personal information protection manager is the General Manager of the Head Office General Affairs Department. In addition, an audit manager appointed by the President periodically inspects whether personal information is being handled properly in the Company and how these rules are being applied. An audit report is prepared on the results of the inspection, which is reported to the President.

Response to COVID-19

In our response to COVID-19, we prioritize the protection of human life, including employees and their families, customers and related parties, and neighboring communities, and strive to prevent the spread of infection and ensure business continuity.

In addition, basic measures to prevent the spread of infection are thoroughly implemented, such as wearing gapless masks, washing and disinfecting hands, frequent ventilation of offices, and prohibiting conversation when eating and drinking.

Directors and Officers

Directors (excluding those who are Audit and Supervisory Committee members)



**Mitsuo Taguchi**  
President  
Chair, Nomination and Compensation Advisory Committee



**Shinichiro Takebayashi**  
Managing Director  
General Manager, General Affairs Department, Head Office



**Tadashi Taniguchi**  
Director  
Plant Manager, Hinase Plant



**Yorisada Matsumoto**  
Director  
General Manager, Tokyo Branch

Directors who are members of the Audit and Supervisory Committee



**Takashi Umezawa**  
Audit and Supervisory Committee Member (Full-time)



**Shinobu Akiyoshi**  
External Director, Audit and Supervisory Committee Member  
Nomination and Compensation Advisory Committee



**Katsuhiko Omoto**  
External Director, Audit and Supervisory Committee Member  
Nomination and Compensation Advisory Committee



**Yusuke Otsuka**  
External Director, Audit and Supervisory Committee Member  
Nomination and Compensation Advisory Committee

## External Director's Message



External Director, Audit and Supervisory Committee Member  
Nomination and Compensation Advisory Committee  
**Shinobu Akiyoshi**

### Being an enterprise that employees find appealing to work for will be a huge strength for Yotai

I consider my appointment by Yotai as its first female External Director an expression of the Company's respect for and commitment to promoting diversity. In the two years since my appointment, I have come to see Yotai as a company that greatly values its employees. Even though the Company is currently having conversations with and conducting surveys of female employees in the runup to a project to promote career

advancement for women, what I've been impressed by is an expressed desire to see Yotai become a place where junior and young employees want to stay, and to create an organization known for enabling people to thrive regardless of sex or national origin. Rather than stopping at individual satisfaction, there is a real sense that people have become aware that having a robust environment where anyone can flourish is tied to improvement in corporate value. I think that being an enterprise that employees find appealing to work for will be a huge strength for Yotai. This most recent initiative won't stop at the advancement of women; we can expect it to lead to greater opportunities for all employees to thrive even more.

As a publicly listed company, meeting the expectations of shareholders and other stakeholders takes precedence over everything else. Two General Meetings of Shareholders have taken place since my appointment, and from each one I received shareholder suggestions. These spoke to the kind of company that shareholders want Yotai to be, and had me consider how best to respond to these expectations; ultimately, they were important opportunities for me to be more aware of the importance of the discussions happening at the Board of Directors and other meetings. I can also praise both Yotai's transition to a "Company with Audit and Supervisory Committee" structure and its clear steps to comply with the Corporate Governance Code as initiatives that will strengthen corporate governance. Going forward, I think that considering the kind of value that Yotai will create from an even longer-term perspective, and packaging it as an intuitive vision to stakeholders, will help to build relationships of trust.



External Director, Audit and Supervisory Committee Member  
Nomination and Compensation Advisory Committee  
**Katsuhiko Omoto**

### Helping strengthen structures for creating new products and services, bringing new partners into view by linking management with frontline capabilities

I recognize that the fiscal year ending March 31, 2024, the final term of Yotai's First Medium-term Management Plan, will be an extremely important year for the Company, and I am honored to have been chosen as an External Director at this stage. I also recognize that because of my own 13-year history as a business executive in

manufacturing, and given the changes afoot in Yotai's business environment and market, I will be asked to offer advice to empower the management team to take appropriate risks. With themes such as companywide DX advancement, quality improvement for products and services, improved productivity in manufacturing work, and the promotion of ESG management as a baseline, I want to support the establishment of management strategies for Yotai's sustainable growth.

At meetings of the Board of Directors, my sense is that there are excellent discussions taking place, led by President Taguchi, in support of Yotai's growth. What's more, at the point when I was unofficially offered the position, I was asked to perform plant diagnostics and visited each of Yotai's four domestic production plants. My impression was that each plant is moving aggressively ahead on rationalization and other work commensurate with its own position.

Looking at the First Medium-term Management Plan, the message that appropriate investments would be made wherever needed was very clear. I felt it was at this point that the mood at Yotai might have changed. Today, Yotai is building a rock-solid position in the refractories market. Under the Second Medium-term Management Plan, I want to help strengthen structures for creating new products and services while bringing the formation of new partnerships into view, even as we continue to link management with frontline capabilities.



External Director, Audit and Supervisory Committee Member  
Nomination and Compensation Advisory Committee  
**Yusuke Otsuka**

### Supporting medium- to long-term improvement in shareholder value as the "unsung hero" behind Japanese industry

Since Yotai's business isn't for the general consumer, the Company might, at first glance, come across as plain. Yet, through refractories, Yotai is supporting manufacturing, construction and other industries in Japan at the most foundational level. Calling the company an "unsung hero," then, really does make sense. As an accounting and tax specialist, I hope to contribute to Yotai's management on

two fronts. For one, across every facet of the internal management framework, including account settlement, taxes, and the internal control system, my experience and insight as both a CPA and tax accountant will make me a good consultant for administrative departments. On another front, I'm looking to give input from my CPA perspective on the right balance between shareholder returns and growth investments. This is particularly key for issues like capital cost and responding to achieve share price-conscious management, which have become important topics in recent years.

Yotai has a solid financial foundation and is effectively debt-free, and it is clear from the financial statements that it has enjoyed extremely sound and stable management for many years. On the flip side, one might feel that the lack of debt despite external factors, including long-term stagnation in Japan's manufacturing and construction industries, means that Yotai hasn't made many assertive investments. This is why I would argue that the Company may need to take a risk and make investments to go on the offensive.

Although Yotai belongs to a sector with high barriers to entry, changes in the external environment are occurring, namely demand for ESG-conscious management and management that is more aware of share-price level. As I continue to reflect from my position as an External Director serving on the Audit and Supervisory Committee, I hope to contribute to improving Yotai's medium- to long-term shareholder value.



## Fiscal 2023 Financial Review

### Operating results

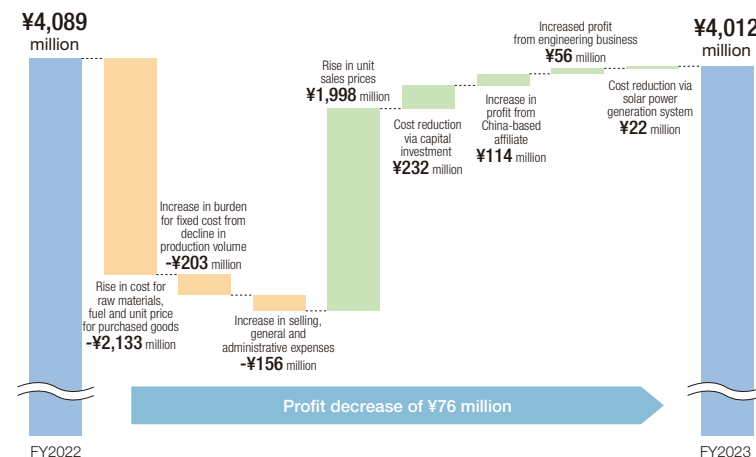
- Net sales rose 9.0% year on year to a new record high, mainly atop firm demand from steel manufacturers, Yotai's principal client industry
- Operating profit declined 1.9% year on year, largely reflecting the shifting of high prices for raw materials and fuel into sales prices, along with cost-reduction efforts
- In the engineering business, sales and profit both rose to record highs, lifted by workforce expansion efforts, including mid-career hires, and the taking on of numerous construction projects

### Financial Analysis

Net sales for the consolidated fiscal year under review rose ¥2,338 million year on year, to ¥28,250 million. Higher sales volume for refractories, driven by increased demand from steel manufacturers, was the main factor behind this growth.

Ordinary profit rose ¥20 million year on year (ordinary profit to net sales ratio of 14.7%), to ¥4,143 million. In addition to sales price revisions and cost-reduction efforts, profit rose atop the sale of marketable securities, and came despite soaring prices for raw materials and fuel.

#### Analysis of change in operating profit



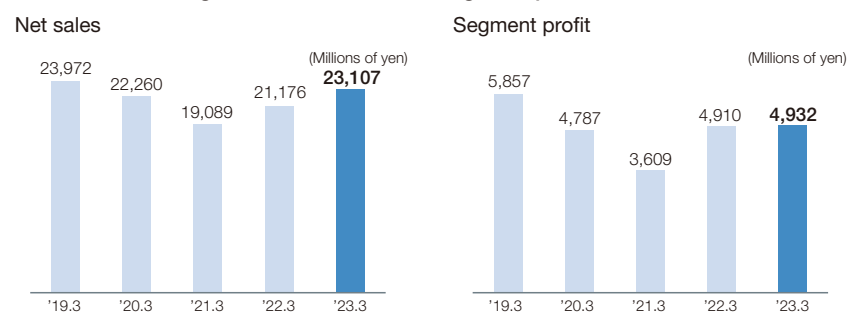
### Performance by Segment

Organizationally, Yotai is fundamentally composed of the refractories business and the engineering business. The Company devises comprehensive domestic and overseas strategies and conducts business activities for each business individually. Accordingly, Yotai categorizes “refractories” and “engineering” as its reporting segments.

#### Refractories Segment

Net sales for the segment rose 9.1% year on year to ¥23,107 million, with segment profit up 0.5% to ¥4,932 million for the same period. Growth came atop increased demand from steel manufacturers.

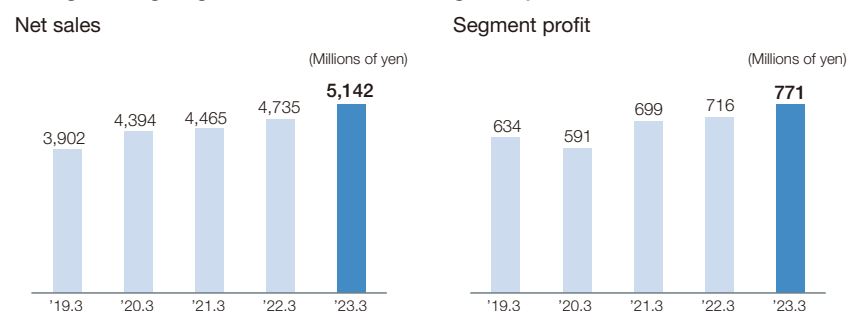
#### Refractories Segment – Net sales and segment profit



#### Engineering Segment

Net sales for the segment rose 8.6% year on year to ¥5,142 million, with segment profit up 7.7% to a record high of ¥771 million. Growth was spurred by an increase in orders for large-scale construction projects.

#### Engineering Segment– Net sales and segment profit



### Dividend Policy

The speed of technological change and advancement in the industry is dramatic, making investment in the upgrade and streamlining of production facilities extremely important. In principle, the capital necessary to do so is allocated from internal reserves.

In terms of policy with respect to dividends, backed by a fundamental commitment to the continued payment of a stable dividend, our basic policy is to strengthen the Company's financial structure, while building and augmenting internal reserves and paying a dividend commensurate with earnings.

Guided by this approach, under the First Medium-term Management Plan (FY2022 to FY2024), in parallel with allocations to promote strategic investments, upgrade investments, IT investments and others to develop a management base to support sustainable growth, we are reinforcing fund allocation to shareholder returns. Regarding such returns, we intend to continue payment of a stable dividend, with a target consolidated payout ratio of 30%, while flexibly purchasing treasury shares.

In terms of year-end dividends from retained earnings for fiscal 2023 (ended March 31, 2023), we paid a dividend per share of ¥25, after accounting for a comprehensive range of factors, including financial condition and business performance. Combined with an interim dividend per share of ¥20, the full-year dividend was ¥45 per share, or ¥2 higher than in the previous fiscal year.

### Financial Position

Total assets as of March 31, 2023 stood at ¥39,645 million, an increase of ¥895 million from the previous consolidated fiscal year-end. This growth mainly reflected increases in raw materials and supplies, buildings and structures, finished products,

and notes and accounts receivable - trade and came despite a decrease in cash and deposits.

Liabilities amounted to ¥8,580 million, a decrease of ¥60 million from a year earlier. This decrease was mainly due to a decline in accounts payable - trade.

As a result, the capital adequacy ratio as of March 31, 2023 was 78.4%. While this was up 0.7 percentage points from 77.7% at the previous fiscal year-end, the Company's financial position is still deemed to be in good shape overall.

### Cash Flows

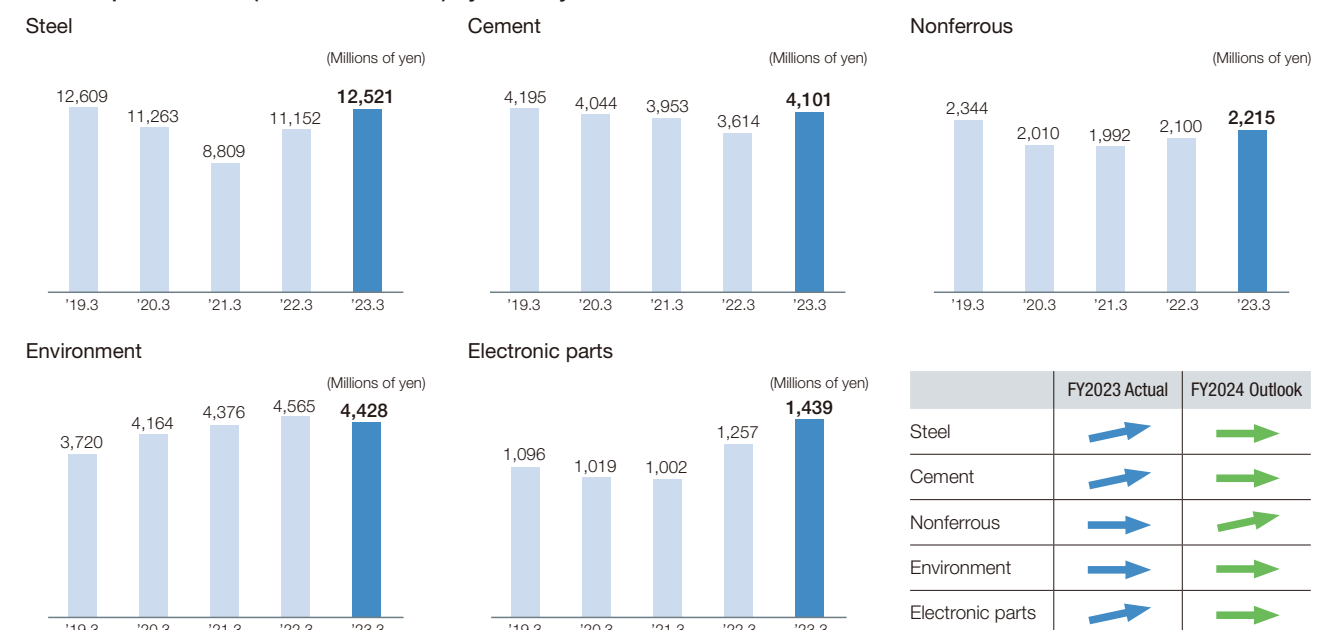
Cash and cash equivalents as of March 31, 2023 stood at ¥5,841 million, a decline of ¥2,696 million year on year, as profit before income taxes and an increase in depreciation were offset by growth in inventories from increases in raw materials and ingredients, difference between increase/decrease in trade receivables, and cash used for the purchase of treasury shares (¥1,538 million).

#### Cash flows

(Millions of yen)

	FY2022	FY2023
Cash flows from operating activities	421	1,781
Cash flows from investing activities	(1,208)	(1,954)
Cash flows from financing activities	(2,111)	(2,536)
Effect of exchange rate changes on cash and cash equivalents	45	12
Change in cash and cash equivalents	(2,853)	(2,696)
Cash and cash equivalents, end of term	8,537	5,841

#### Sales performance (non-consolidated) by industry sector and outlook



	FY2023 Actual	FY2024 Outlook
Steel	→	→
Cement	→	→
Nonferrous	→	→
Environment	→	→
Electronic parts	→	→

Key Financial Data

	2013.3	2014.3	2015.3	2016.3	2017.3	2018.3	2019.3	2020.3	2021.3	2022.3	2023.3
Consolidated Fiscal Year (Millions of yen)											
Net sales	20,357	20,107	21,123	21,465	22,236	24,217	27,875	26,654	23,554	25,912	28,250
Cost of sales	16,822	17,095	17,787	18,002	18,182	18,527	20,587	20,535	18,594	19,565	21,824
Gross profit	3,535	3,011	3,336	3,462	4,054	5,690	7,287	6,118	4,960	6,347	6,426
Operating profit	1,441	884	1,179	1,309	1,913	3,559	5,134	4,017	2,921	4,089	4,012
Ordinary profit	1,554	1,043	1,346	1,396	2,013	3,663	5,224	4,134	3,021	4,123	4,143
Profit attributable to owners of parent	852	793	924	936	1,374	2,625	3,610	2,794	1,845	2,966	2,971
R&D expenses	147	149	167	156	138	124	134	137	167	188	225
Cash flows from operating activities	2,512	903	1,580	693	3,070	(1,759)	3,048	5,413	4,803	421	1,781
Cash flows from investing activities	(470)	(370)	(466)	(658)	(527)	(778)	(943)	(1,111)	(1,202)	(1,208)	(1,954)
Cash flows from financing activities	(1,096)	(354)	(244)	(248)	(234)	(229)	(317)	(398)	(418)	(2,111)	(2,536)
Consolidated Fiscal Year-end (Millions of yen)											
Net assets	16,305	17,029	18,000	18,319	19,728	22,163	25,104	27,234	29,032	30,109	31,065
Total assets	21,926	22,743	24,558	24,163	26,432	29,336	34,186	34,443	35,396	38,750	39,645
Per-share indicators (Yen)											
Basic earnings per share	38.03	35.54	42.03	42.61	62.53	119.44	164.29	127.17	84.59	141.28	147.33
Dividends per share (annual)	10.00	9.00	10.00	10.00	10.00	12.00	15.00	16.00	17.00	43.00	45.00
Net assets per share	727.46	774.38	818.64	833.34	897.58	1,008.43	1,142.27	1,239.17	1,332.86	1,460.90	1,582.45
Financial Indicators											
Operating profit margin (%)	7.1	4.4	5.6	6.1	8.6	14.7	18.4	15.1	12.4	15.8	14.2
ROE (return on equity) (%)	5.4	4.8	5.3	5.2	7.2	12.5	15.3	10.7	6.6	10.0	9.7
Capital adequacy ratio (%)	74.4	74.9	73.3	75.8	74.6	75.5	73.4	79.1	82.0	77.7	78.4
PER (Price-earnings ratio) (Times)	7.81	8.61	9.30	6.81	6.06	6.68	3.11	4.95	12.14	8.91	10.30
Share price (Year-end closing price) (Yen)	297	306	391	290	379	798	511	630	1,027	1,259	1,518
Payout ratio (%)	26.3	25.2	23.8	23.5	16.0	10.1	9.1	12.6	20.1	30.4	30.5
Net sales per employee (Millions of yen)	32.44	33.37	36.86	37.72	38.84	42.98	50.82	48.16	42.71	47.07	49.47

Non-financial Data

	2019.3	2020.3	2021.3	2022.3	2023.3
Environment					
Refractory Production Volume (t)	127,857	115,624	101,430	121,357	113,403
GHG Emissions (t-CO <sub>2</sub> e)	51,989	53,311	46,282	48,375	45,160
Scope 1	37,187	38,824	33,023	34,641	32,608
Scope 2	14,801	14,487	13,259	13,733	12,552
Energy Usage (GJ)	547,177	514,473	482,076	509,188	478,029
Electricity Usage (MWh)	25,472	25,102	22,944	23,970	22,440
Water Usage (m <sup>3</sup> )	79,785	77,857	77,164	74,515	73,295
Social					
No. of employees [consolidated]	541	566	537	564	578
[non-consolidated]	417	442	444	475	499
Pct. female employees (%)	9.4	12.0	13.5	13.1	13.6
No. of managers	69	69	75	73	74
No. of female managers	0	0	0	0	1
Average years of continuous employment Males (years)	15.23	14.67	15.29	14.64	14.20
Average years of continuous employment Females (years)	10.59	8.53	8.40	8.79	8.41
Turnover rate 3 years after employment (%)	31.6	25.0	20.0	15.0	50.0
Voluntary retirement rate (%)	3.4	2.3	2.5	3.8	3.8

	2019.3	2020.3	2021.3	2022.3	2023.3
Social					
Working hours *1 (hours/year)	2,238	2,178	2,064	2,171	2,010
Age brackets					
Under 30 years old	97	99	98	108	109
30-39 years old	112	119	118	124	139
40-49 years old	134	135	128	129	133
50-59 years	71	85	95	108	108
60 years or older	3	4	5	6	10
Days of paid leave taken *2 (days/year)	15	15	15	15	15
No. of care leave claimants	1	0	0	0	0
Disabled employment rate (%)	1.91	2.13	2.13	1.95	1.99
No. of childcare leave claimants					
Males	0	0	0	0	12
Females	1	0	1	1	6
Childcare leave reinstatement rate (%)	100	—	100	100	100
No. of education/training days *3	10	12	15	20	28
Health and Safety					
No. of fatalities (cases)	0	0	0	0	0
No. of accidents (cases)	9	9	10	10	11
No. of claimants for mental health leave	0	0	0	0	1

\*1: Skilled laborers only. Scheduled working hours are 1,940 hours   \*2: Skilled laborers only. Union member average   \*3: Sponsored by Head Office



Corporate Overview

Corporate name	Yotai Refractories Co., Ltd.
Establishment	August 1936
Representative	Mitsuo Taguchi
Head office location	8-1 Nishikinaka-machi, Kaizuka-shi, Osaka Prefecture 597-0093
No. of employees	578
Paid-in capital	2,654 million yen
Business description	Manufacturing and sales of refractories/ new ceramics, and related engineering businesses
Market listing	Prime market, Tokyo Stock Exchange
Securities code	5357



Director/Officer Composition  
(as of June 22, 2023)

President	Mitsuo Taguchi
Managing Director General Manager, Head Office General Affairs Department	Shinichiro Takebayashi
Director Plant Manager, Hinase Plant	Tadashi Taniguchi
Director General Manager, Tokyo Branch	Yorisada Matsumoto
Director Audit and Supervisory Committee (Full-time)	Takashi Umezawa
Director Audit and Supervisory Committee (External)	Shinobu Akiyoshi
Director Audit and Supervisory Committee (External)	Katsuhiko Omoto
Director Audit and Supervisory Committee (External)	Yusuke Otsuka

Share Information

Total no. of authorized shares	70,000,000 shares
Total no. of outstanding shares	25,587,421 shares
Shareholders	1,799

Major Shareholders

Shareholder name	No. of shares owned (thousand shares)	Shareholding ratio (%)
Sumitomo Osaka Cement Co., Ltd.	3,589	18.29
The Master Trust Bank of Japan, Ltd. (Trust account)	1,618	8.24
Sunshine D Investment Partnership Executive Partner UGS Asset Management Inc.	1,110	5.65
Challenge No.2 Investment Partnership Executive Partner Capital Management Ltd.	1,000	5.09
The Tachibana Securities Co., Ltd.	998	5.08
The Chugoku Bank, Ltd.	908	4.62
Capital Gallery Co., Ltd.	810	4.12
Sanei Kosan Co., Ltd.	750	3.82
Sunshine G Investment Partnership Executive Partner UGS Asset Management Inc.	564	2.87
Custody Bank of Japan, Ltd. (Trust account)	500	2.55

(Note) The shareholding ratio is calculated after a deduction of 5,956 thousand shares of treasury stock.

Shareholder Memo

Fiscal year	April 1st to March 31st of the next year
Confirmation date for shareholder eligibility to receive year-end dividends	March 31st
Confirmation date for shareholder eligibility to receive interim dividends	September 30th
Ordinary general meeting of shareholders	June each year
Account management institution for shareholder registry administrator special account	Mitsubishi UFJ Trust and Banking Corporation
Announcement method	Will be announced electronically
Announcement URL	<a href="https://www.yotai.co.jp/ir/j_annual.html">https://www.yotai.co.jp/ir/j_annual.html</a>

However, in the event that an accident or other unavoidable factor prevents electronic announcement, announcements will instead be made via The Nihon Keizai Shimbun.

List of Business Locations

Head Office	8-1 Nishikinaka-machi, Kaizuka-shi, Osaka Prefecture 597-0093
Sales Offices	
Head Office Sales Division	8-1 Nishikinaka-machi, Kaizuka-shi, Osaka Prefecture 597-0093
Tokyo Branch	1-1-1 Koraku, Bunkyo-ku, Tokyo (TK-CENTRAL 6th Floor) 112-0004
Kyushu Branch	4-6 Konya-cho, Kokurakita-ku, Kitakyushu-shi, Fukuoka Prefecture (Kitakyushu Dai-ichi Bldg., 7th floor) 802-0081
Nagoya Branch	2103-1 Oda-cho, Mizunami-shi, Gifu Prefecture 509-6112
Okayama Branch	2601 Hinase, Hinase-cho, Bizen-shi, Okayama Prefecture 701-3204
Plants	
Hinase Plant	2601 Hinase, Hinase-cho, Bizen-shi, Okayama Prefecture 701-3204
Yoshinaga Plant	1250 Minamikata, Yoshinaga-cho, Bizen-shi, Okayama Prefecture 709-0223
Yoshinaga Plant, Second Branch	426 Mitsumata, Yoshinaga-cho, Bizen-shi, Okayama Prefecture 709-0225
Kaizuka Plant	8-1 Nishikinaka-machi, Kaizuka-shi, Osaka Prefecture 597-0093
Mizunami Plant	2103-1 Oda-cho, Mizunami-shi, Gifu Prefecture 509-6112
Mizunami Plant, Toki Factory	95-8 Dachi-cho, Toki-shi, Gifu Prefecture 509-5401
R&D Division	
Advanced Materials Laboratory	8-1 Nishikinaka-machi, Kaizuka-shi, Osaka Prefecture 597-0093
Technical Research Laboratory	2601 Hinase, Hinase-cho, Bizen-shi, Okayama Prefecture 701-3204
Engineering Division	
Engineering Division	2601 Hinase, Hinase-cho, Bizen-shi, Okayama Prefecture 701-3204

Website Guide

Please visit the website for the latest information on Yotai  
<https://www.yotai.co.jp/en/>

