

## Defining product/market scopes in 2030

### Organizational reform according to the product/market scope

#### Managing portfolio dynamically

#### Strategic investments in M&As

**We will balance and accelerate the management of “exploitation” and “exploration” and pursue internal and external synergies to continually create financial value and social and environmental values.**

To realize the Vision firmly based on our newly established Purpose, we reviewed the Mitsui Kinzoku Group’s product and market scopes.

We set the product and market scopes in 2030 as the intersection between attractive markets, which are backcast from the predicted world in 2050, and advantageous markets, which are forecast based on the strengths of our Group.

Mitsui Kinzoku Group will engage in business in six product/market scopes: the environment and energy, resources, life science, electronics, mobility, and circular economy.

According to the scope, we carried out organizational reform, reorganizing business organizations toward 2030. The design concept in the reorganization had two axes: attractive product/market scopes and allowing continued pursuit of synergies. Traditionally, at Mitsui Kinzoku, each sector has accessed its market and customers. Now, organizations are grouped by product/market scope to be able to constantly provide attractive markets with value. In addition to developing existing businesses in three sectors, the Business Creation Sector will create new businesses to reinforce and accelerate the pursuit of ambidexterity.

“Exploitation” is to develop existing businesses and maximize their potential. “Exploration” is to forge new businesses and to expand knowledge in uncharted areas for creating new businesses. These two will be balanced by the pursuit of ambidexterity. For the advancement of exploitation, we will evaluate the value of existing businesses based on the two axes of business feasibility and business value for portfolio management and effective allocation of management resources.

With respect to evaluation criteria, we use market attractiveness and our competitiveness for business feasibility, and EBITDA and ROIC (past, present, future [expected value for 2030]) for business value. Based on the result of reviews performed in FY2022 (see the right chart), we are focusing management resources on business units categorized into the value cultivation/expansion area.

On the matrix, each business unit is positioned from a comprehensive point of view and taking account of a number factors, such as objective data obtained from the above reviews, the past performance of each unit, and suitability for strategies aimed at achieving the Vision for 2030.

We are also planning to adopt ROIC as a criterion for allocating management resources, in addition to the position in the matrix, and examining possible systems to enable the needed process.

At present, for highly feasible businesses, we are seeking M&As and partnerships to actively use external capabilities, rather than relying for growth only on our strengths, in order to further expand and develop value. Going forward, we will endeavor to combine synergies created in two ways, namely, through internal business reorganization and partnership with external organizations, in a bid to enhance our growth strategies.

In April 2022, we established the Business Development Office, which is in charge of carrying out the effort, under the Corporate Planning Department.

We also decided that the basic M&A policy should be a programmatic method of executing small-scale M&As in a planned manner in areas where the effects of synergies with existing businesses would be high. The method aims to gain the capabilities required for the long-term strategy in a phased manner, accumulate M&A experience, and improve the effect of integration.

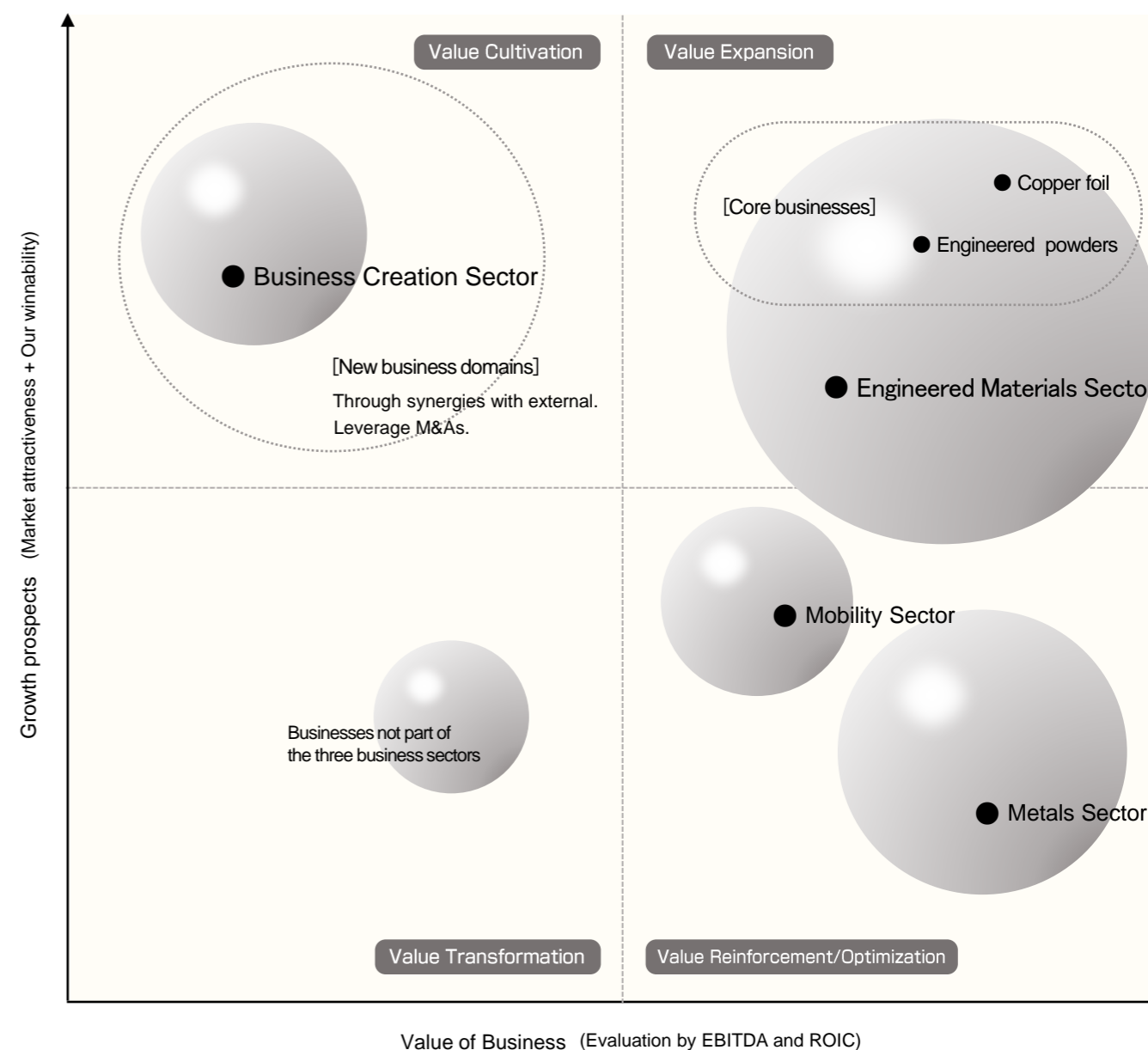
Based on dynamic business portfolio management, we will constantly assess businesses and explore internal and external best owners\* for businesses that are categorized for value restructuring.

In the product/market scopes set based on the Purpose, we will continue to bring about innovation by controlling the balance between exploitation and exploration and promote integrated thinking-based management that can continually create financial value and social and environmental values.

\* Best owner

“Best owner” refers to the management entity that is expected to make the best use of the management resources of the business to maximize the corporate value in the medium to long term.

**Portfolio Matrix** Positioning at the start of the 22 Mid-term Plan



# Exploring for new businesses

[Business Creation Sector]

Exploration

Value Cultivation

Vision for 2030 (What we should be in 2030)

## A team of excited people co-creating value, and exploring the future with material intelligence

“Help build a better future.” By taking on this challenge and making it come true, we will help improve the sustainability of society and enhance the corporate value of Mitsui Kinzoku Group.



The mission of the Business Creation Sector is to provide our stakeholders with “exciting” value, using our spirit of exploration and diverse technologies, and thus contribute to improving the corporate value of Mitsui Kinzoku Group.

To fulfill this mission, in the three years of the 22 Mid-term Plan, we are carrying out value creation activities centering on R&D and market co-creation and pursuing the three strategies of searching better, strengthening R&D, and solidifying the foundation.

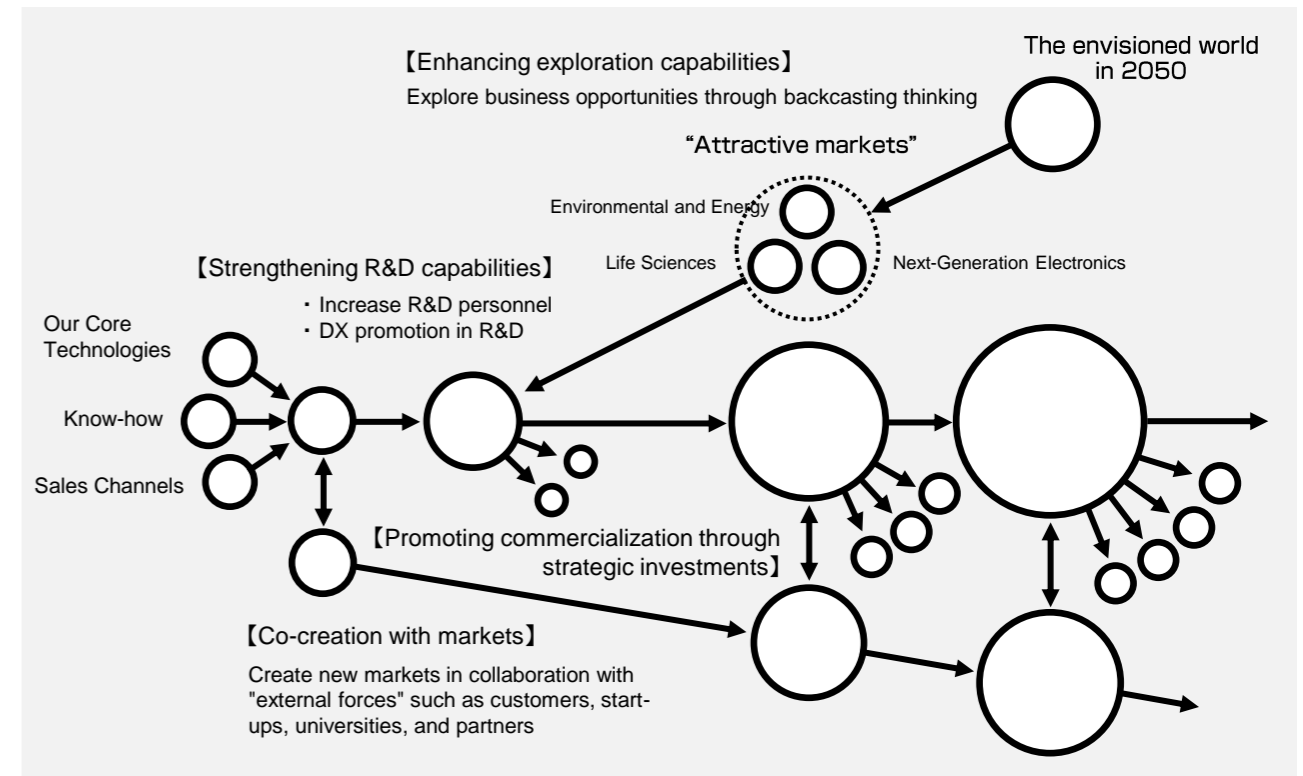
In addition to the above, we are making investments to promote the commercialization of development themes in existing units, while advancing collaborations with customers steadily to make profits.

We will continue to make concerted efforts to achieve Mitsui Kinzoku Group’s growth and improve the sustainability of society through providing value in the form of solutions made possible only by drawing on the Group’s material intelligence. The Business Creation Sector will make further advancements.

Senior Executive Officer,  
Senior General Manager of Business Creation Sector

**YASUDA Kiyotaka**

### Sustainably co-create new businesses



#### Promoting commercialization through strategic investments

All-solid-state batteries are expected to be the next-generation of storage batteries, and development efforts are underway for a wide range of applications, including electric vehicles (EVs). In FY2021, we started to supply A-SOLID<sup>®</sup>, a solid electrolyte for all-solid-state batteries produced at our mass production testing facility, and in FY2022, we doubled the production capacity, in response to a sharp rise in demand for the product from customers inside and outside of Japan who are involved in the intensifying development race for commercializing all-solid-state-battery products for EVs. We have also begun to receive orders for other uses from a growing number of customers.

A number of our customers who are leading semiconductor manufacturers have started the full-scale semiconductor packaging development process using our HRDP<sup>®</sup> a special carrier for next-generation semiconductor packaging devices. In response to this situation, in FY2023, we signed an agreement with GEOMATIC Co., Ltd., the partner manufacturer, to build a second line for HRDP<sup>®</sup> in its Ako Plant, for the purpose of further improving quality and expanding production capacity. Our plan is to implement investments in sequence between 2023 and 2025 to complete the fully automated line to go into operation in 2025.

#### Co-creation with markets

We are accelerating market co-creation activities to integrate our core technologies and “external forces” to create innovations.

One of such recent projects was launched in July 2022, when we invested in eSep Inc. (headquartered in Soraku-gun, Kyoto Prefecture), which develops, manufactures, and sells ceramic functional separation membranes, through our corporate venture capital (CVC). eSep aims to manufacture and commercialize fuel prepared synthetically from carbon dioxide using a membrane reactor that combines its proprietary technologies, namely the separation membranes and catalytic agents.

Our investment in eSep is primarily directed at combining the firm’s separation membrane technology and our strong inorganic materials technology, with an eye to seeking business opportunities in environmental energy fields, such as the development of membrane reactors for manufacturing e-fuels which contribute to achieving a carbon neutral society.

A more recent project was to invest in Helical Fusion Co., Ltd. (headquartered in Chuo-ku, Tokyo), which aims to implement nuclear fusion power generation technology for real-life applications. The investment was made in April 2023 through the CVC. Nuclear fusion represents a next-generation energy source that does not emit CO<sub>2</sub>. Resources used as fuel for this technology exist in large amounts in seawater. Through this investment, we will combine Helical Fusion’s nuclear fusion reactor technologies and our technological capabilities with the aim of enabling sustainable and stable energy generation.

# Engineered materials

[ Engineered Materials Sector ]

Exploitation

Value Expansion

Vision for 2030 (What we should be in 2030)

## FY2030 targets: ¥180 billion net sales, ¥40 billion ordinary income

More than 70% of newly launched products and more than 50% of sales are environmental contribution products.

The Engineered Materials Sector provides useful, high-performance products that satisfy customer needs as well as contribute to solving social issues, thereby improving and expanding financial value. Towards realizing the Vision for 2030, we are striving vigorously to effectively execute the strategies set for each division, enhance core technologies, improve marketing capabilities, create environmental contribution products, further develop existing businesses, and explore new business opportunities.

FY2022 was a difficult year for the Engineered Materials Sector. Sales of copper foil decreased due to the prolonged inventory adjustment throughout the supply chain chiefly for semiconductors. The Engineered Powders Division also recorded a decline in sales as an outcome of production adjustments made by major customers and sluggish demand from smartphone manufacturers. We were also affected by raw material inventory-related factors. As a result, the Sector as a whole posted a decline in revenue and income year on year.

Despite the generally challenging business environment, however, we made steady progress in carrying out the strategies set forth in the Mid-term Management Plan, specifically by increasing order volume for MicroThin™, a major copper foil product, for HDI, and preparing for expanding the capacity of supplying the same product for packaging. The Engineered Powders Division launched new products, such as copper powders for 3D printers, and the Ceramics Division expanded sales of next-generation setters and 3D-printed ceramics.

We are also endeavoring to create an organization where highly engaged employees with different qualities thrive together, an essential condition for aiming at achieving our goals, while continuing to pursue collaborations with customers and other stakeholders to create value on an ongoing basis.

I believe that our efforts to tackle these challenges will result in the growth of Mitsui Kinzoku Group as well as contribution to achieving a sustainable society.

Managing Director, Senior Executive Officer,  
Senior General Manager of Engineered Materials Sector

**OKABE Masato**

### Main Business Strategies

#### Copper foil

- Prepare to expand MicroThin™ market/applications
  - (1) Enter new markets (2) Fully leverage supply capacity
- Develop, launch, and expand sales of high-performance electrolytic foil

#### Engineered powders

- Maximize profit from existing products (Sales expansion of copper powders for electronics, abrasives)
- Launch new products (copper powders for 3D printers, rare metal solutions)

#### PVD materials

- Keep decent margins, overhaul production to reduce costs
- Cultivate future products

#### Ceramics

- Expand sales of new products (e.g. next-generation setters\*)

\* Calcined ceramic jigs for electronic parts

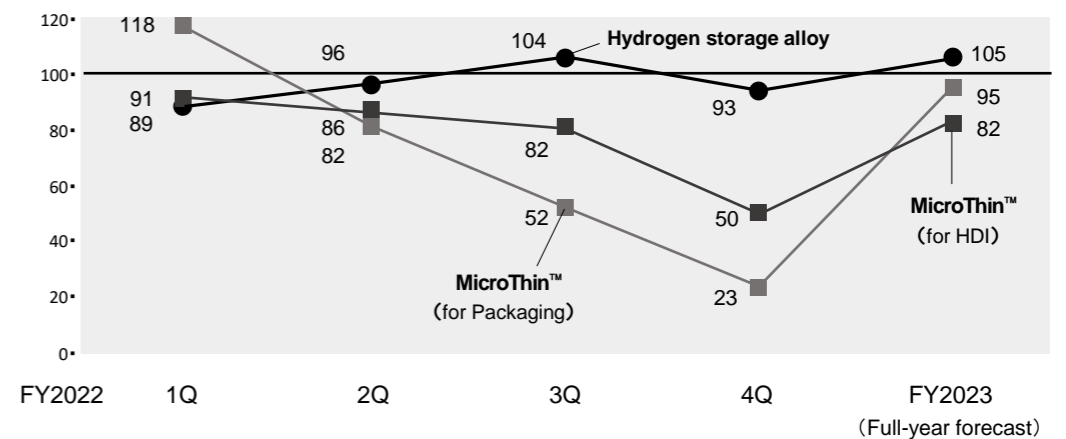
### ESG Initiatives

- In cooperation with the Corporate function, build and operate an organization for promoting efforts to create environmental contribution products and achieve carbon neutrality by 2050
- Applications submitted for certification of environmental contribution products with candidates selected by divisions and affiliates

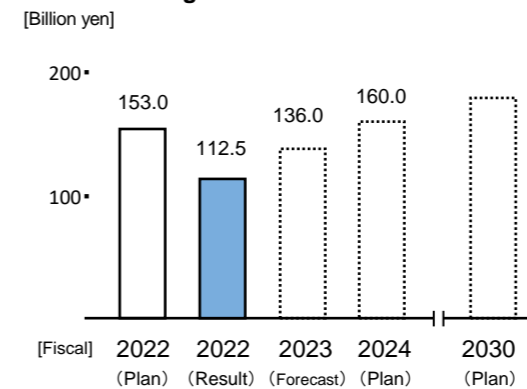
### Opportunities and Risks

- Creation of new demand through technological innovation
- Expansion of demand for high-performance products due to increasingly sophisticated market needs
- Increase in demand due to expansion of markets in emerging economies
- Intensifying price competition due to rise of manufacturers in emerging economies
- Sluggish demand due to spread of infection and rise of protectionism
- Increase in geopolitical risks in procurement of raw materials from overseas

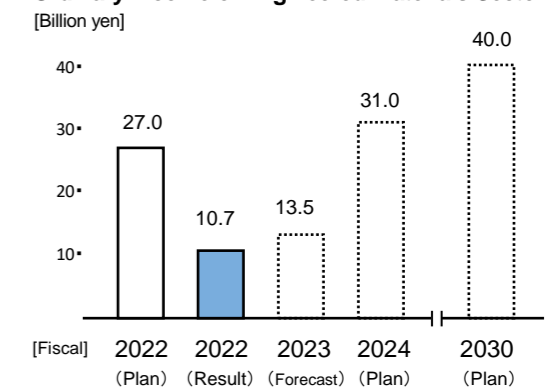
Sales Trends for Major Products in FY2022 (Index based on full-year sales results for FY2021 set at 100)



### Net sales of Engineered Materials Sector



### Ordinary income of Engineered Materials Sector



Note: The plan for FY2030 does not include the impact of inventory.

# Metals Mining and smelting

[ Metals Sector ]

Vision for 2030 (What we should be in 2030)

## We are essential in efforts to build a sustainable world.

We strive to further enhance recycling network underpinned by distinctive characteristics, and we continue to explore new mineral resources and renewable energy.

Exploitation

Value Reinforcement/Optimization

Main Business Strategies

### Sector-wide

□ Build a sophisticated recycling network based on our diversified smelting assets

### Lead & Zinc

□ Leverage existing assets to expand business of waste processing  
 □ Improve margins for metals produced from complex ores  
 □ Increase the volume of new lead-based materials being collected and processed to make profit

### Copper & Precious Metals

□ Improve margins for metals produced from profitable materials  
 □ Reduce costs by improving operations and investing more judiciously

### Mineral Resources

□ Explore new mining opportunities around Huanzala and Pallca in Peru

ESG Initiatives

To contribute to a decarbonized society, reduce CO2 emissions and explore renewable energy solutions

Opportunities and Risks

- Stable growth of zinc and copper demand in the long run
- Expanding and increasingly complicated needs for resource recycling
- Promotion of the spread of renewable energy
- Fluctuations in market price of metals and exchange rates
- Rise in energy costs
- Accelerated measures to address climate change for carbon neutrality

We have continuously improved our smelting and recycling over the years. To respond to a growing need for recycling in line with the development of a recycling-based society, we determined the mission of the Metals Sector to be: provide solutions that help build a sustainable world.

Toward our vision for 2030, we will pursue a more sophisticated recycling network, explore new mining opportunities, reduce CO2 emissions for the development of a decarbonized society, explore renewable energy solutions, and improve digital infrastructures for digital transformation.

In FY2022, the Metals Sector posted a decline in profit chiefly due to higher energy costs and inventory-related factors accompanying fluctuations in the non-ferrous metals market. However, we made progress steadily in implementing the strategies set for the Sector.

For zinc smelting, the division is expanding the waste processing business leveraging existing assets, and for lead smelting, it is increasing the volume of processing recycled materials while improving the utilization of the furnace. The Mineral Resources Division is moving forward with the new mine development project planned for areas near the existing mines in Peru, which has received sufficient profitability scores from the preliminary economic feasibility analysis and will advance to a more detailed feasibility study. Also, we have begun to engage in a demonstration project for using alternative fuels for smelting, as a measure to reduce CO2 emissions from the related operations.

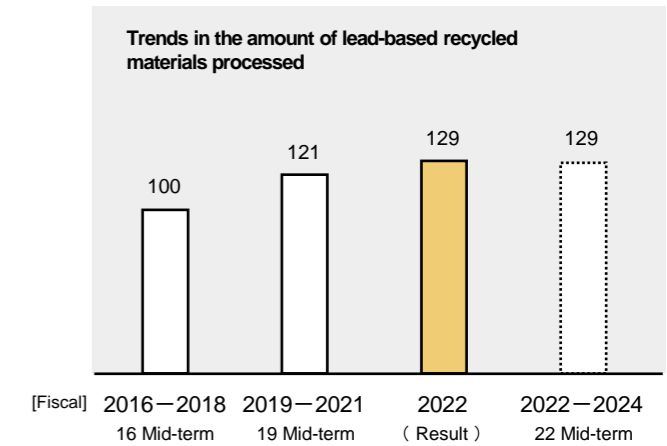
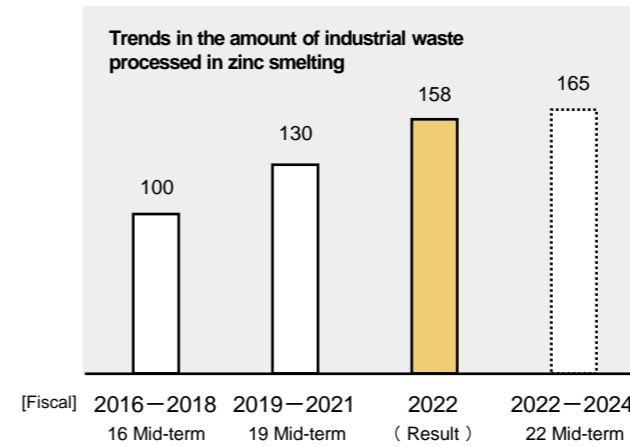
While optimizing the characteristics of zinc, lead, and copper smelting networks using diverse processes owned by our Group, mining resources, and renewable energy, we will enhance collaboration and synergies between these to provide unique value.

Senior Managing Director, Senior Managing Executive Officer, Senior General Manager of Metals Sector

**TSUNODA Satoshi**

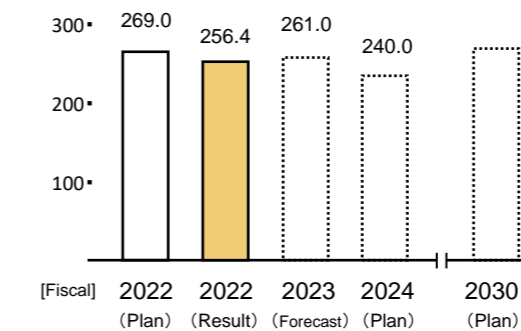
### Expansion of processing of industrial waste and recycled materials

(Index display when the actual results during the 16 Mid-term period are set as 100)



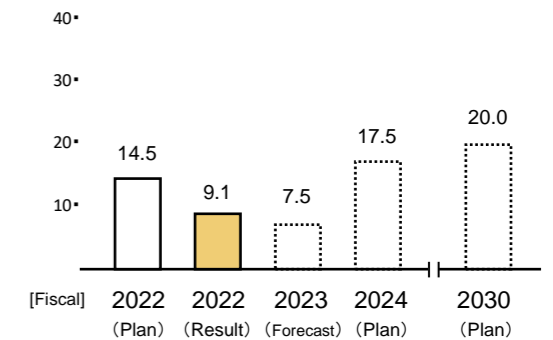
### Net sales of Metals Sector

[Billion yen]



### Ordinary income of Metals Sector

[Billion yen]



Note: The plan for FY2030 does not include the impact of inventory.

# Mobility

[ Mobility Sector ]

Vision for 2030 (What we should be in 2030)

We act as a pioneer of mobility, always making sure of and always creating the best values to be chosen.

New products account for more than 50% of sales, ordinary income trends at ¥20 billion, and there are no product recalls.

Exploitation

Value Reinforcement/Optimization

Main Business Strategies

**Sector-wide**

- Unlock synergies (short-/medium-/long-term)
- Forge new businesses that reflect the changing times

**Catalysts**

- Keep honing tech prowess to differentiate products
- Streamline production with technology coefficient improvement and DX
- Envisage medium- to long-term scenarios in which we use our strengths to succeed

**Mitsui Kinzoku ACT Corporation**

- Develop and expand system-related products to shift focus toward systems suppliers
- Make costs more competitive by globally optimizing production and adopting smart factory design

**Mitsui Kinzoku Die-Casting Technology Co., Ltd.**

- Rebuild business, produce optimal profit

ESG Initiatives

Incorporate customers' environmental concerns into our own goals, while trying to reconcile both, develop quantifiable and sustained practices to achieve the goals.

Opportunities and Risks

- Sales expansion of new products through the electrification and automation of automobiles
- Tightening of environmental regulations on fuel efficiency, exhaust gas, etc.
- Rise of new players with changes in the automotive industry
- Decrease in demand and delay in production recovery in the automotive market due to the spread of infection and semiconductor shortage
- Increase in geopolitical risks in procurement of raw materials from overseas, production and sales

Recognizing big changes and evolutions in the automotive industry, including CASE, MaaS, and carbon neutrality, as new needs, the Mobility Sector will provide value that serves our customers and contributes to the development of a mobility-based society.

The targets we set for 2030 are: increasing the percentage of new products in net sales, significantly increasing profit, and ensuring that there are no product recalls. To achieve these targets, we will pursue exploitation in technology, manufacturing, and sales; forge new businesses; and pursue synergies over short-, medium-, and long-term cycles.

In FY2022, door latches for automobiles, a main product of the Mobility Sector, posted an increase in revenue thanks to rising demand in Japan, India and Southeast Asia, which offset declining demand in China. Revenue of the Catalysts Division also increased, as sales increased reflecting the increased production of exhaust gas purifying catalysts for motorcycles in response to strong growth in demand in India and Southeast Asia as well as the mass production of exhaust gas purifying catalysts for four-wheeled vehicles in response to orders from manufacturers for new models for India. Partially thanks to the improved yield in the diecast business, our Sector as a whole posted an increase in revenue and income year on year, although falling short of the initial targets set under the Mid-term Management Plan.

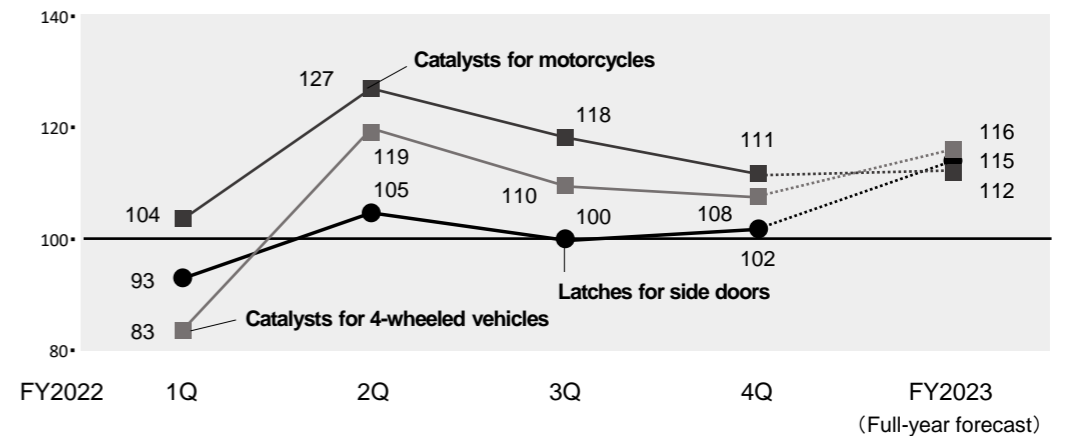
In FY2023, we are expanding sales of door latches and catalysts, looking to achieve a growth in revenue and profit for the sector overall. We will also press ahead with our strategies set forth for each division in the 22 Mid-term Plan.

With the three keywords of enthusiastic “challenge,” “persistence” to make it to the end without giving up, and “speed” of action, we aim to be a mobility pioneer that identifies future value and continues to create it.

Senior Executive Officer,  
Senior General Manager of Mobility Sector

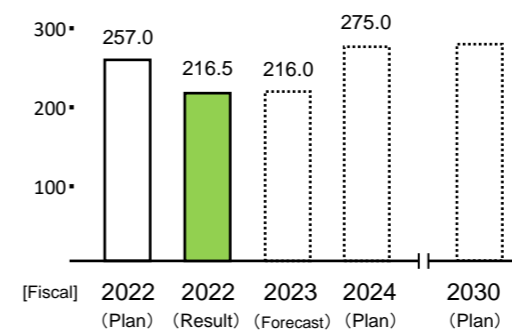
**IGATA Hiroshi**

Sales Trends for Major Products in FY2022 (Index based on full-year sales results for FY2021 set at 100)



**Net sales of Mobility Sector**

[Billion yen]



**Ordinary income of Mobility Sector**

[Billion yen]

