



# KOBELCO Group Initiatives in the Advanced Materials Business

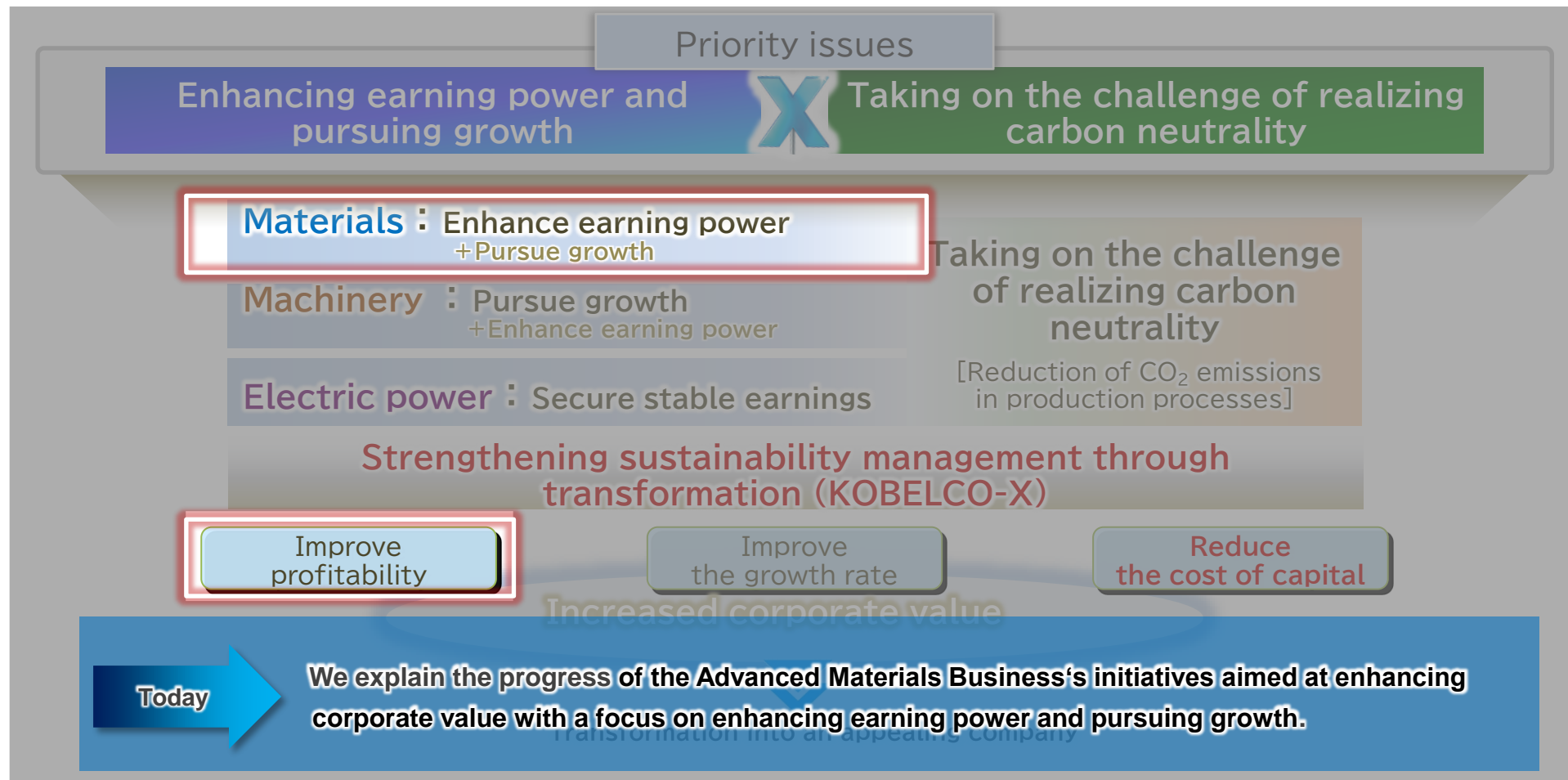
February 17, 2025  
Kobe Steel, Ltd.

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# Introduction

## Kobelco Group Medium-Term Management Plan (Fiscal 2024–2026) — Basic Policy —

- Enhancing earning power and pursue growth, while continuing to take on the challenge of realizing carbon neutrality
- Increasing corporate value by strengthening sustainability management to transform us into an appealing company



# **1. Overview of the Advanced Materials Business**

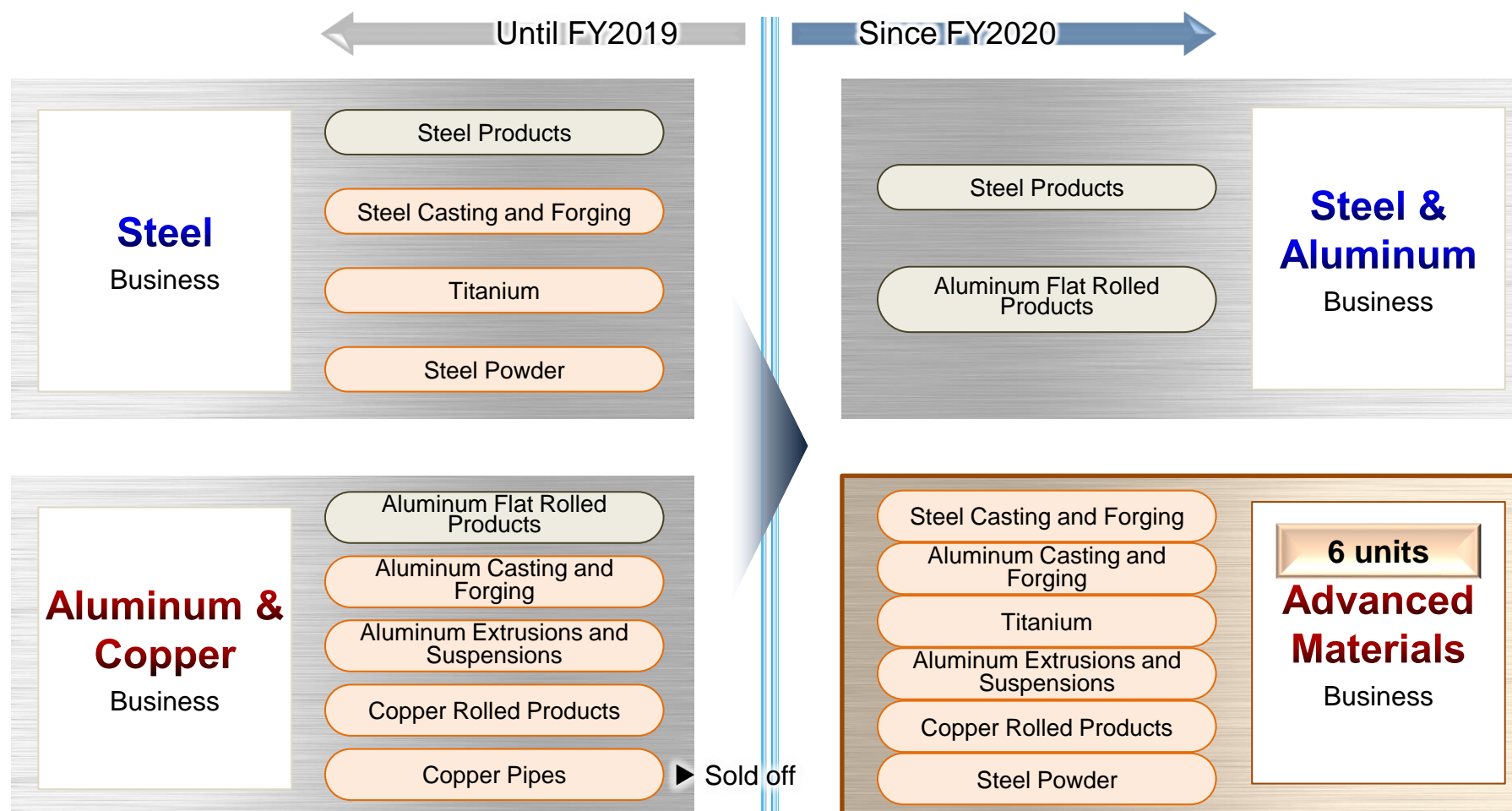
**2. Medium- to Long-Term Policies**

**3. Status of the Efforts to Enhance Earning Power**

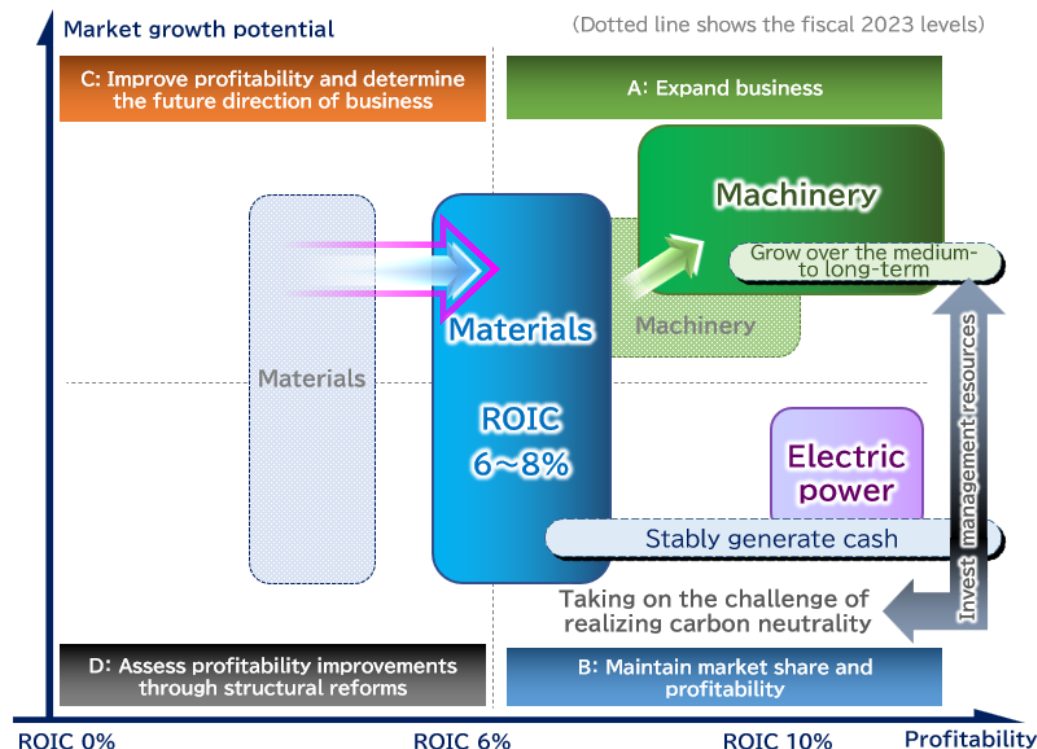
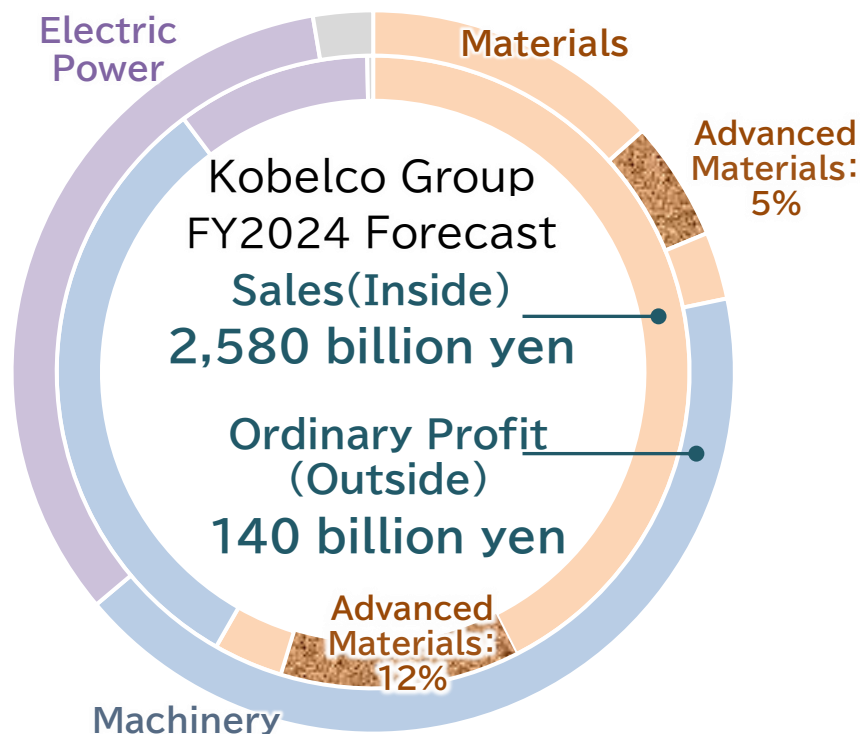
**4. Status of the Efforts to Pursue Growth**

# Origins of the Business Division

- In fiscal 2020, the Company reorganized its materials businesses, dividing them into **the component segment (Advanced Materials Business)** and the materials segment (Steel & Aluminum Business).
- While reinforcing strategies specific to each demand area, we are strengthening our manufacturing capabilities through cross-divisional collaboration in areas such as common element technologies, quality control, etc., to better serve our customers and increase the profitability of the materials businesses.



## Position in the Kobelco Group



### Fiscal 2024 Forecast

- Sales: 323 billion yen
- Ordinary Profit: 8 billion yen
- ROIC: Approx. 5%

Advanced Materials Business's ROIC Target: 6–8%

Enhancing the Advanced Materials Business's earning power is essential.



Aiming to achieve an ROIC of 8% in fiscal 2026 and beyond

# Business Division Overview

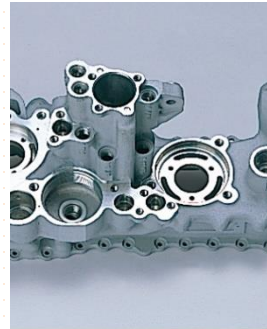
## Six Units Comprising the Business Division



### Steel Casting & Forging Unit

Main products

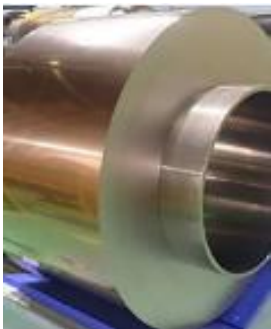
- Crankshafts (merchant vessels, naval vessels, power generation)
- Ship components (merchant vessels, naval vessels)
- Steel and aluminum mill rolls



### Aluminum Casting & Forging Unit

Main products

- Aircraft components and defense equipment components
- Semiconductor manufacturing equipment components
- Railway vehicle components



### Titanium Unit

Main products

- Aircraft (airframe, landing gear, engine parts, defense equipment components)
- Heat exchanger plates
- Materials for hydrogen fuel cells



### Aluminum Extrusion & Suspension Unit

Main products

- [Suspensions] Automotive undercarriage components
- [Extrusions] Automotive and railway vehicle components



### Copper Rolled Products Unit

Main products

- Copper alloy sheets and strips for lead frames
- Copper alloy sheets and strips for terminals and connectors



### Steel Powder Unit

Main products

- Automotive components
- Steel powder for soil and groundwater purification
- Steel powder for hand warmers and deoxidizers



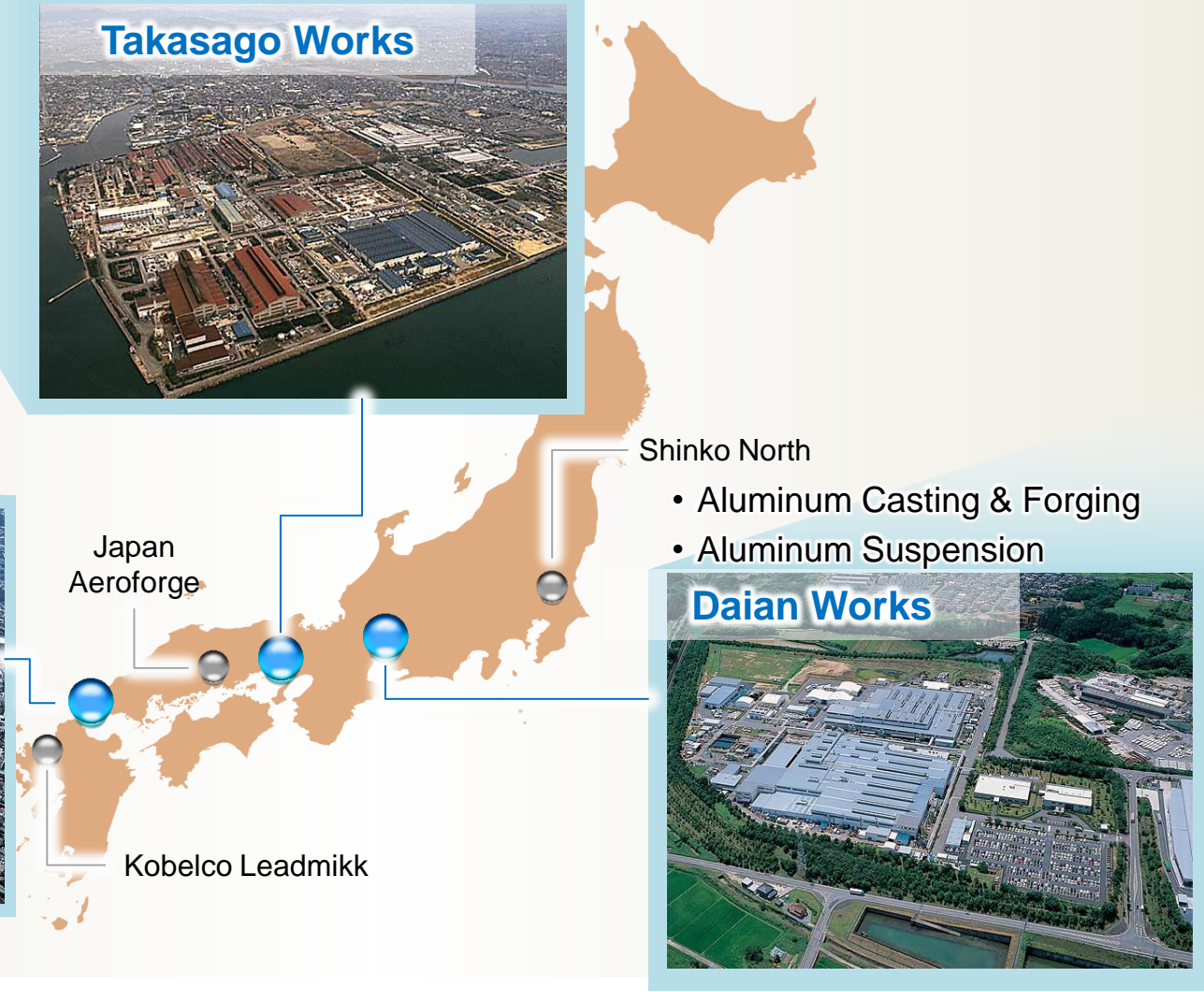
# Business Division Overview: Domestic Production Bases

The main production bases in Japan are located in Daian, Takasago, and Chofu.

- Steel Casting & Forging
- Titanium
- Steel Powder

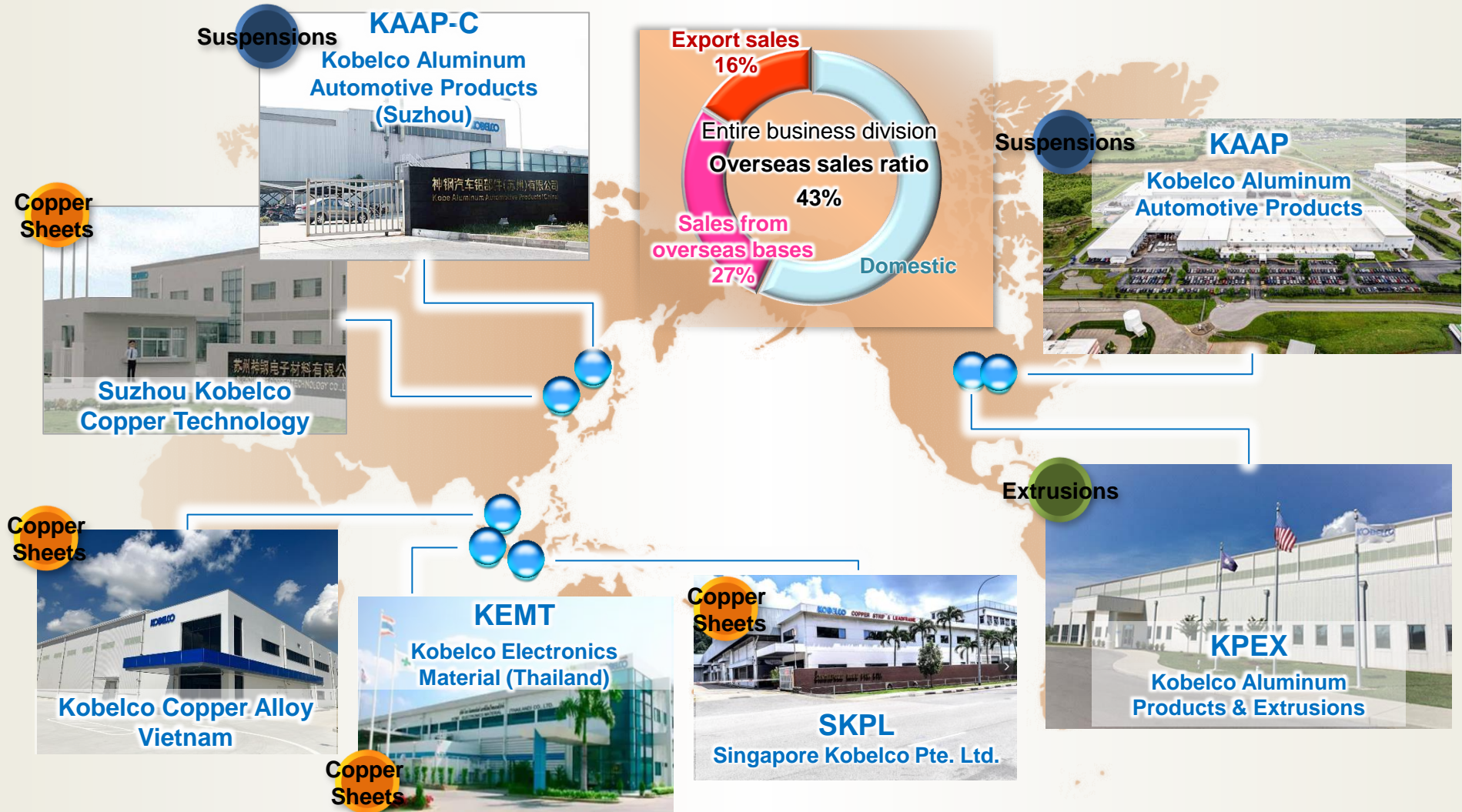


- Aluminum Extrusion
- Copper Rolled Products



# Business Division Overview: Overseas Production Bases

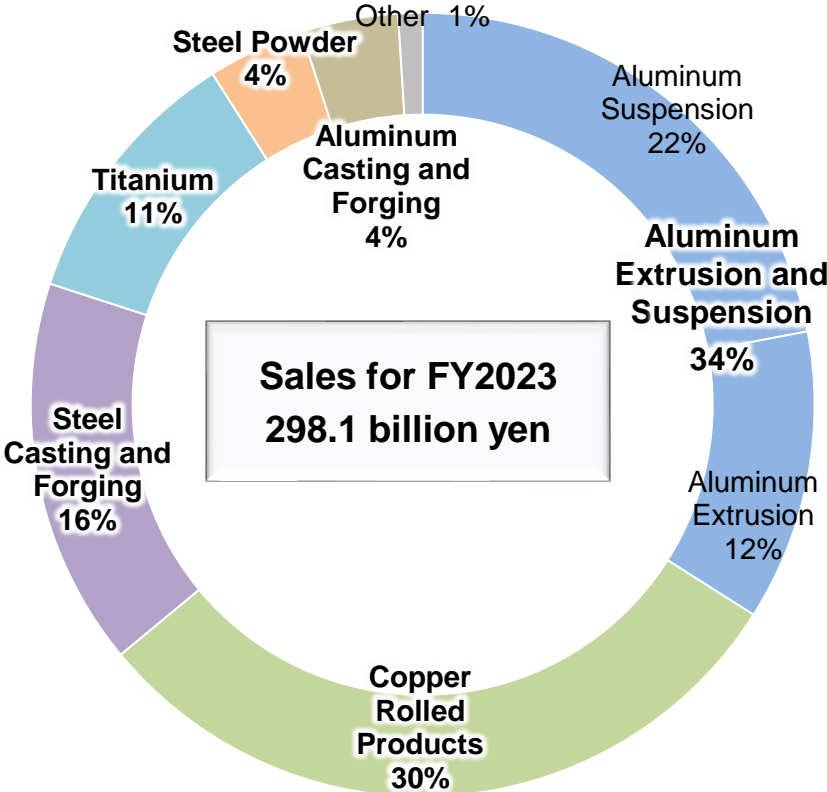
Aluminum extrusion/suspension and copper sheet products manufactured/processed at overseas bases account for more than 60% of total overseas sales. Titanium and other products are exported globally.



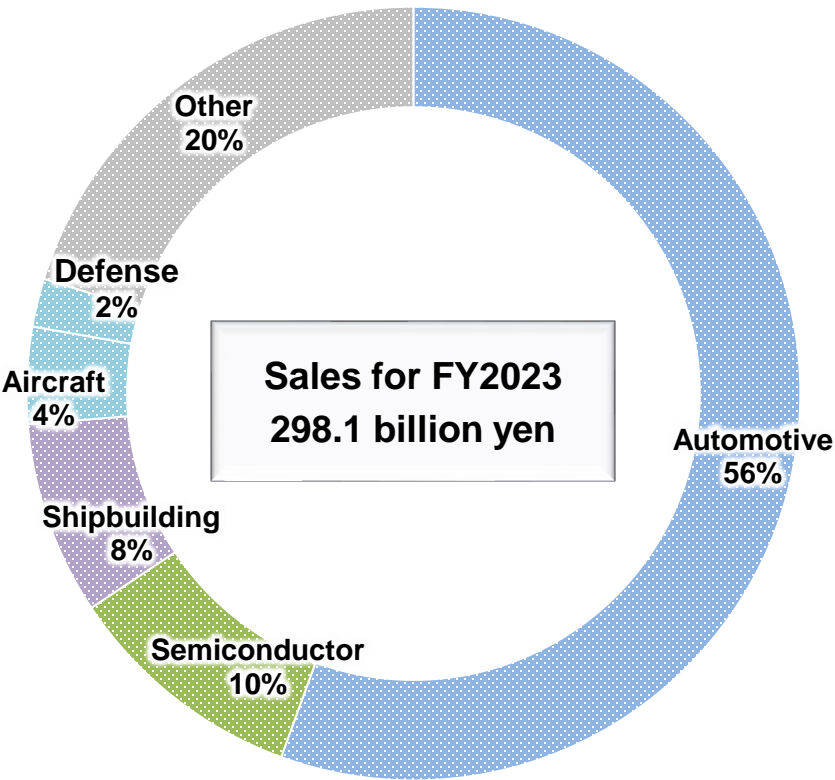


# Business Division Overview: Sales Ratio by Unit and Customer Domain


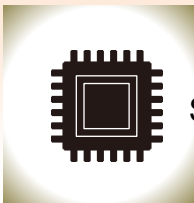



Sales Ratio by Unit



Sales Ratio by Customer Domain

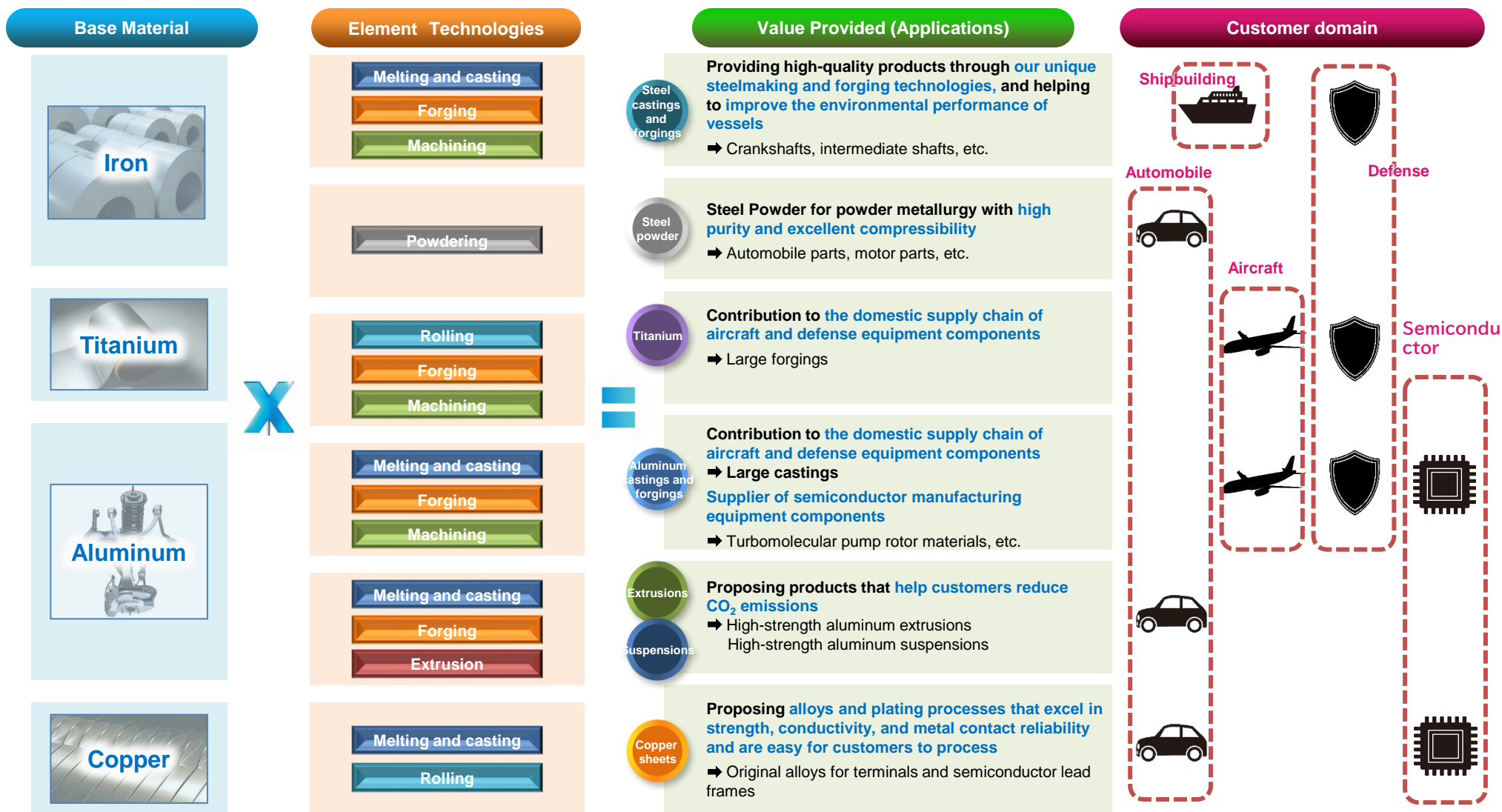


## Business Division Overview: Customer Domains and Distinctive Products

Customer domain		Related businesses	Distinctive products
	Automobiles	Aluminum Extrusion & Suspension Copper Rolled Products Steel Powder	<ul style="list-style-type: none"> <li>• <b>80% share both in Japan and North America</b> for aluminum forgings for suspensions (medium and large size)</li> <li>• <b>30% share in Japan</b> for copper alloys for automotive terminals and connectors</li> <li>• <b>45% share in Japan</b> for steel powder for automotive powder metallurgy</li> </ul>
	Semiconductors	Aluminum Casting & Forging (Forging using hydraulic press) Copper Sheets	<ul style="list-style-type: none"> <li>• <b>20% share in Asia</b> for semiconductor lead frame materials</li> </ul>
	Shipbuilding	Steel Casting & Forging	<ul style="list-style-type: none"> <li>• <b>40% global market share</b> for large ship crankshafts</li> </ul>
	Aircraft	Aluminum Casting & Forging (Sand mold casting) Titanium	<ul style="list-style-type: none"> <li>• <b>The only company in Japan</b> with extensive experience in large titanium forgings and large aluminum castings</li> </ul>
	Other	Various businesses	<ul style="list-style-type: none"> <li>• <b>Top share in the Japanese market</b> for aluminum shapes for railway vehicles</li> </ul>

# Value Provided by the Advanced Materials Business

- We propose and deliver value tailored to customer needs by combining base materials and element technologies.
- We conduct marketing through collaboration among units that share the same customer domain (market).



**1. Overview of the Advanced Materials Business**

**2. Medium- to Long-Term Policies**

**3. Status of the Efforts to Enhance Earning Power**

**4. Status of the Efforts to Pursue Growth**



# Business Vision and Ideal State

## <Group Corporate Philosophy>

- ◆ KOBELCO's View of the Future
- ◆ KOBELCO's Mission
- ◆ Core Values of KOBELCO
- ◆ Six Pledges of KOBELCO

## <Next 100 Project Activities>

Improving customer satisfaction

Building a solid operation base

Improving employee satisfaction

### Business vision and ideal state

- Become a business entity indispensable to society by providing materials and components that satisfy our customers.
- Pursue business development and the happiness of every employee by leveraging diverse technologies and human resources through teamwork.

### Catchphrase

Becoming a business division that everyone is willing to work for

### Strengthening the business foundation

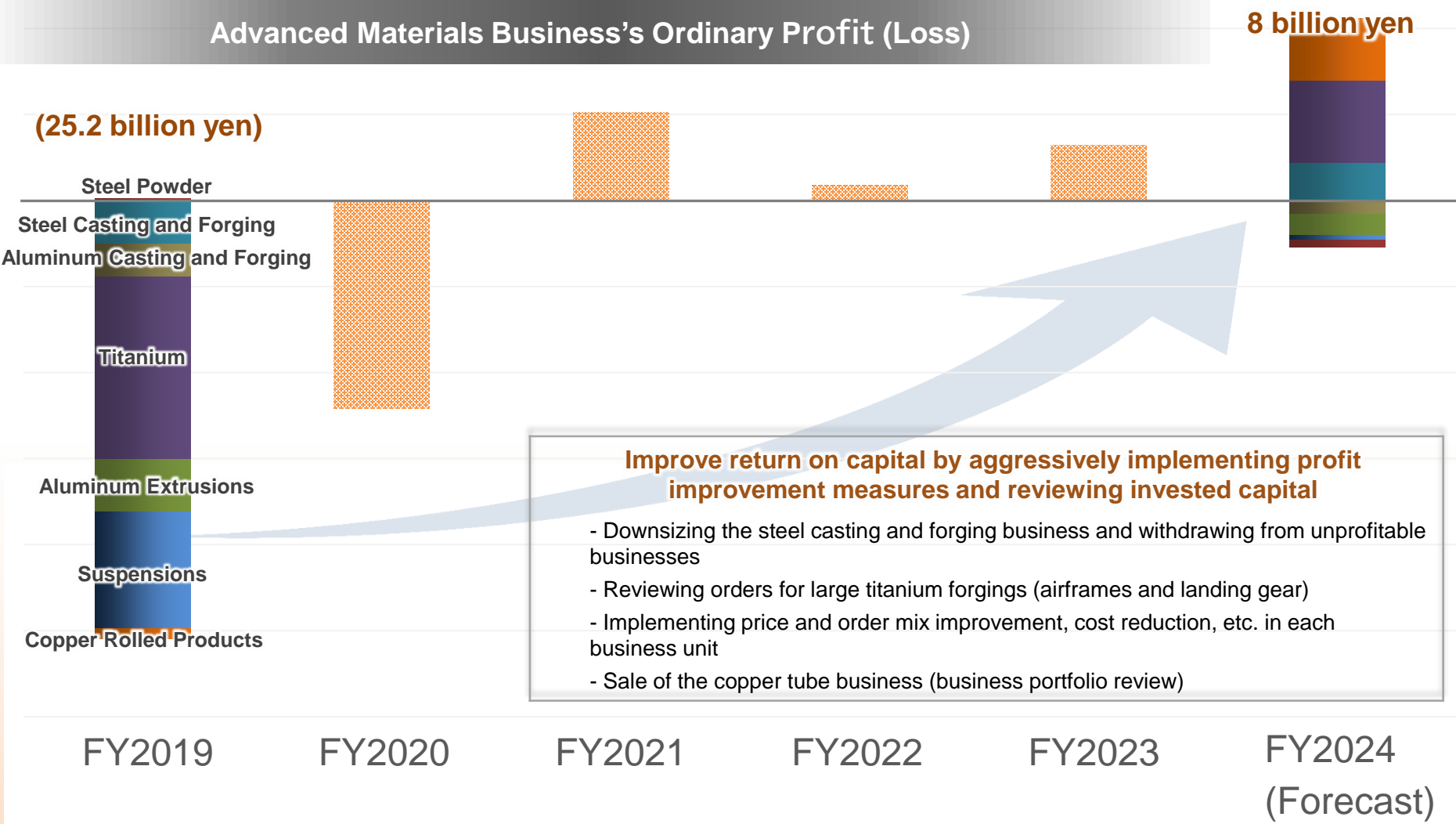
- Foster the business division's cohesion and culture
  - Create a work environment where every employee is actively engaged
  - Establish cultural standards based on the action guidelines
  - Implement orderly manufacturing through all processes starting with the customer
- Promote K-TQM activities: Create value and create our future
  - Promote K-TQM activities with the participation of all members
  - Achieve targets in safety, environmental control, disaster prevention, and quality
  - Improve customer trust
  - Implement KPI management

### Strengthening the value creation area (earnings base)

- Enhance earnings base for consistently delivering outstanding products in QCDS with sustainability and stability ensured, and increase customer satisfaction
- Aim to achieve an ROIC of 8% or higher by identifying the root causes of underperforming businesses and implementing measures to improve profitability
  - 1) Strengthen sales activities
    - Improve selling prices and promote sales expansion activities
  - 2) Improve manufacturing capabilities
    - Improve productivity and process capability

### Action guidelines (Keywords)

- 1) Respect for people; 2) Go to the location, examine the actual item, and see the reality;
- 3) Teamwork; and 4) Professionalism



# Demand Outlook and Policies for Medium- to Long-Term Initiatives (1)

	Demand Outlook	Policies for Medium- to Long-term Initiatives	
<b>Auto-mobile</b>	<ul style="list-style-type: none"> <li>Progress in the transformation of automotive structures and components (EVs, Gigacasts), and growing needs for weight reduction</li> <li>Impact of the shift to EVs Positive: Increasing demand for battery-related products (extrusions) and electrification (copper rolled products) Negative: Shrinking ICE-related demand (extrusions, steel powder)</li> <li>Japanese OEMs' dwindling competitive edge in the Chinese market</li> </ul>	<b>Aluminum Extrusions</b>	Aim to increase orders for frame materials and battery frames, which are expected to grow in the future due to the shift to EVs and lighter vehicles.
		<b>Suspensions</b>	Aim for further growth through improved profitability and stable production by leveraging the high market share in Japan and the United States to improve prices.
		<b>Copper Rolled Products</b>	Aim to improve profitability by responding to increasingly demanding quality requirements and capturing growing electrification-driven demand.
		<b>Steel Powder</b>	Aim to expand sales in Southeast Asia and capture new demand, while maintaining a high domestic market share in powder metallurgy applications, .
<b>Ship-building</b>	<ul style="list-style-type: none"> <li>Increasing demand for replacement of vessels with environmentally friendly alternatives, driven by environmental regulations</li> <li>Need to ensure stable supply (Vessel parts: specified critical products for economic security)</li> </ul>	<b>Steel Casting and Forging</b>	Aim to capture strong demand driven by environmental regulations by leveraging strengths such as a large market share and proprietary technologies.
<b>Aircraft</b>	<ul style="list-style-type: none"> <li>Steady demand due to replacement of old aircraft and expansion of demand in emerging countries</li> <li>Need to ensure stable supply (Aircraft parts: specified critical products for economic security)</li> </ul>	<b>Aluminum Casting and Forging (Sand casting)</b>	Aim to improve profitability through a stable supply and price improvement against the backdrop of a growing preference for domestic procurement driven by economic security concerns.
		<b>Titanium</b>	Aim to increase profitability by capturing growing demand for large forgings.

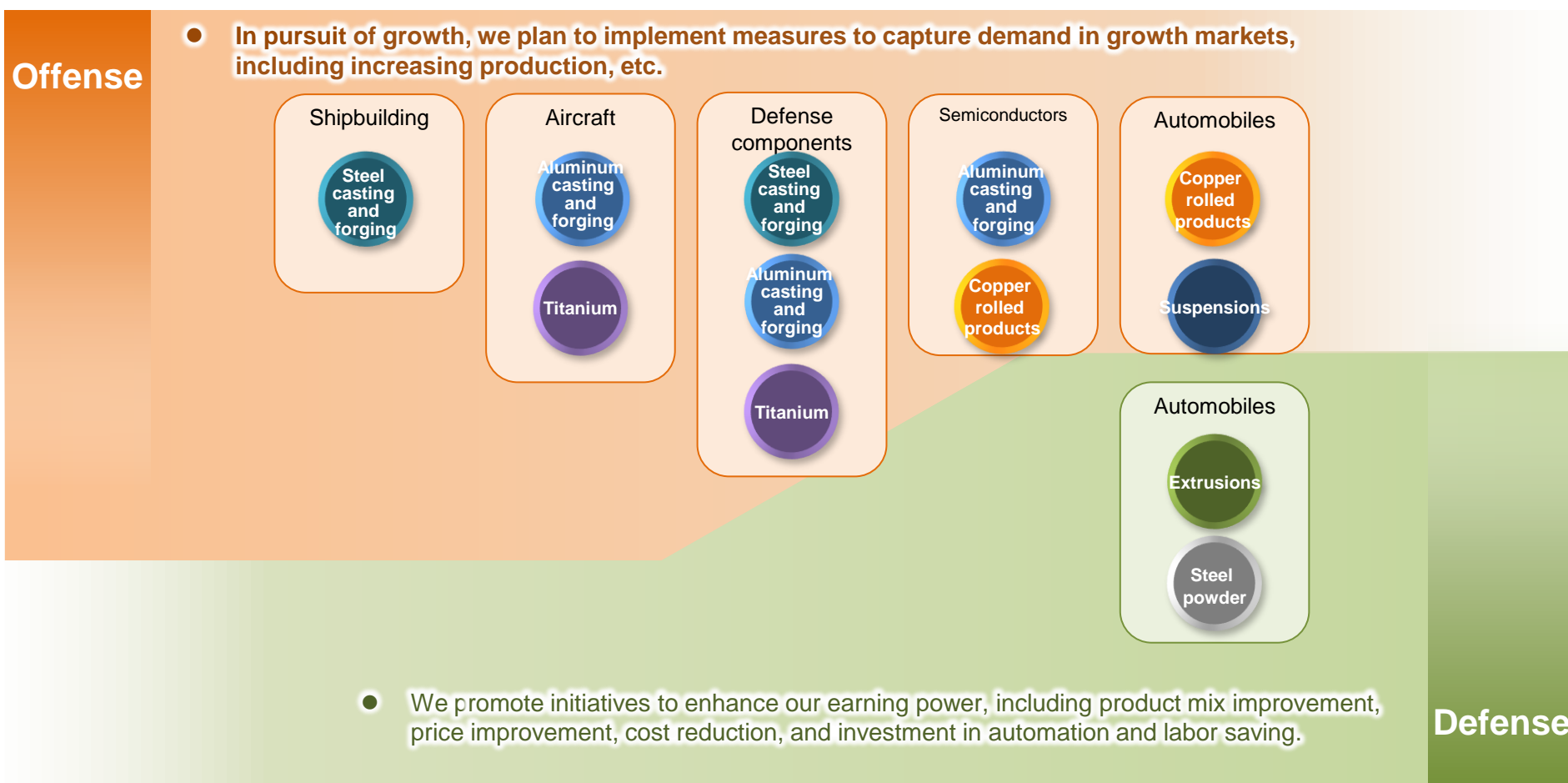
## Business Environment Outlook and Policies for Medium- to Long-Term Initiatives (2)

	Business Environment Outlook	Policies for Medium- to Long-Term Initiatives	
Defense	<ul style="list-style-type: none"> <li>● Increase in defense spending</li> <li>● There will be new demand, and demand for complementary products.</li> </ul>	Steel Casting and Forging	Strengthen the domestic supply chain and respond to requests for increased production
		Aluminum Casting and Forging	
		Titanium	
Semiconductor	<ul style="list-style-type: none"> <li>● Medium- to long-term market growth is expected for both semiconductor manufacturing equipment (aluminum castings and forgings) and semiconductors (copper sheets).</li> </ul>	Aluminum Casting and Forging (Hydraulic Press)	Securely capture growing demand by leveraging the high market share in turbomolecular pump rotor materials.
		Aluminum Casting and Forging (Machining)	Strive to bring high-value-added component products to the market by focusing on the development of cutting-edge equipment components.
		Copper Rolled Products	Aim to increase profitability by responding to growing demand while ensuring a stable supply system and promoting investments to increase production based on price improvements.



## Medium- to Long-Term Policies of the Business Division

To Achieve an ROIC of 8% in fiscal 2026 and beyond, we effectively allocate management resources to business segments that are classified as offensive or defensive, taking into account each segment's operating environment and position in the industry.



**1. Overview of the Advanced Materials Business**

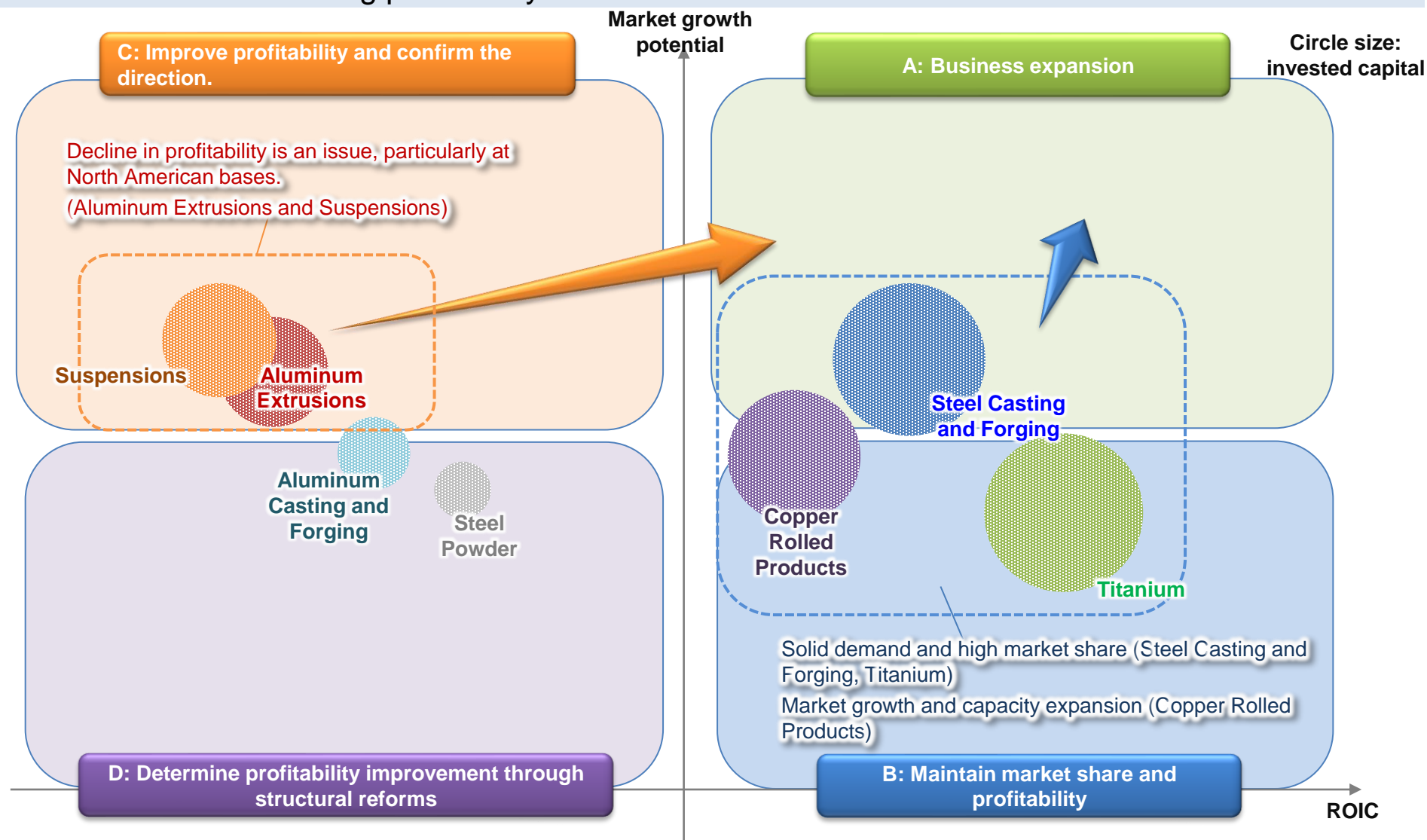
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**3. Status of the Efforts to Enhance Earning Power**

**4. Status of the Efforts to Pursue Growth**

# Challenges in Enhancing Earning Power

- It is essential to improve the profitability of the aluminum extrusions and suspensions businesses, which have been declining particularly in North America.



# Aluminum Suspensions Business (1)

- Our tripolar integrated production system based in Japan, the United States, and China allows for a global supply of aluminum forgings that contribute to automotive weight reduction.
- We hold a high market share in Japan and the United States, leveraging solution proposals based on our design and development expertise as well as production facilities that can handle medium to large parts.

	Manufacturing base	Equipment	Production volume (Converted into the number of vehicles produced*) * Estimation based on 2 pieces per vehicle
Japan	Daian Works (Mie Prefecture)	5 press machines	Approx. 2.5 million vehicles per year
U.S.	Kobelco Aluminum Automotive Products, LLC ( <b>KAAP</b> )	10 press machines	Approx. 4 million vehicles per year
China	Kobelco Aluminum Automotive Products (Suzhou) Co., Ltd. ( <b>KAAP-C</b> )	3 press machines	Approx. 1.2 million vehicles per year

Suspension mechanism



Examples of forged suspension products

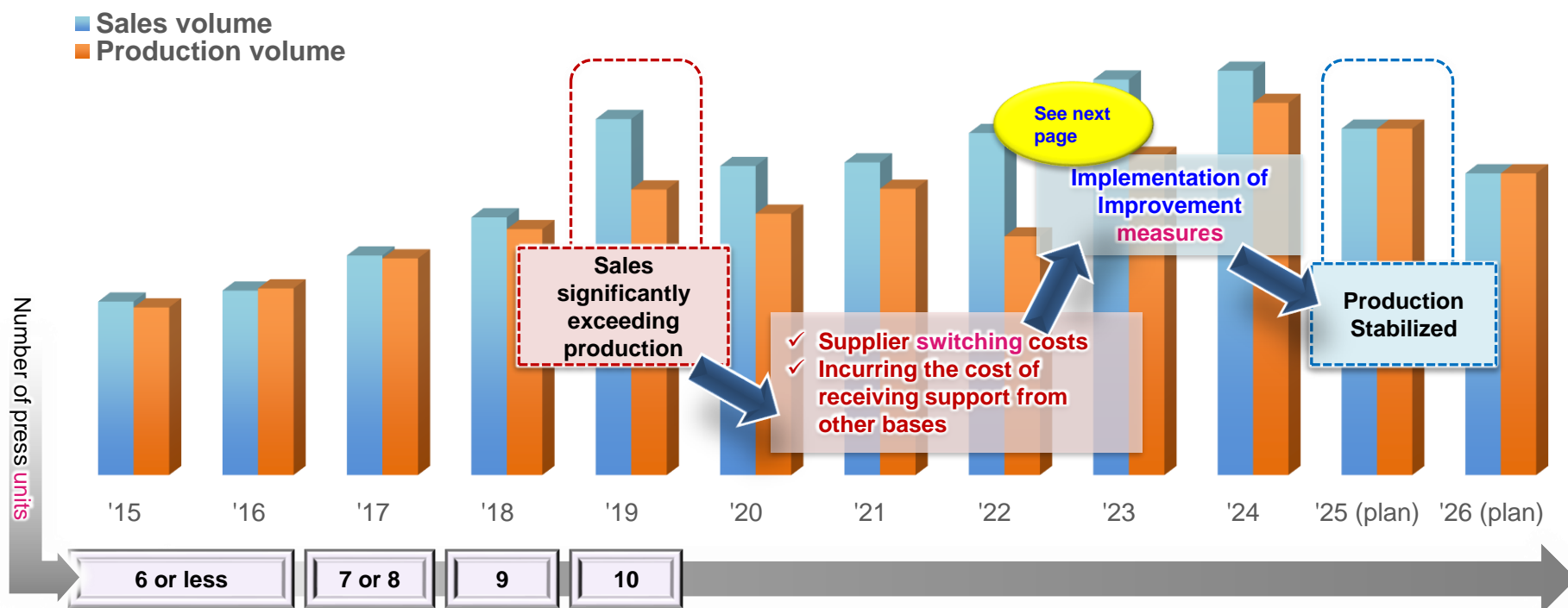




## Aluminum Suspensions Business (2)

- KAAP has been in the red since fiscal 2017. While demand was strong, the urgent issue was to restore profitability by improving productivity. Production then stabilized in 2024, and **profitability is now within reach**.

- Since commencing operations in 2005, the scale of the business has grown in line with the progress of automotive weight reduction in the North American market (10 press machines).
- While **order volume increased as planned**, productivity deteriorated due to production problems, such as increased equipment and operational troubles, as well as human resources problems, such as difficulties in recruiting and retaining employees due to immigration policies and the COVID-19 pandemic and difficulties in establishing a Japanese-style management system.
- Profitability had deteriorated because production could not keep up with the increase in orders, and **the cost of responding to increased orders**. Currently, **profitability is improving due to the stabilization of production**.



# Aluminum Suspensions Business (3)

- KAAP's profit improvement measures are progressing as planned.

## [1] Productivity improvement

- Strengthening of floor management by Japanese supporters (systematization, role planning, and standardization)
- Retaining employees through turnover prevention measures, including improving wage systems, work environment (protecting from heat), etc.
- Promoting automation for the future

➔ **Since February 2024, production has been stable.**

## [2] Price and product mix improvement

- Price improvement has been achieved as planned, along with cost pass-through and margin improvement.
- Aim for a product mix that focuses on medium to large products, capitalizing on KAAP's existing competitive edge.

➔ **Progress in achieving optimal product mix by increasing the ratio of orders for highly profitable products from specific customers.**

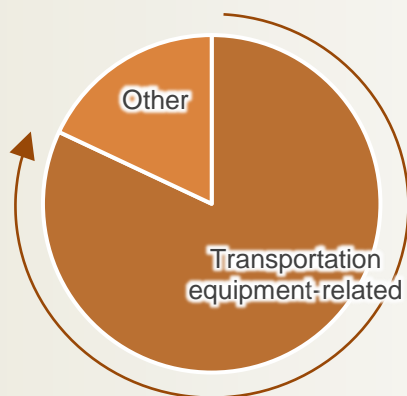
**Aims to make KAAP profitable in fiscal 2025 and further improve profitability while balancing production and order volumes.**

# Aluminum Extrusions Business (1)

- With production facilities in Japan and the United States, we supply unique extrusions mainly to the transportation equipment-related industries, namely automobiles and railway vehicles.

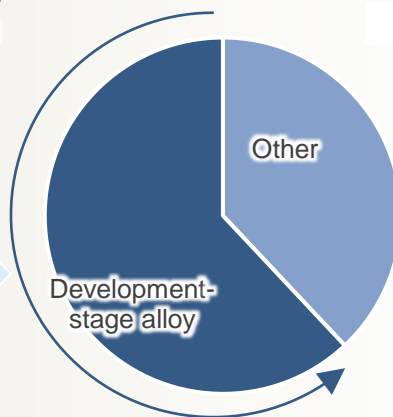
	Manufacturing base	Equipment
Japan	Chofu Works (Yamaguchi Prefecture)	8 press machines
U.S.	Kobelco Aluminum Products & Extrusions, Inc. ( <b>KPEX</b> )	2 press machines

Sales destination ratio



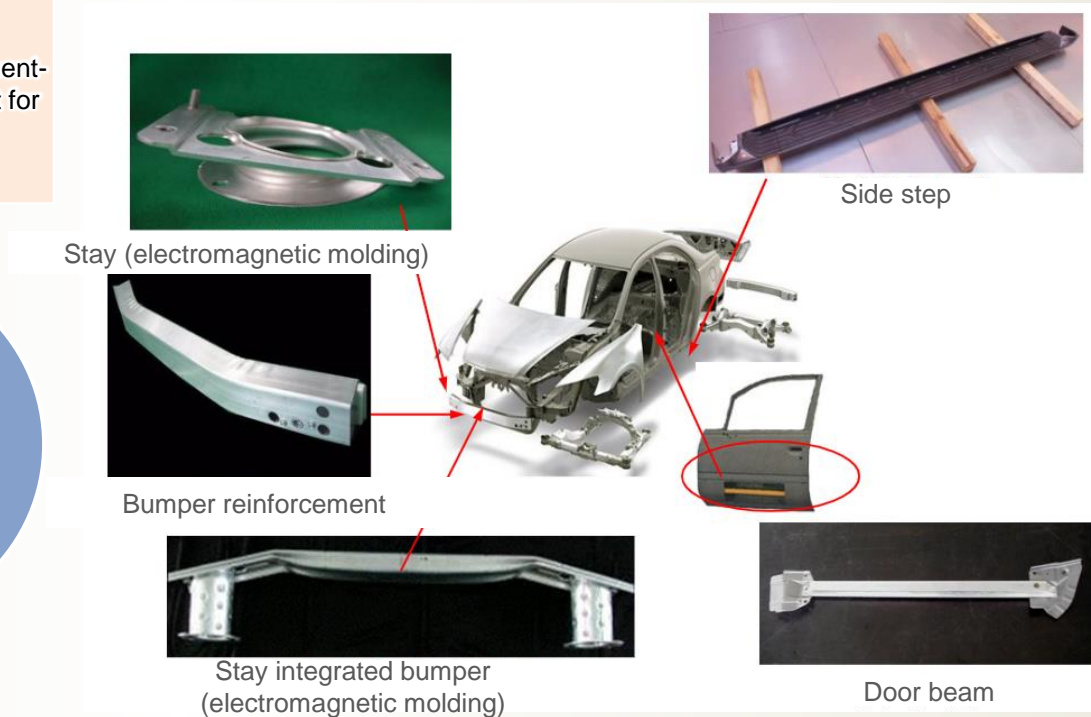
The transportation equipment-related industries account for 80% of the total.

High percentage of orders for development-stage materials



Product Mix (Chofu)

Examples of extruded aluminum parts and products



## Aluminum Extrusions Business (2)

- KPEX has been in the red since its establishment. The company aims to return to profitability in fiscal 2025, but earnings are expected to remain sluggish, and **further improvement in profitability is expected to take time**. (Demand for new parts is expected to increase in 2027 and beyond due to the shift to EVs and lighter vehicles.)

### Status since establishment (until 2026)

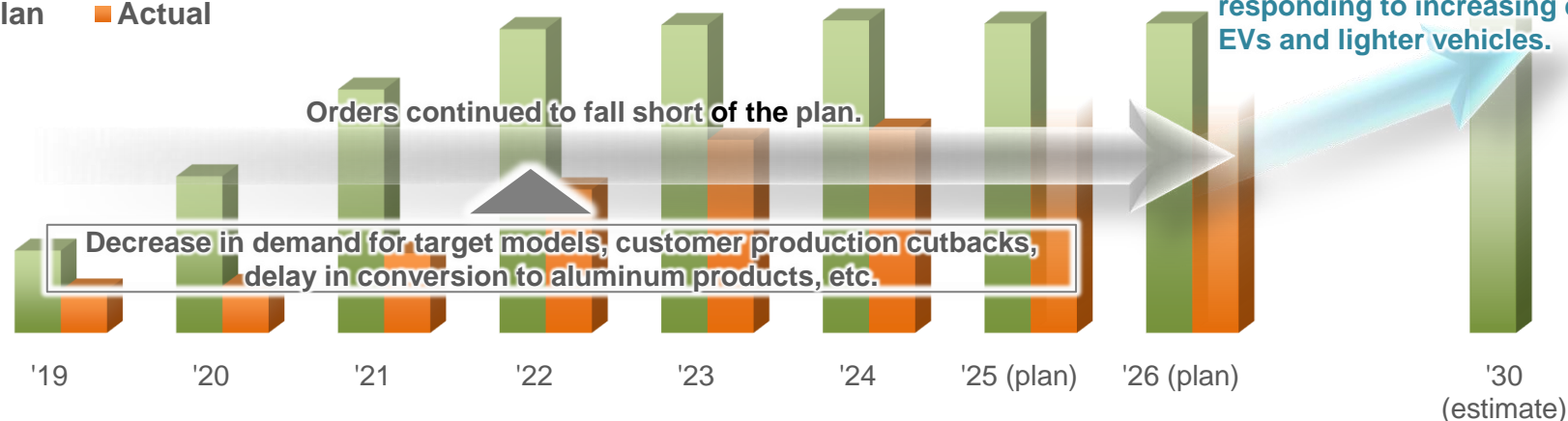
- With an eye on the growing demand for lightweight automotive products, the company entered the North American market, focusing on Japanese OEMs in the upstream processes. **Main products were high-strength 7000 series aluminum alloy extrusions**. (This decision was made in 2016 and the investment decision to increase production in 2018).
- After the decision was made, **orders became sluggish** due to declining demand (sales slump at customers, production cutbacks, and development project cancellations).
- As an immediate measure, the company is working on to return to profitability by **reducing production to match order volume**, improving prices, and reducing costs.

### Future (2027 and beyond)

- The company is working to **obtain orders for large EV-related items**, which are projected to see increased demand.

### Sales volume in the initial plan and actual results

■ Plan ■ Actual


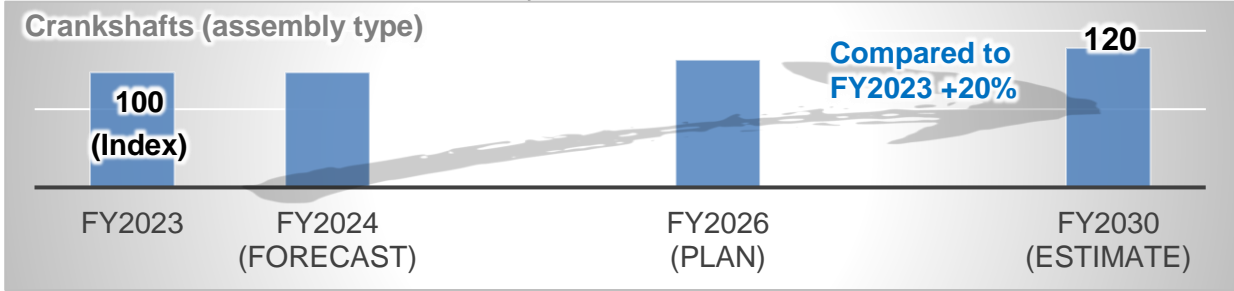

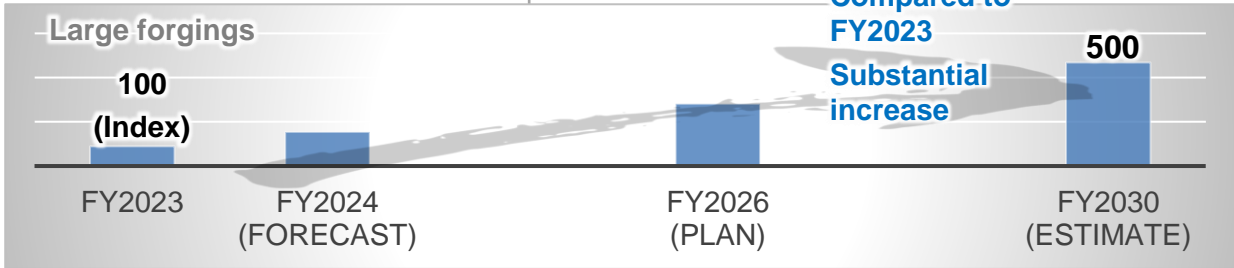




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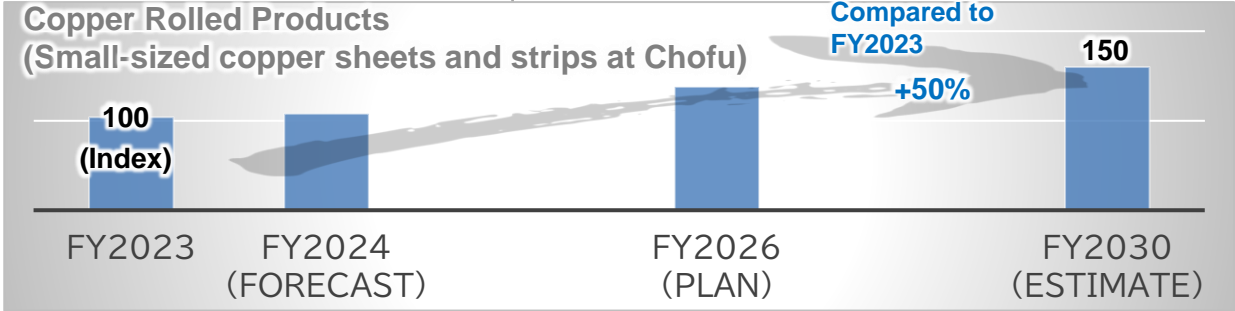
# Steel Casting and Forging Business and Titanium Business

- With strong medium- to long-term demand, both businesses lead the division's earnings.

	Opportunities and strengths	Strategy										
<div>Steel Casting and Forging business</div> 	<ul style="list-style-type: none"><li>• Solid demand driven by <b>environmental regulations</b></li><li>• <b>Integrated production</b> from steelmaking to final products</li><li>• <b>Our distinctive technologies</b> (high fatigue-strength steel, automatic ultrasonic flaw detector, etc.)</li></ul>	<ul style="list-style-type: none"><li>• Differentiate through our proprietary technologies that meet the customer needs.</li><li>• Maintain and expand market share and improve prices.</li><li>• Promote investment in automation of production facilities (multi-tasking machines, remote control).</li></ul>										
	<div>Sales plan (Quantity)</div> <div>Crankshafts (assembly type)</div>  <table><tr><th>Year</th><th>Index</th></tr><tr><td>FY2023</td><td>100</td></tr><tr><td>FY2024 (FORECAST)</td><td></td></tr><tr><td>FY2026 (PLAN)</td><td></td></tr><tr><td>FY2030 (ESTIMATE)</td><td>120</td></tr></table> <p>Compared to FY2023 +20%</p>	Year	Index	FY2023	100	FY2024 (FORECAST)		FY2026 (PLAN)		FY2030 (ESTIMATE)	120	
Year	Index											
FY2023	100											
FY2024 (FORECAST)												
FY2026 (PLAN)												
FY2030 (ESTIMATE)	120											
<div>Titanium business</div> 	<ul style="list-style-type: none"><li>• <b>Growth in demand for aircraft and defense components</b></li><li>• <b>Growing demand</b> driven by carbon neutrality trend</li><li>• <b>Equipment (world-leading 50,000 ton press*)</b> and design <b>technology</b> for large aircraft forgings</li></ul> <p>* Owned by Japan Aeroforge (our equity method affiliate)</p>	<ul style="list-style-type: none"><li>• Securely capture growing demand for aircraft and defense components.</li><li>• Respond to increased demand driven by <b>the carbon neutrality trend</b> and other societal needs (e.g., developing applications for titanium products used in hydrogen fuel cells).</li></ul>										
	<div>Sales plan (Quantity)</div> <div>Large forgings</div>  <table><tr><th>Year</th><th>Index</th></tr><tr><td>FY2023</td><td>100</td></tr><tr><td>FY2024 (FORECAST)</td><td></td></tr><tr><td>FY2026 (PLAN)</td><td></td></tr><tr><td>FY2030 (ESTIMATE)</td><td>500</td></tr></table> <p>Compared to FY2023 Substantial increase</p>	Year	Index	FY2023	100	FY2024 (FORECAST)		FY2026 (PLAN)		FY2030 (ESTIMATE)	500	
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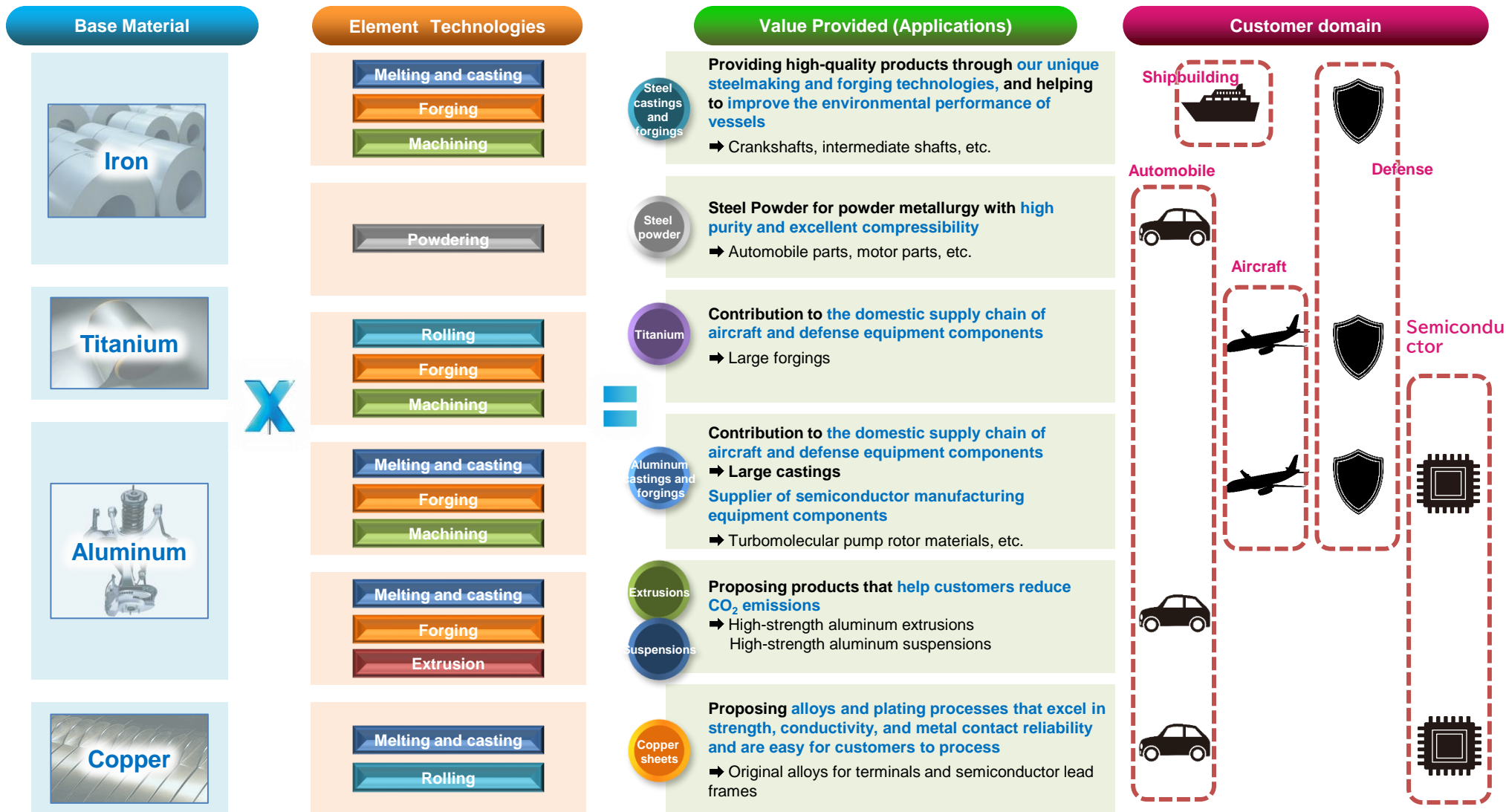
# Copper Rolled Products Business

- Aim to expand earnings by increasing capacity to meet market growth (automotive electrification and semiconductors)

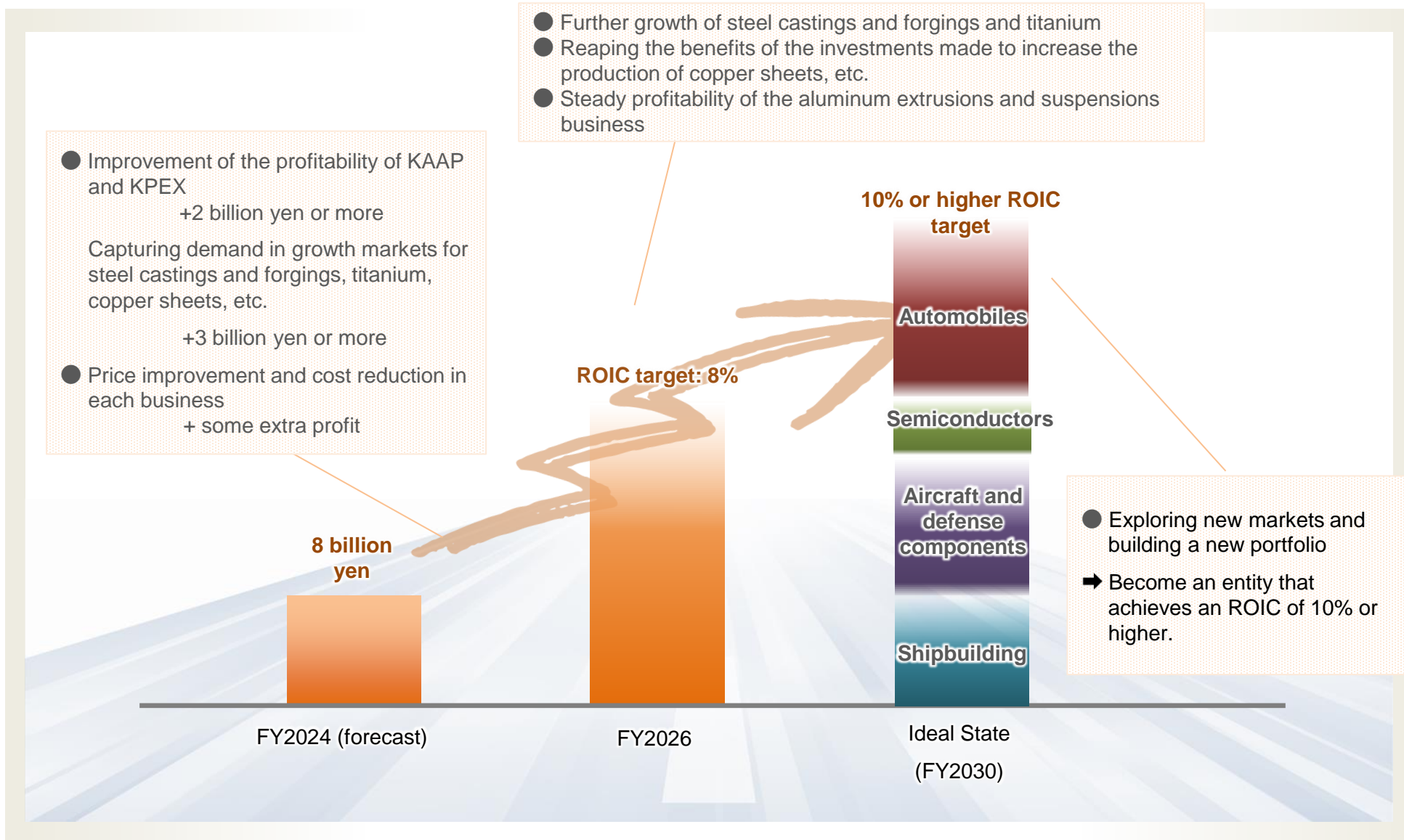
	Opportunities and strengths	Strategy															
<div><div>Copper Rolled Products business</div></div>	<ul style="list-style-type: none"><li>• Strong demand environment <b>driven by vehicle electrification and other factors.</b></li><li>• <b>Original alloys</b> with superior strength, conductivity, and workability for customers, and <b>surface treatment (plating) technology</b> with superior contact reliability.</li><li>• <b>Achieving a large market share among industry-leading manufacturers.</b></li></ul>	<ul style="list-style-type: none"><li>• <b>Implement measures to increase supply capacity to meet demand to the maximum extent and maintain/expand the current market share.</b></li><li>• <b>Establish and enhance manufacturing capabilities for stable supply.</b></li><li>• <b>Maintain and improve profitability through price improvement and cost reduction.</b></li></ul>															
<div>Sales plan (Quantity)</div>	<div><div>Copper Rolled Products (Small-sized copper sheets and strips at Chofu)</div><table><thead><tr><th>Fiscal Year</th><th>Quantity (Index)</th><th>Status</th></tr></thead><tbody><tr><td>FY2023</td><td>100</td><td>Historical</td></tr><tr><td>FY2024</td><td>(Forecast)</td><td>Forecast</td></tr><tr><td>FY2026</td><td>(Plan)</td><td>Plan</td></tr><tr><td>FY2030</td><td>150</td><td>Estimate</td></tr></tbody></table></div>		Fiscal Year	Quantity (Index)	Status	FY2023	100	Historical	FY2024	(Forecast)	Forecast	FY2026	(Plan)	Plan	FY2030	150	Estimate
Fiscal Year	Quantity (Index)	Status															
FY2023	100	Historical															
FY2024	(Forecast)	Forecast															
FY2026	(Plan)	Plan															
FY2030	150	Estimate															

# Value Provided by the Advanced Materials Business (Restated)

- We propose and deliver value tailored to customer needs by combining base materials and element technologies.
- We conduct marketing through collaboration among units that share the same customer domain (market).



# Path to the Ideal State (Advanced Material Business's Ordinary Profit)



# Group Corporate Philosophy

## KOBELCO's View of the Future

Our view of a society and future to be attained as we carry out KOBELCO's mission

**We envision a world in which people, now and in the future, can fulfill their hopes and dreams while enjoying safe, secure, and prosperous lives.**

## KOBELCO's Mission

Our mission and the social significance of the KOBELCO Group that we must fulfill

**Our mission is to provide solutions to the needs of society, by making the best use of the talents of our employees and our technologies.**

## Core Values of KOBELCO

The commitments of the KOBELCO Group to society and the values shared by the entire KOBELCO Group

- 1. We provide technologies, products and services that win the trust and confidence of our customers we serve and the society in which we live.**
- 2. We value, and support the growth of, each employee on an individual basis, while creating a cooperative and harmonious environment.**
- 3. Through continuous and innovative changes, we create new values for the society of which we are a member.**

## Six Pledges of KOBELCO

Code of Conduct for all Group employees to follow to fulfill the Core Values of KOBELCO and the Quality Charter

- 1. Uphold the Highest Sense of Ethics and Professionalism**
- 2. Contribute to the Society by Providing Superior Products and Services** **Quality Charter**
- 3. Establish a Comfortable but Challenging Work Environment**
- 4. Live in Harmony with the Local Community**
- 5. Contribute to a Sustainable Environment**
- 6. Respect Each Stakeholder**



# Cautionary Statement

- Certain statements in this presentation contain forward-looking statements concerning forecasts, assertions, prospects, intentions and strategies. The decisions and assumptions leading to these statements are based on information currently available to Kobe Steel. Due to possible changes in decisions and assumptions, future business operation, and internal and external conditions, actual results may differ materially from the projected forward-looking statements. Kobe Steel is not obligated to revise the forward-looking contents of this presentation.
- Uncertain and variable factors include, but are not limited to:
  - Changes in economic outlook, demand and market conditions
  - Political situations and trade and other regulations
  - Changes in currency exchange rates
  - Availability and market conditions of raw materials
  - Products and services of competitors, pricing policies, alliances, and business developments including M&As
  - Strategy changes of alliance partners

**KOBELCO**