

Progress and Outlook of the Medium-term Management Strategy FY2031

May 21, 2024

Director, Chief Executive Officer
Naoki Ono

Management Policy for FY ending March 2025

- We have established management policy for FY ending March 2025, the second year of the Medium-term Management Strategy FY2031. In order to fulfill “Our Commitment” of “For people, society and the earth, circulating resources for a sustainable future,” we will build a recycling system for metal resources based on our strengths and realize growth throughout the value chain by expanding the scope, regions and scale of our operations.

Strengthening Response to SCQ * Issues

- Prevention of industrial accidents
- Strict adherence to compliance
- Strengthening information security
- Company-wide critical risk management activities

Achievement of FY 2031 Strategy Goals

- Implementation of PDCA for the FY2031 Strategy
- Improving profitability
- Responding to labor shortage

Optimization of Management Structure

- Deepening matrix management of business and functional axes
- Establishment of regional axes (A new company in Europe)
- Optimization of business structure

Responding to Sustainability Issues

- Promoting resource recycling
- Strengthening response to global environmental issues
- Strengthening human capital

Sustainability Issues

- | | |
|---|-------------------------------------|
| • Promotion of resource circulation | • Deepening of DX |
| • Response to global environmental issues | • Pursuit of value creation |
| • Enhance human capital management | • Geopolitical and geoeconomic risk |
| • Activate communication | • Financial risk |
| • Strengthen information security | |
| • Strengthening response to SCQ * issues | |
| • Strengthening sustainable SCM | |

*SCQ: the order of priority of our business decisions.
Safety & Health, Compliance, Quality

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 - 3) Renewable Energy business**

1. Progress of the Medium-term Management Strategy FY2031

Medium-term Management Strategy FY2031 (the FY2031 Strategy)

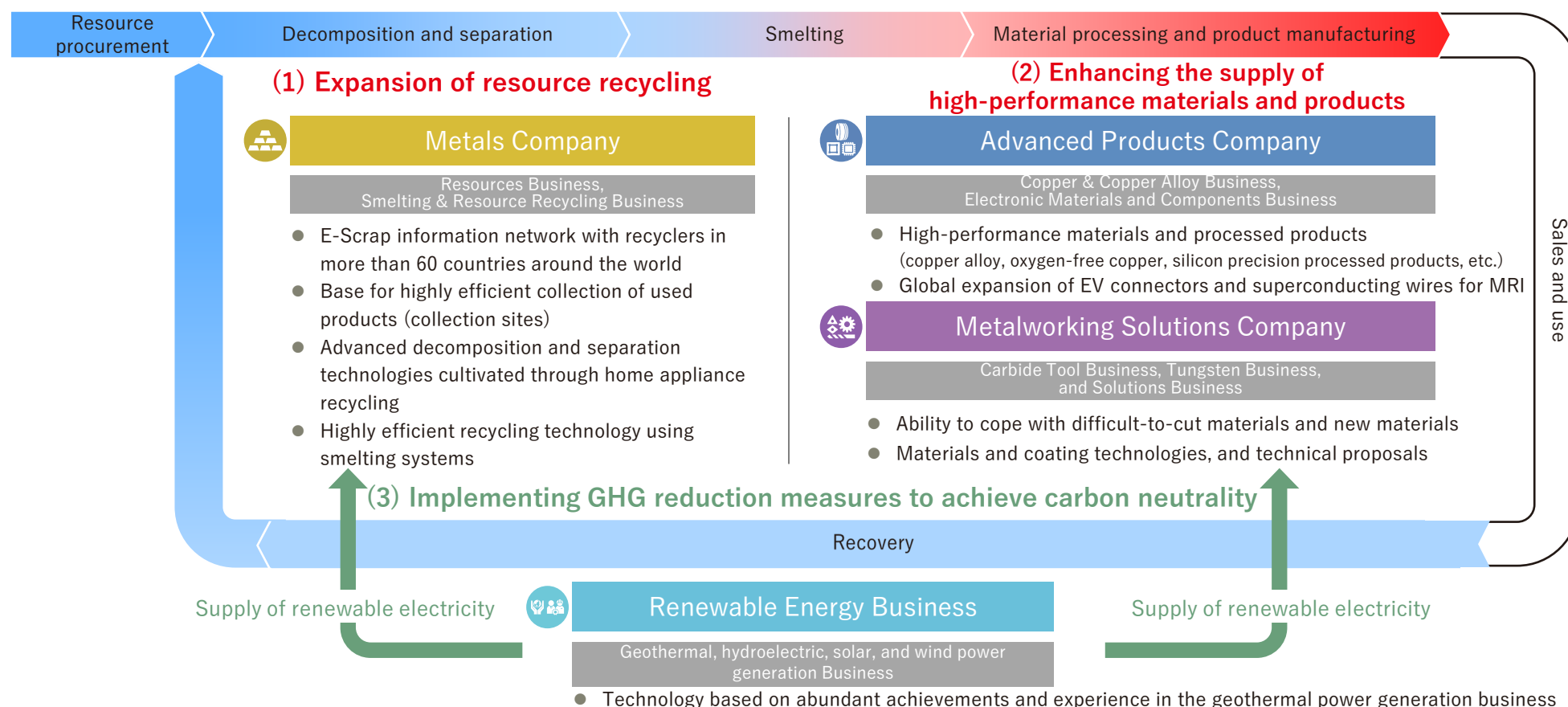
For people, society and the earth, circulating resources for a sustainable future

Prosperous
society

Recycling-
oriented society

Decarbonized
society

Build a recycling system of metal resources based on our strengths and realize growth throughout the value chain by expanding the scope, regions, and scale of our operations



*The Environmental & Recycling business was integrated into Metals Company in April 2023, and the Renewable Energy business was reorganized under the Strategic Headquarters.

Trends in the External Environment

Copper	Demand	<ul style="list-style-type: none"> Growth is slowing due to a generally sluggish global economy and delayed economic recovery in China; however, in the medium- to long-term, demand for copper will remain strong due to demand for EVs and renewable energy, as well as demand for data centers as the digitalization society progresses.
	Copper Price	<ul style="list-style-type: none"> Although copper price was 379¢/lb in FY ended March 2024 (full year), lower than the previous fiscal year (388¢/lb), it has been on an upward trend since April 2024 and is currently above 450¢/lb. Steady movement is expected due to anticipated long-term growth in demand.
	TC/RC	<ul style="list-style-type: none"> Supply concerns have led to strong buying by Chinese smelting operations and traders, and spot TC/RCs are extremely low; as smelting capabilities continue to grow in Indonesia and India, there are concerns that TC/RCs will remain low.
Automobile Industry		<ul style="list-style-type: none"> There was a general trend toward recovery up through Q3 of FY ended March 2024, but the recovery trend slowed down in the 4th quarter. A moderate recovery is projected in FY ending March 2025. Demand for our copper alloy products and cemented carbide tools is also expected to recover in FY ending March 2025.
Semiconductor Industry		<ul style="list-style-type: none"> As Semiconductor-related demand continued to be at a bottom phase in FY ended March 2024, it appears to have bottomed out in the fourth quarter. Demand for semiconductor manufacturing equipment and materials is expected to recover in FY ending March 2025, particularly for AI-related technologies and automotive applications. Stronger recovery of demand for semiconductor-related materials is projected for the latter half of the fiscal year.

Review of FY Ended March 2024, Forecast for FY Ending March 2025

- Operating profit in FY ended March 2024 fell short of our initial plan, due to the effects of weakening automobile and semiconductor markets. In contrast, we made efforts to enhance cost competitiveness, such as by implementing cost reduction measures in each of our businesses, ahead of schedule in the FY2031 Strategy.
- Recovered demand is projected for automobile products beginning in Q1 of FY ending March 2025, and for semiconductor-related products beginning in the latter half of the fiscal year.
- We can achieve our strategy targets by implementing the various measures provided in the FY2031 Strategy and enhancing our cost competitiveness.

		FY Ended March 2023 Result	FY Ended March 2024 Initial Forecast	FY Ended March 2024 Result	FY Ending March 2025 Forecast	FY Ending March 2026 Plan	FY Ending March 2031 Target
Net sales (Net sales excluding metal charges)	Billions of yen	1,625.9 (608.0)	1,670.0 (706.0)	1,540.6 (548.1)	1,950.0 (652.0)	1,940.0 (690.0)	2,000.0 (850.0)
Operating profit	Billions of yen	50.0	50.0	23.2	41.0	70.0	130.0
Ordinary profit	Billions of yen	25.3	58.0	54.1	63.0	87.0	180.0
ROIC	%	1.4%	4.1%	3.8%	4.3%	5.5%	9.0%
ROE	%	3.5%	6.8%	4.8%	6.7%	10.0%	13.6%
EBITDA	Billions of yen	75.7	113.0	105.0	117.4	150.0	260.0
Net D/E ratio	Times	0.7	0.7	0.7	0.7	0.7	0.5 or less
Net interest-bearing debt / EBITDA ratio	Times	5.2	4.1	4.5	4.3	3.5	2.0 or less
Dividend per annum	Yen	50	94	94	100		

1. Progress of the FY2031 Strategy

Metals Company

- **Resources business:** Dividends from Los Pelambres Copper Mine increased in FY ended March 2024. Dividends are expected to be lower in FY ending March 2025, however, Copper Mountain Copper Mine and Mantoverde Copper Mine are expected to become profitable.
- **Smelting & Resource Recycling business:** In FY ended March 2024, profitability deteriorated due to a decline in palladium prices and one-time factors such as trouble in Onahama Smelter & Refinery and reduction of raw material arrivals. One-time factors are expected to be resolved in FY ending March 2025.

(billions of yen)		FY Ended March 2023 Result	FY Ended March 2024 Result	FY Ending March 2025 Forecast	FY2031 Strategy Plan	FY2031 Strategy Measures	Progress	Direction for achieving the FY2031 Strategy Plan
Resources Business WACC:9.7%	Ordinary profit	2.4	20.1	17.9	11.4	<ul style="list-style-type: none"> Promotion of technological development to recover rare metal resources contained in copper deposits Acquisition of copper mining interests and securing copper concentrates through continuous investment in mines Expansion of electrolytic copper supply through SX-EW operations at copper mines 	<ul style="list-style-type: none"> Mining investment is proceeding as anticipated. Full-scale copper concentrate production planned at Mantoverde copper mine in the latter half of 2024. 	<ul style="list-style-type: none"> Expansion of operations at Los Pelambres Copper Mine is also going well, and dividends are as planned In FY ending March 2026, the ROIC is temporarily expected to decrease, and EP will be negative due to the execution of investment in mines.
	EBITDA	2.5	19.0	16.6	11.1			
	ROIC	1.1%	11.7%	10.5%	9.0%			
	ROIC spread	-8.6pt	+2.0pt	+0.8pt	-0.7pt			
	EP		2.1	0.9				
Smelting & Resource Recycling Business WACC:5.4%	Ordinary profit	25.9	11.6	19.0	27.0	<ul style="list-style-type: none"> Strengthening and expanding the networks to promote resource recycling Expansion of electrolytic copper production capacity Increasing the recycling rate by expanding the treatment of recycled products containing metal resources Creation of rare earths and rare metals recycling businesses Accelerating business developments in Japan and overseas (E-Scrap, home appliances, automobile recycling) 	<ul style="list-style-type: none"> Construction has begun on a pilot plant for LIB recycling. We will consider adjustments to investment allocation with respect to strengthening E-scrap capacity. 	<ul style="list-style-type: none"> Increased profit due to review of metal prices and reduction of hedging costs in response to increased electricity costs ROIC is improving due to increased profit Regarding E-Scrap, we will strengthen the collection system in Europe based on the forecast of supply and demand
	EBITDA	42.6	28.8	33.4	39.6			
	ROIC	8.3%	2.9%	5.7%	7.1%			
	ROIC spread	+2.9pt	-2.5pt	+0.3pt	+1,7pt			
	EP		-7.4	1.0				

*EBITDA= Ordinary profit + Interest expense + Depreciation + Goodwill depreciation

Advanced Products Company

- **Copper & Copper Alloy business:** Demand for automobiles declined in FY ending March 2024. Ordinary profit is expected to improve in FY ending March 2025 driven by recovery of demand for automobiles, revision of roll margins and cost reductions.
- **Electronic Materials & Components business:** Demand for semiconductor products decreased in FY ended March 2024. The semiconductor market remains weak, and a full-scale recovery in demand is expected in the second half of FY ending March 2025.

(billions of yen)		FY Ended March 2023 Result	FY Ended March 2024 Result	FY Ending March 2025 Forecast	FY2031 Strategy Plan	FY2031 Strategy Measures	Progress	Direction for achieving the FY2031 Strategy Plan
Copper & Copper Alloy Business WACC:2.7%	Ordinary profit	-0.0	-0.5	7.3	12.4	<ul style="list-style-type: none"> Improve the recycling rate of wrought copper products and establish a scrap platform base Overseas (Luvata): Rapid entry into growing markets (xEV, healthcare, environment) Expand sales and strengthen services to overseas customers by establishing a new overseas plant which carries out a downstream process, with the domestic plants as mother ones 	<ul style="list-style-type: none"> Investment to strengthen production capacity for copper sheets and copper strips is proceeding as anticipated, and substantial operations to begin in the latter half of FY ending March 2025 	<ul style="list-style-type: none"> Lowering the break-even point by improving yield and productivity Reducing raw material costs by improving recycling rates Promoting sales expansion to domestic key accounts and expanding into overseas sales channels Accelerating sales shift to high-profit products
	EBITDA	9.3	10.6	20.5	24.6			
	ROIC	0.6%	0.6%	3.2%	4.0%			
	ROIC spread	-2.1pt	-2.1pt	+0.5pt	+1.3pt			
	EP		-4.5	1.1				
Electronic Materials & Components Business WACC:7.4%	Ordinary profit	7.7	2.8	3.8	8.6	<ul style="list-style-type: none"> Highly capital-efficient management through continual restructuring of the business portfolio Strategic investment in focal products in growth areas Developing and securing human resources for the creation of new businesses and the promotion of business alliances Enhancing manufacturing capabilities and DX to enhance production sophistication and profitability Providing business and social value (SDGs) for carbon neutrality 	<ul style="list-style-type: none"> The business environment for precision silicon products is worsening. We will reevaluate investments in increased production and shift toward other growth areas. 	<ul style="list-style-type: none"> Semiconductor market, effects of increased production due to recovery in demand and growth of automobiles (mainly electric vehicles), additional sales expansion measures (Silicon processed products, device products) Improvement of ROIC by implementing a growth investment plan based on semiconductor market conditions
	EBITDA	11.5	6.9	8.7	16.0			
	ROIC	8.7%	3.3%	3.8%	7.8%			
	ROIC spread	+1.3pt	-4.1pt	-3.6pt	+0.4pt			
	EP		-2.7	-2.7				

*EBITDA= Ordinary profit + Interest expense + Depreciation + Goodwill depreciation

Metalworking Solutions Company

- Metalworking Solutions business: In FY ended March 2024, demand for cemented carbide products for Japan and Asia declined. In FY ending March 2025, we expect recovery in demand for automobiles.

(billions of yen)		FY Ended March 2023 Result	FY Ended March 2024 Result	FY Ending March 2025 Forecast	FY2031 Strategy Plan	FY2031 Strategy Measures	Progress	Direction for achieving the FY2031 Strategy Plan
Metalworking Solutions Business WACC:6.5%	Ordinary profit	14.5	12.2	14.0	25.0	<u>Carbide tools business</u> <ul style="list-style-type: none"> Stable supply of the world's top quality, high-efficiency products utilizing the strength of materials and coating technology <u>Tungsten business</u> <ul style="list-style-type: none"> Expansion of business scale for rechargeable batteries in addition to carbide tools, etc. Strengthening environmental responsiveness <u>Solution business</u> <ul style="list-style-type: none"> Commercialization of solution sales to manufacturing sites 	<ul style="list-style-type: none"> Creation of high added-value products in various fields including automobile, aerospace, and medical are as planned. 	<ul style="list-style-type: none"> Enhancement of tungsten business (Recycling, production and sales of high-performance powders and alloys) through acquisition of H.C. Starck, Germany Improvement of sales efficiency and productivity using DX Improvement of capital efficiency by reducing inventories
	EBITDA	27.4	24.5	28.8	39.9			
	ROIC	6.9%	5.2%	5.3%	8.6%			
	ROIC spread	+0.4pt	-1.3pt	-1.2pt	+2.1pt			
	EP		-2.1	-2.0				

*EBITDA= Ordinary profit + Interest expense + Depreciation + Goodwill depreciation

Renewable Energy Business

- **Renewable Energy business:** In FY ended March 2024, operations of hydroelectric, geothermal and solar power plants were stable. Earnings are expected to increase in FY ending March 2025 driven by the start of the operation of Appi Geothermal Power Plant.

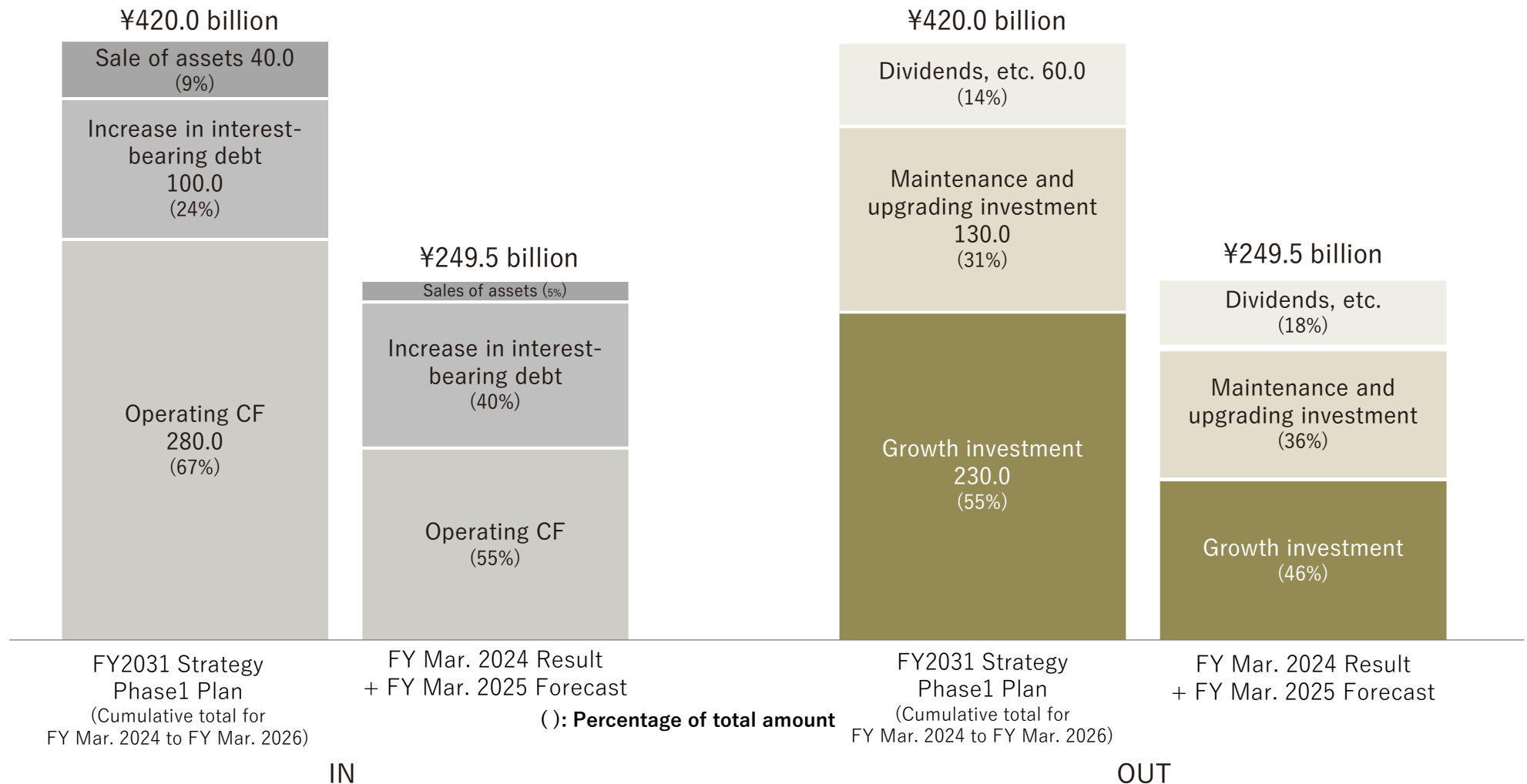
(billions of yen)		FY Ended March 2023 Result	FY Ended March 2024 Result	FY Ending March 2025 Forecast	FY2031 Strategy Plan	FY2031 Strategy Measures	Progress	Direction for achieving the FY2031 Strategy Plan
Renewable Energy Business WACC:1.6%	Ordinary profit	0.9	0.8	2.4	2.3	<ul style="list-style-type: none"> • New development at one location every three years to expand business • New entrants into wind power generation where power generation costs are expected to decline in the future • Further development of new biogas plants 	<ul style="list-style-type: none"> • Appi Geothermal Power Plant started operation in March 2024 (1 month ahead of schedule) 	<ul style="list-style-type: none"> • Profit contribution from stable operation of Appi Geothermal Power Plant • Promotion of geothermal and wind power generation projects under investigation and consideration • Search for new potential geothermal power generation sites • Study of wind power generation using our own company-owned forests
	EBITDA	1.9	2.2	5.1	4.6			
	ROIC	3.8%	3.4%	4.7%	3.7%			
	ROIC spread	+2.2pt	+1,8pt	+3.1pt	+2.1pt			
	EP		0.5	1.3				

*EBITDA= Ordinary profit + Interest expense + Depreciation + Goodwill depreciation

Capital Allocation

- **Cash inflow:** Operating CF for FY ended March 2024, the first year of Phase1, was lower than expected. As for FY ended March 2024 results and FY ending March 2025 forecasts, the D/E ratio to the FY2031 Strategy Phase1 plan has increased.
- **Cash outflow:** We will execute required growth investment.
- **While the market is currently recovering, we are aiming to realize the cash allocation envisaged in Phase1.**
Even if the operating CF does not reach the target level, we will realize an appropriate cash allocation while securing the growth investment necessary to realize the strategy.

■ Comparison of FY March ended 2024 result and FY ending March 2025 forecast to the FY2031 Strategy Phase1 plan (Progress rate: 59.4%)



Strengthening Cost Competitiveness

- The FY2031 Strategy plans to implement aggregate cost cuts of about ¥9.0 billion by FY ending March 2026 and about ¥24.0 billion by FY ending March 2031.
- Regarding cost reduction in each business in FY ended March 2024, additional cost reduction measures progressed in Metals business and Metalworking Solutions business, and moved largely as planned in Advanced Products business. In FY ending March 2025, we will also promote cost reduction measures in each segment.

(Billions of yen)

Cost Reduction Plan		FY Ended March 2024		FY Ending March 2025		FY Ending March 2026
		FY2031 Strategy Plan	Result	FY2031 Strategy Plan	Forecast	FY2031 Strategy Plan
Metals	• Reduction of hedging costs, slag costs, and energy costs	0.0	4.7	0.01	11.1	2.6
Advanced Products	Copper & Copper Alloy • Yield rate improvement, fixed cost reduction (labor, outsourcing, etc.) Electronic Materials & Components • Fixed cost reduction (labor, etc.), productivity improvement	1.7	1.6	2.4	3.1	3.2
Metalworking Solutions	• Reduction of manufacturing costs • Cost reduction at subsidiaries	0.9	2.1	1.9	3.6	3.0
Renewable Energy	• Reduction of operating expenses of power plants • Improvement of operational efficiency through automatic operation of power plants, etc.	0.0	0.0	0.02	0.03	0.02
Total Business		2.6	8.4	4.4	17.8	8.8

2. Status of Major Measures in the Medium-term Management Strategy FY2031

Overview of the FY2031 Strategy for Each Business Segment

*Explanation of initiatives related to business-specific strategies in blue

1) Expansion of resource recycling

2) Enhancing the supply of high-performance materials and products

Metals Company	Resources Business	<ul style="list-style-type: none">● Promotion of technological development to recover rare metal resources contained in copper deposits● Acquisition of copper mining interests and securing copper concentrates through continuous investment in mines● Expansion of electrolytic copper supply through SX-EW operations at copper mines
	Smelting & Resource Recycling Business	<ul style="list-style-type: none">● Strengthening and expanding the networks to promote resource recycling● Expansion of electrolytic copper production capacity● Increasing the recycling rate by expanding the treatment of recycled products containing metal resources● Creation of rare earths and rare metals recycling businesses● Accelerating business developments in Japan and overseas (E-Scrap, home appliances, automobile recycling)
Advanced Products Company	Copper & Copper Alloy Business	<ul style="list-style-type: none">● Improve the recycling rate of wrought copper products and establish a scrap platform base
	Electronic Materials& Components Business	
Metalworking Solutions Company	<u>Tungsten Business</u> <ul style="list-style-type: none">● Expansion of business scale for rechargeable batteries in addition to carbide tools, etc.● Strengthening environmental responsiveness	
	<u>Cemented Carbide Tools Business</u> <ul style="list-style-type: none">● Stable supply of the world’s top quality, high-efficiency products utilizing the strength of materials and coating technology <u>Solutions Business</u> <ul style="list-style-type: none">● Commercialization of solution sales to manufacturing sites	

performance materials and products

*Considering the recent deterioration in TC/RC, sulfuric acid prices, etc., we are currently reviewing a change in the direction of our strategy.

- Overseas (Luvata): Rapid entry into growing markets (xEV, healthcare, environment)
- Expand sales and strengthen services to overseas customers by establishing a new overseas plant which carries out a downstream process, with the domestic plants as mother ones

- Highly capital-efficient management through continual restructuring of the business portfolio
- Strategic investment in focal products in growth areas
- Developing and securing human resources for the creation of new businesses and the promotion of business alliances
- Enhancing manufacturing capabilities and DX to enhance production sophistication and profitability
- Providing business and social value (SDGs) for carbon neutrality

3) Supply of renewable electricity

Renewable Energy Business	<ul style="list-style-type: none"> New development at one location every three years to expand business New entrants into wind power generation where power generation costs are expected to decline in the future Further development of new biogas plants
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1) Expansion of resource recycling

Expansion of Resource Recycling

- In terms of resource recycling, we will expand the scope, regions and scale of our operations based on trends and laws and regulations in each country and region.

Expanding the Scope of Resource Recycling

- **E-Scrap recycling** (Improving processing capacity) **P18**
- **LIB recycling** (Pilot plant design in progress) **P19**
- **In-process recycling of the Copper & Copper Alloy business** (Cost reduction, copper smelter load reduction → Increasing E-Scrap)
- **Cobalt recovery at a copper mine** (Pilot plant testing underway at Mantoverde Copper Mine) **P20**
- **Tungsten Recycling** (Cutting tool raw materials, aiming to become global top through acquisition of H.C. Starck) **P22**
- **Construction of resource recycling loop**
 - Home appliances: Scaling up in Japan and overseas
 - Automobile recycling: Scaling up targeting EV vehicles
 - Creating a recycling system to extract important mineral resources from various products and supply them as raw materials for products

Expanding Business Regions

Economic bloc, enclosure of important mineral resources

Japan: Economic security

USA: IRA law

EU: Various regulations



Toward intraregional circulation

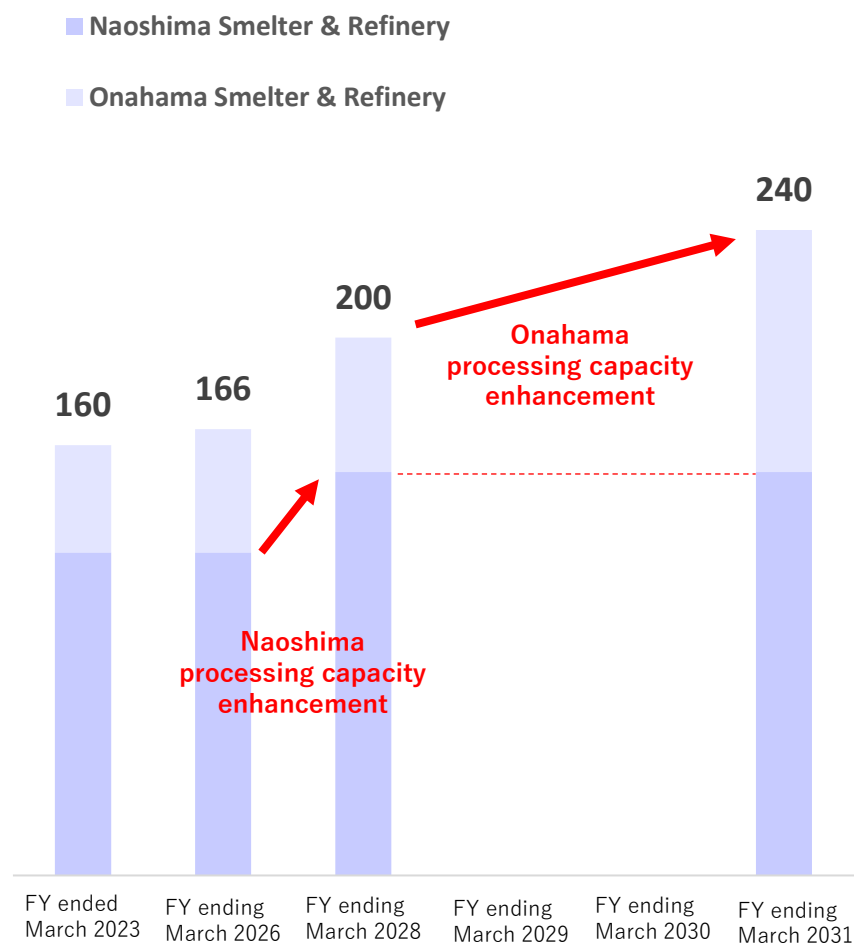
- **Establishment of a new company in Europe**
 - Development of resource recycling strategies in Europe and rapid implementation (E-Scrap/Copper-based scrap/LIB/Tungsten)
- **Enhancement of E-Scrap Recycling by Domestic Smelters** **P18**
 - Enhancement of E-Scrap processing capacity by improving smelting and pretreatment capacity
 - Expansion of Collection Centers in Europe
 - Investment in mines to secure low-impurity copper concentrates
 - Enhancing functions of MEX* *Online E-Scrap trading system
- **Investment in Exurban** **P21**
 - Participation in the construction and operation of a recycling plant in Indiana, USA
 - Expansion outside the USA



Improvement of E-Scrap Processing Capacity

- We are aiming to maximize our E-Scrap processing capacity to reach 240,000 tons by FY ending March 2031.
- As for Naoshima Smelter & Refinery, we will increase our copper smelting and other facilities, thereby increasing the processing capacity by FY ending March 2028.
In Onahama Smelter & Refinery, we will build a pretreatment facility for increasing the processing capacity and start operation in FY ending March 2029.

E-Scrap processing capacity (unit: thousand tons)



Naoshima Smelter & Refinery



Onahama Smelter & Refinery

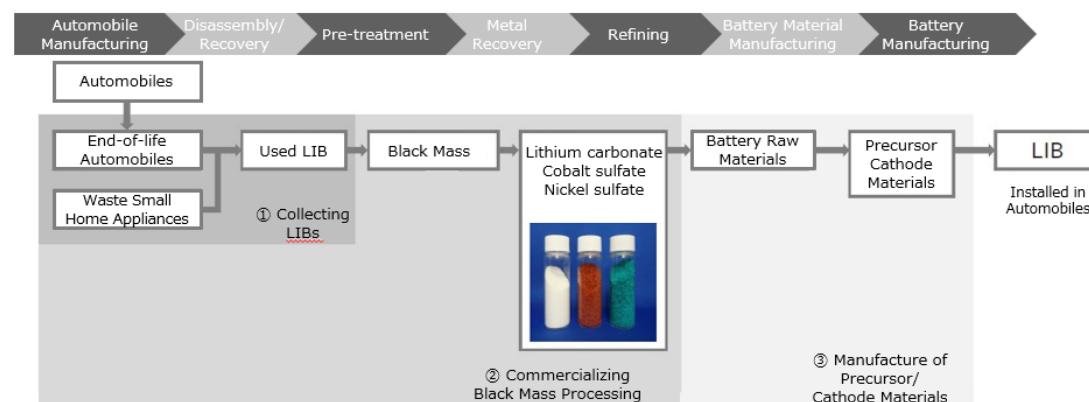




LIB Recycling Initiatives

- After small-scale testing produced a certain degree of positive results, we began construction on a pilot plant in Iwaki City, Fukushima Prefecture in December 2023. (Operations are scheduled to begin in 2025.) We are proceeding to further develop our technology, working toward commercialization of high-efficiency recovery of rare metals from Black Mass.

- We are achieving global competitiveness through rapid development of a comprehensive recycling process for producing lithium-ion materials from LIBs, using the network we built through our E-Scrap business to collect Black Mass, and efficiently recovering lithium carbonate, cobalt sulfate, and nickel sulfate from Black Mass.
- We are broadening our business fields by expanding into recovery of LIBs from end-of-life vehicles (①) and commercializing Black Mass processing through collaboration with other companies (②), as well as expanding into producing precursor and cathode material (③).



Black Mass : Concentrated residue of lithium, cobalt and nickel sorted from LIBs that have been discharged, dried and crushed.



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Geospatial Information Authority of Japan: Map and Aerial Photograph Browsing Service



Progress of Mantoverde PJ (Copper Concentrate Production and Cobalt Recovery)

- The completion of the construction was expected in December 2023 but has been delayed, and the copper concentrate production is anticipated in May 2024. Full-scale operation is expected in the second half of 2024.
- Profitability forecasts for the current period project negative profits for the first half of the fiscal year, which is the launch period, but profitability will be achieved for the year overall as operations ramp up moving into the latter half of the fiscal year.
- A pilot plant test for cobalt recovery has started since January 2024.

< Concentrator >



< Panoramic view >



< Overview >

Location and Geography

Atacama Region, Northern Chile

Approx. 50 km to the coast and 176 km to the nearby city of Copiapo

Altitude: 880 m

Although located in a desert area with little rainfall, the mine has a seawater desalination plant.

Resources (contained metal)

5.7 million tons

Reserves (contained metal)

2.1 million tons

Mining method

Open pit

Copper production

1.7 million tons for mine life

Mine life

2041



Exurban Project Progress

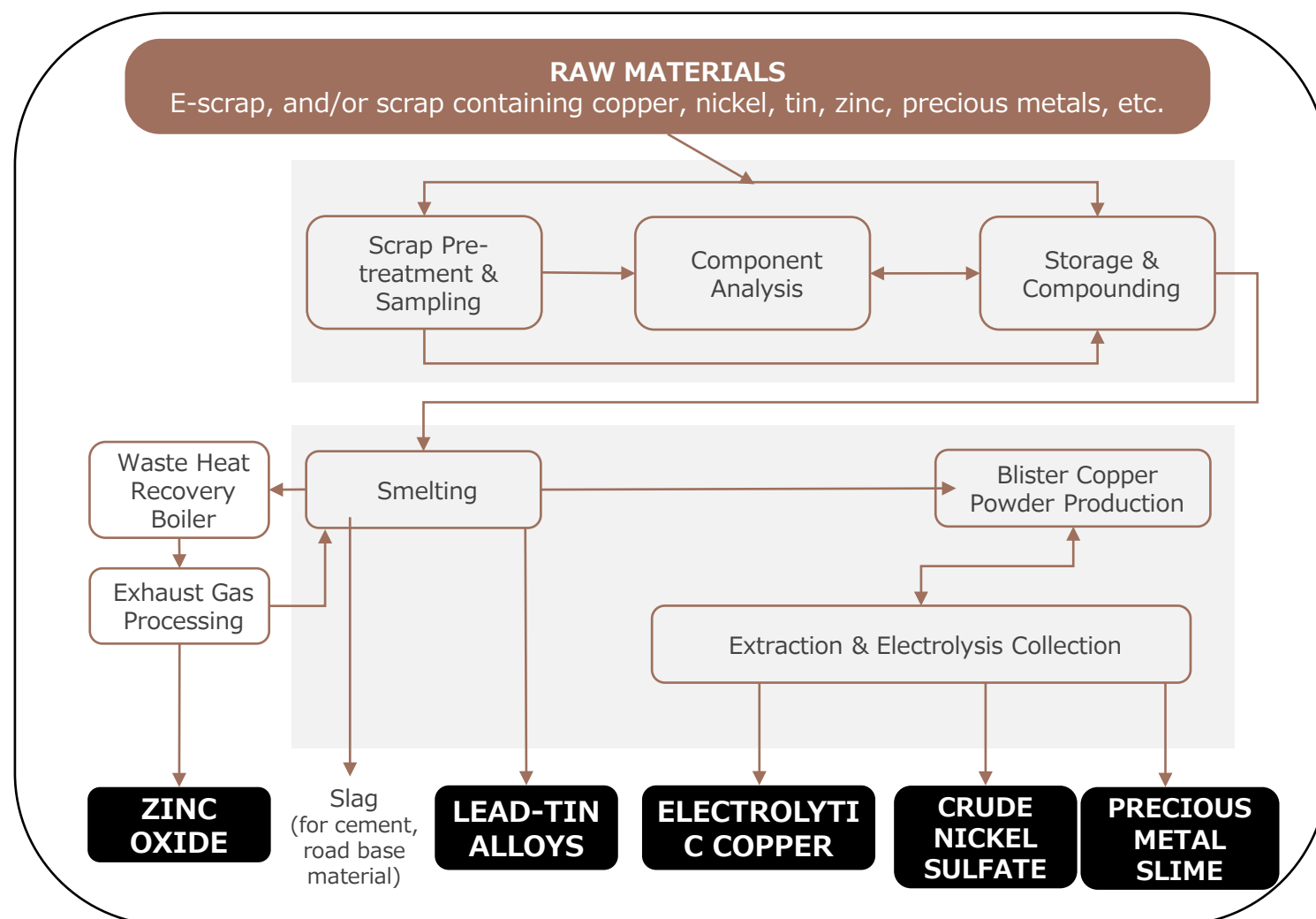
- As we anticipate continuing trends toward local recycling within regions and local production for local consumption in North America, we are participating in this project as a means of gaining a foothold in the N. America region, and to acquire technology specialized for smelting secondary raw materials.
- With Exurban, we aim to provide solutions for building resource recycling systems.
- The Feasibility Study for our new recycling plant construction project in Indiana, USA will soon be completed.



Exurban Project

Recycled Products

- **Electrolytic Copper**
- **Precious Metal Slime**
- **Crude Nickel Sulfate**
- **Tin & Lead Alloys**
- **Slag, etc.**





Agreement for the Acquisition of Shares of H.C. Starck Holding

- Mitsubishi Materials (“MMC”) has reached an agreement to acquire all shares of H.C. Starck, one of the world's leading manufacturers of tungsten products.
- For cemented carbide tools, which uses tungsten as its main raw material, we will accelerate efforts to secure global collection and recycling capacity for used cemented carbide tools.
- By leveraging tungsten business bases in Japan, Europe, North America and China, Mitsubishi Materials Group and H.C. Starck will develop a global tungsten recycling business.

Strengthening R&D capabilities through the cooperation between Japan New Metals Co., Ltd. Corporation (Wholly owned subsidiary of MMC) and H.C. Starck

Creating synergies and improving corporate value through cross-selling initiatives

Global business development of tungsten recycling by utilizing recycling technologies and bases owned by both companies

<Company Profile of H.C. Starck Holding (Germany) GmbH>

Address	Gosler, Germany
CEO	Dr. Hady Seyeda (Managing Director)
Business	Manufacture high-quality powders made of tungsten powder, tungsten carbide powder, and its alloys in Europe, North America, and China and has sales networks worldwide, including Japan Own the world's largest tungsten recycling capacity
Share Capital	€25,000 (approx. ¥4 million)
Year of Establishment	1920
Major Shareholders and Shareholding Ratio	Masan Tungsten Limited Liability Company 100% (Wholly owned subsidiary of Masan Hi-Tech Materials Corporation, Vietnam)
Net Sales (FY ended March 2024)	Approx. €334 million (approx. ¥52.4 billion)

2) Enhancing the supply of high-performance materials and products

Copper & Copper Alloy Business Capacity Expansion Investment in the Rolling Business

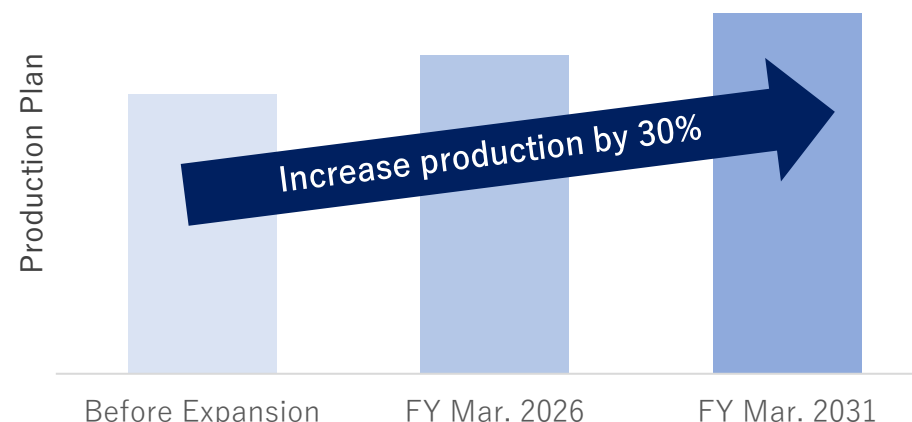
- We are progressing capacity expansion investment in the rolling business as planned. Since production capacity is anticipated to improve after the completion of the work in Sambo Plant, we will strive to expand sales in order to match up sales to production.



Increase production of copper sheet and strip products

- ◆ Strengthen and expand core businesses (copper sheets and strips)
- ◆ Further expand market share in the domestic market
- ◆ Taking on the challenge of the global market

Production capacity expansion plan for copper sheets and copper strips



		Sakai Plant	Sambo Plant	Wakamatsu Plant
Location		Sakai City, Osaka Prefecture	Sakai City, Osaka Prefecture	Aizuwakamatsu City, Fukushima Prefecture
Products targeted for increase production		Copper cake	Copper sheet and strip	Copper strip
Plan	Increase in production	Increase production by approximately 30%		
	Investment	Enhancement of casting facilities	Installment of additional cleaning machine, slitter, and packaging machine	Installment of additional slitters and packing machines and enhancement of reflow tin plating line
Commencement of operation		Started operation	Scheduled to start operation in October 2024	Scheduled to start operation in May 2024 *1

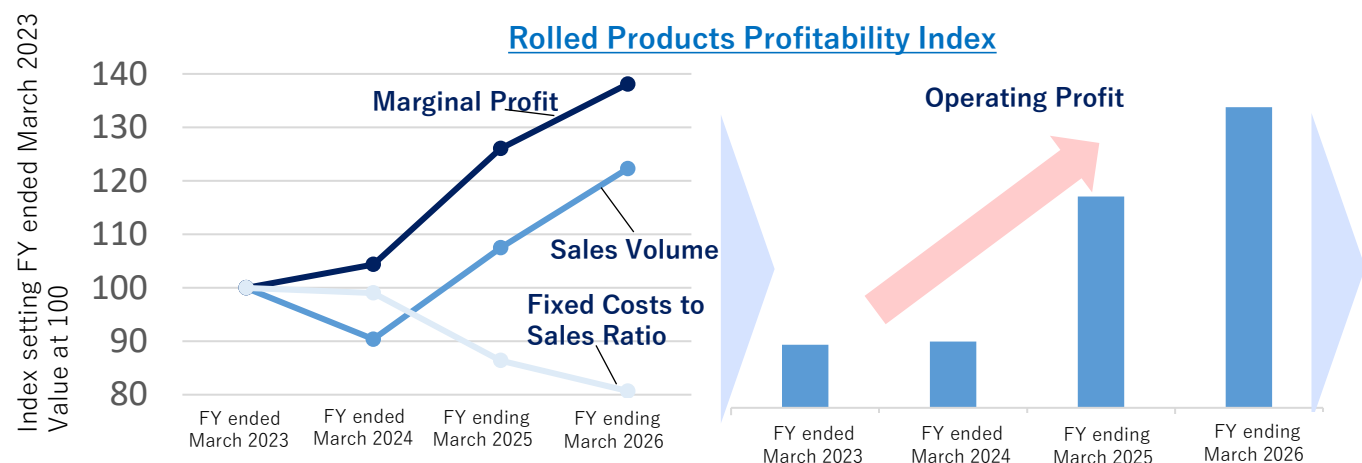
*1 The expansion of the reflow tin plating line began operations

Copper & Copper Alloy Business Profitability Improvement Plan (Rolled Products)

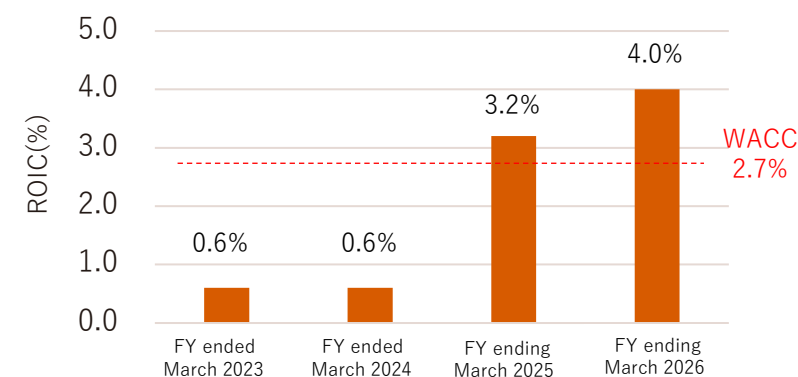
- In FY ended March 2024, in addition to price increase, the profit structure was strengthened by yield improvement and cost reductions through efficiency improvements. However, the effects of these measures were offset by lower sales volumes, mainly for automotive products, and as a result, ROIC remained at the same level as the previous year.
- In anticipation of a recovery in demand from FY ending March 2025 onward, we will reap the benefits of investment in increased production, reduce costs by lowering costs and improving productivity, and reduce interest-bearing debt in order to achieve the ROIC target of 4.0% in FY ending March 2026 for the Copper & Copper Alloy business set forth in Phase1.

Profitability Improvement Plan for Rolled Products

		ROIC Improvement Effects	Main Improvements
Variable Costs	Improving Yield Rates, etc.	+ 0.2 %	◆ Raise production efficiency, stable production measures ◆ Improve & optimize production processes, etc.
	Product Composition, etc.	+ 1.0 %	◆ Change product composition (increase ratio of high added-value products), increase prices, etc.
	Increasing Sales & Production, etc.	+ 1.4 %	◆ Increase production of copper billet & cake products ◆ Increase production of rolled products • Add and improve rolling equipment at Sambo & Wakamatsu Plants • Build sales expansion system based on sales & marketing integrating manufacturing, sales, and development, etc.
Fixed Costs	Cost Reductions, etc.	+ 0.1%	◆ Adjust some large-scale investments (under consideration)



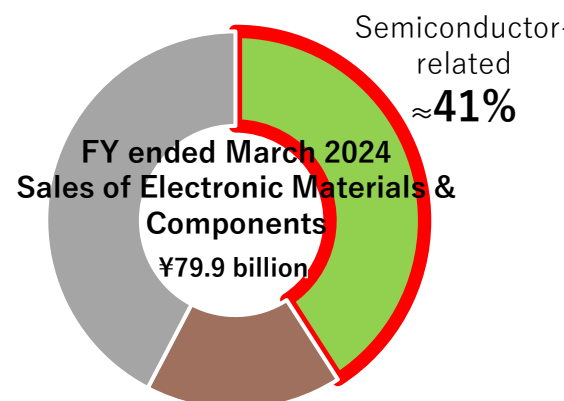
Copper & Copper Alloy Business Management Indicator (ROIC)





Electronic Materials & Components Business Status of Semiconductor Products

- While the precise timing will differ for each of our products, we anticipate demand to recover in or around the latter half of FY ending March 2025.
- Since the business environment for precision silicon products has deteriorated, we will reassess the planned investments in increased production and shift to other growth areas. We will also work on measures to increase sales shares among major customers, acquire new customers, enter new fields, etc.
- We will continue to strengthen cost competitiveness by reducing fixed costs such as labor and maintenance costs, mainly in the functional materials business.



Advanced Materials (≈ 24%)

Chemical Business (8%)

Seals(9%)

Coating Diffusion Sources

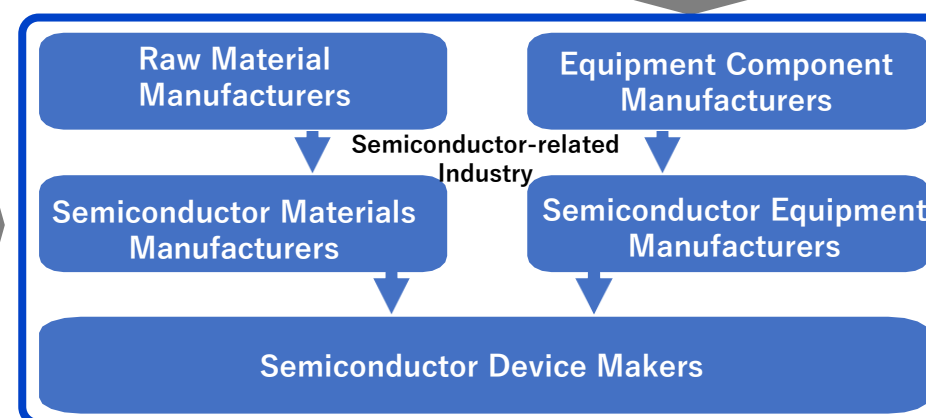


Columnar Crystal Silicon



Investment to increase production capacity by about 1.3 times (compared to FY ended March 2022) is progressing as planned.

Photo Acid Generator for Photo Resists



Precision Silicon Products



Reassess investment in increased production announced in FY2031 Strategy



Sealing Products

Investment to increase production capacity by about 1.5 times (compared to FY ended March 2022) is progressing as planned.

Silver-coated Powder



Thin Film Forming Materials Sol-Gel Solution



Low α emission solder (Precision Mounting Material)



AuSn Solder Paste (Precision Mounting Material)



Some products for semiconductor device makers show signs of recovery in demand.

Metalworking Solutions Business

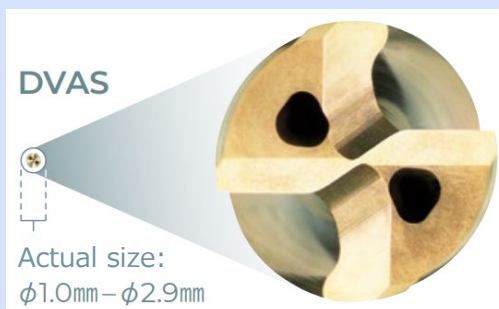
Providing New Products & Services for the Automobile, Aerospace, and Medical Industries

- Under the FY2031 Strategy, we make use of our accumulated technology & experience, putting effort into product development in the areas of difficult-to-process & difficult-to-cut materials
- We are expanding our product lineup in the automobile, aerospace, medical, and metal mold markets, and market development is advancing steadily
- We are moving forward with development of drills that revolutionize small-hole drilling, and also cutting tools with unprecedented functionality

<p>New Product Ratio</p> <p>FY Mar. 25 Target 18%</p> <p>FY Mar. 24 Result 9.4%</p>			Sales Ratio in Major Industries	Market Growth Rate CAGR (2021-30) Our Estimate
	Automobile	<ul style="list-style-type: none"> Adding turning products featuring highly oriented Al₂O₃ coatings Expanding our range of long-life milling products featuring our Al-Rich coating 	Approx. 50%	0.9%
	Aerospace	<ul style="list-style-type: none"> Entered supply contract with major French OEM. Specific initiatives are under consideration. Strengthening cooperation with domestic Japanese heavy industrial makers →Advancing blade processing applications, etc. 	Approx. 10%	7.5%
	Medical	<ul style="list-style-type: none"> Adding more small-bore solid tools for difficult-to-cut materials →Now developing a growing market share, mainly in North America 	Approx. 5%	5.1%
	Metal Molds	<ul style="list-style-type: none"> Building our end mill series for machining of hardened steels Expanding our solutions for high-difficulty processes 	Approx. 35%	1.3%

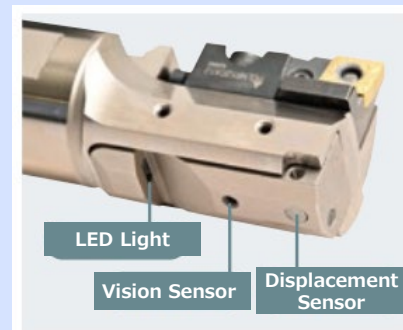
■ Developing New Products

TRISTAR Drill - DVAS



- We successfully balance improved durability and chip disposal by modifying the spiral design of the coolant holes.
- We help avoid delays and maintain machine efficiency by avoiding breakages.

Sensing Tools



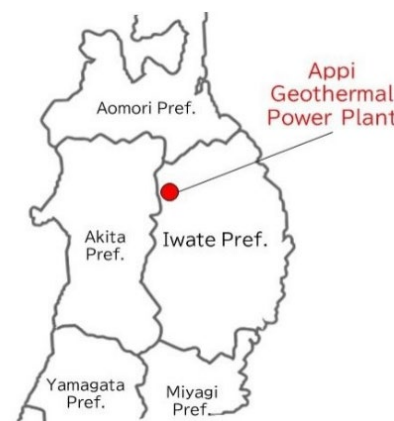
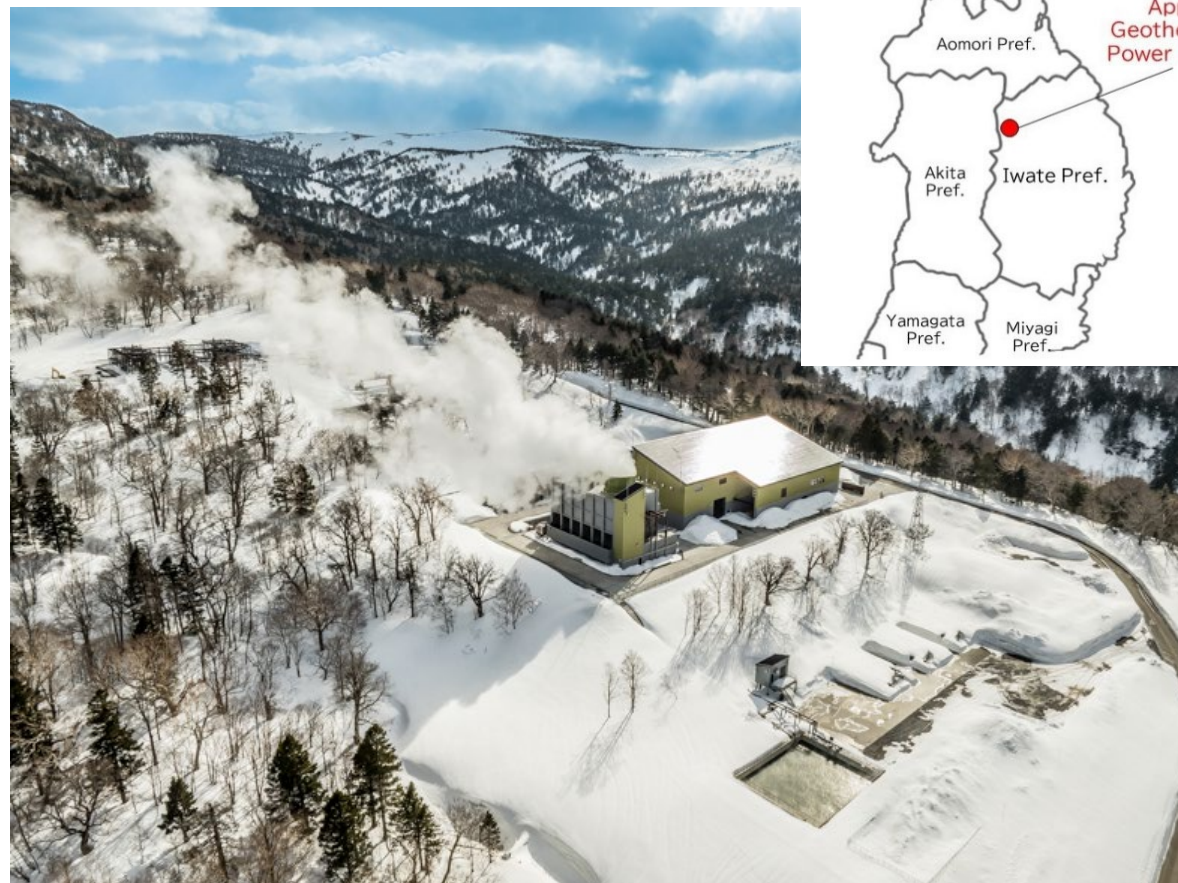
- Cutting tools featuring a displacement sensor that measures the dimensions of the material being cut, and a vision sensor that photographs the cut surface.
- Allowing measurement of cut material immediately after cutting, automatic adjustment, imaging of the cut surface, and more.

3) Supply of renewable electricity



Appi Geothermal Power Plant

- The construction work was completed within the budget. The commercial operation started from March 1, 2024, one month ahead of the plan.
- The operating is going smoothly at the planned output capacity (14,900 KW).
- In FY ending March 2025, we expect operating profit of ¥ +2.1 billion and profit attributable to owners of parent of ¥ +1.3 billion.



Overview of Appi Geothermal Power Plant

Name	Appi Geothermal Power Plant
Location	Hachimantai National Forest, Hachimantai-city, Iwate
Type of motive force	Steam power (geothermal)
Output capacity	14,900kW
Construction started	August 2019
Power generation system	Single flash system

Operator	Appi Geothermal Energy Corporation
Establishment	October 2015
Share capital	¥100 million
Investment ratio	Mitsubishi Materials Corporation 51% Mitsubishi Gas Chemical Company, Inc. 34% Electric Power Development Co., Ltd. 15%

Appi Geothermal Power Plant (Photographed on March 27, 2024)

Enhancing Equity Value and Enterprise Value (by SOTP*1 Valuation)

- Under the Medium-term Management Strategy FY2031, the Company aims to grow EBITDA and improve its balance sheet to increase its equity value and enterprise value, and to achieve approximately four times its equity value by FY ending March 2031.

FY ended March 2024–FY ending March 2026

FY ending March 2027–FY ending March 2031 (Unit: billion of yen)

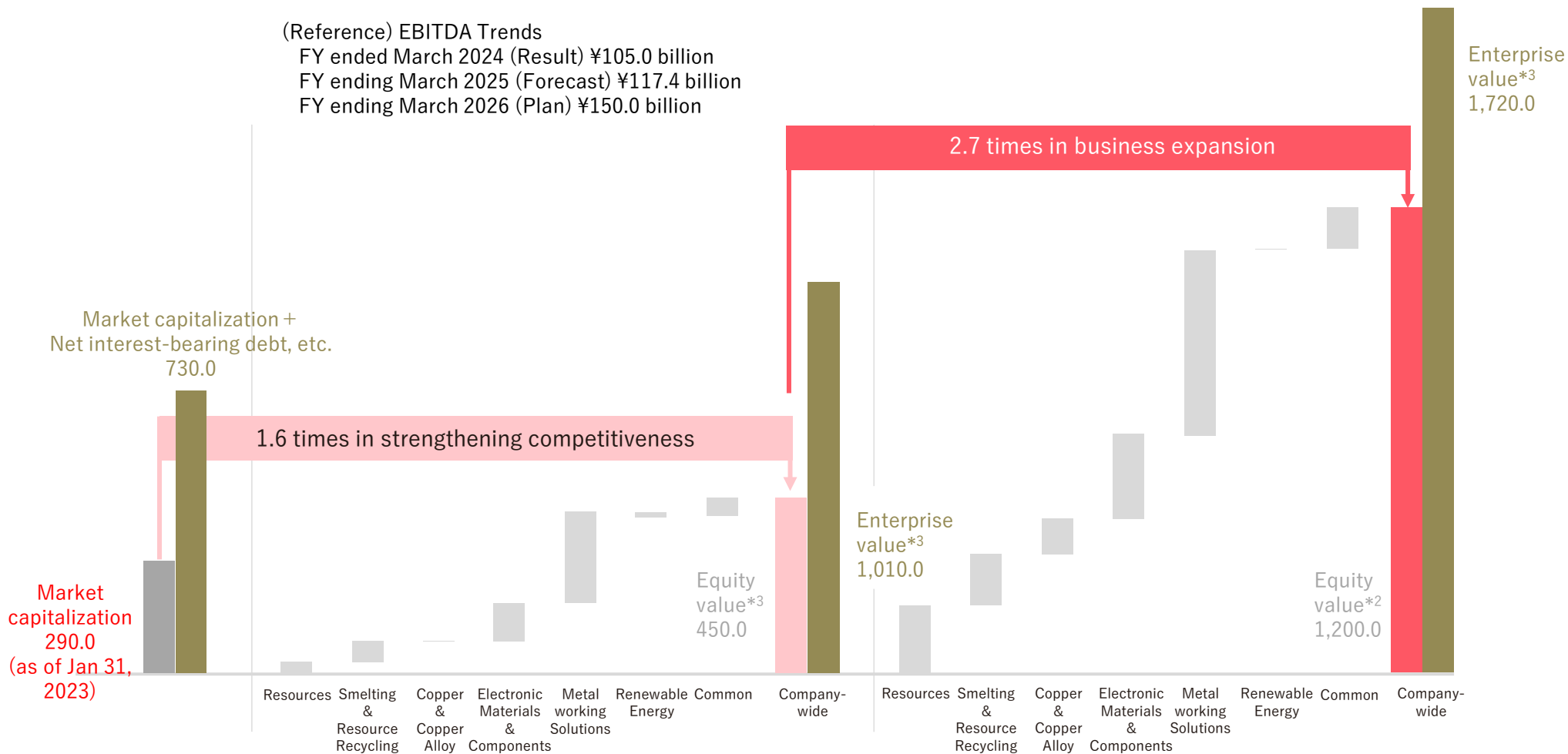
FY ended March 2023

Phase1 FY ending March 2026 Equity Value

Phase2 FY ending March 2031 Equity Value

(Reference) EBITDA Trends

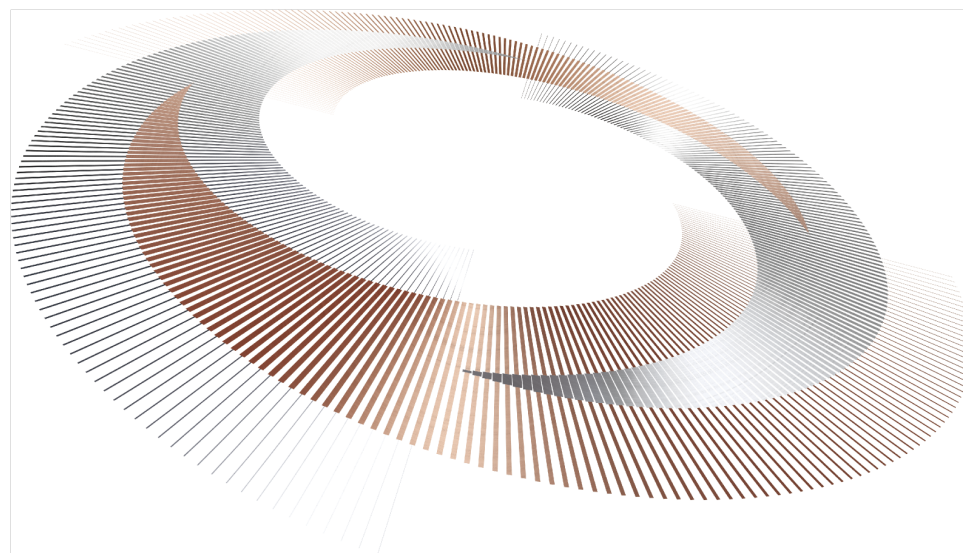
FY ended March 2024 (Result) ¥105.0 billion
FY ending March 2025 (Forecast) ¥117.4 billion
FY ending March 2026 (Plan) ¥150.0 billion



※1 Sum-of-the-Parts

※2 Enterprise value is calculated by multiplying EBITDA for each business by a multiple that takes into account the same industry, and net interest-bearing debt is deducted from enterprise value to calculate equity value

Enterprise value and equity value are figures calculated independently by the Company using SOTP analysis based on the business performance forecast of the FY2031 Strategy and the Company does not guarantee the stock price



For people, society and the earth, circulating resources for a sustainable future



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These projected performance figures are based on information available to the MMC's management as of the day for releasing this material. There are many uncertain or risk factors inherent in this projections, and there might be cases in which actual results materially differ from projections of this material.