

Mitsubishi Materials Corporation Investor Conference Material

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1. Summary of Financial Results

Results for FY2021 (compared with the previous year results)

Comparison With the Previous Year Results

Net sales	: Decreased overall (with higher net sales in the Metals Business, and lower net sales in the Other Businesses).
Operating profit	: Decreased overall (with flat YoY operating profits in the Metals Business and the Environment & Energy Business, and lower operating profits in the Other Businesses).
Ordinary profit	: Decreased due to a decrease in operating profits.
Profit (loss)*	: Increased due to an improvement in extraordinary income (loss), etc., thereby offsetting a decrease in ordinary profit.

(Unit: billion yen)	FY2020 Results (a)	FY2021 Results (b)	Change (b)-(a)
Net sales	1,516.1	1,485.1	-30.9
Operating profit	37.9	26.5	-11.3
Ordinary profit	49.6	44.5	-5.0
Profit (loss)*	-72.8	24.4	97.2
Net income per share (yen)	-556.34	186.71	743.05
Dividends per share (yen)	80	50	-30
Exchange rate (USD/Yen)	109 yen	106 yen	-3 yen
Copper price (LME)	266¢/lb	312¢/lb	46¢/lb

*Profit (loss) attributable to owners of parent

Results for FY2021 (vs. Previous Forecasts on February 9, 2021)



Comparison With the Previous Forecast

Net sales	: Increased overall (with higher net sales in the Advanced Products, the Metalworking Solutions, and the Metals Business).
Operating profit	: Increased overall (with lower operating profits in the Cement Business, and higher operating profits in the Other Businesses).
Ordinary profit	: Increased due to an increase in operating profit.
Profit (loss)*	: Increased due to an increase in ordinary profit.
Dividend	: Expected 50 yen per share (an increase of 10 yen from the previous forecast as of February 9, 2021).

(Unit: billion yen)	FY2021 Previous forecast (a) (announced on February 9, 2021)	FY2021 Results (b)	Change (b)-(a)
Net sales	1,460.0	1,485.1	25.1
Operating profit	15.0	26.5	11.5
Ordinary profit	32.0	44.5	12.5
Profit (loss)*	10.0	24.4	14.4
Net income per share (yen)	76.5	186.71	110.21
Dividends per share (yen)	40	50	10
Exchange rate (USD/Yen)	106 yen	106 yen	0yen
Copper price (LME)	291¢/lb	312¢/lb	21¢/lb

* Profit (loss) attributable to owners of parent

Earnings Forecast for FY2022 (vs. FY2021 Results)



Comparison With FY2021 Results

Net sales	: Overall increased (with lower net sales in the Cement Business and the Environment & Energy Business, and higher net sales in the Other Businesses).
Operating profit	: Overall increased (with lower operating profits in the Metals Business and the Environment & Energy Business, and higher operating profits in the Other Businesses).
Ordinary profit	: Decreased (with higher operating profits and lower dividends from copper mining related company, etc).
Profit (loss)*	: Decreased (with a decrease in ordinary profits).
Dividend	: Minimum of 50 yen per share (and making expeditious allotments of funds, including share buybacks and additional dividends, etc.).

(Unit: billion yen)	FY2021 Results (a)	FY2022 Forecast (b)	Change (b)-(a)
Net sales	1,485.1	1,620.0	134.9
Operating profit	26.5	35.0	8.5
Ordinary profit	44.5	37.0	-7.5
Profit (loss)*	24.4	20.0	-4.4
Net income per share (yen)	186.71	152.99	-33.72
Dividends per share (yen)	50	50	-
Exchange rate (USD/Yen)	106 yen	110 yen	4 yen
Copper price (LME)	312¢/lb	345¢/lb	33¢/lb

*Profit (loss) attributable to owners of parent

2. Efforts during FY2021

Optimization of Business Portfolio

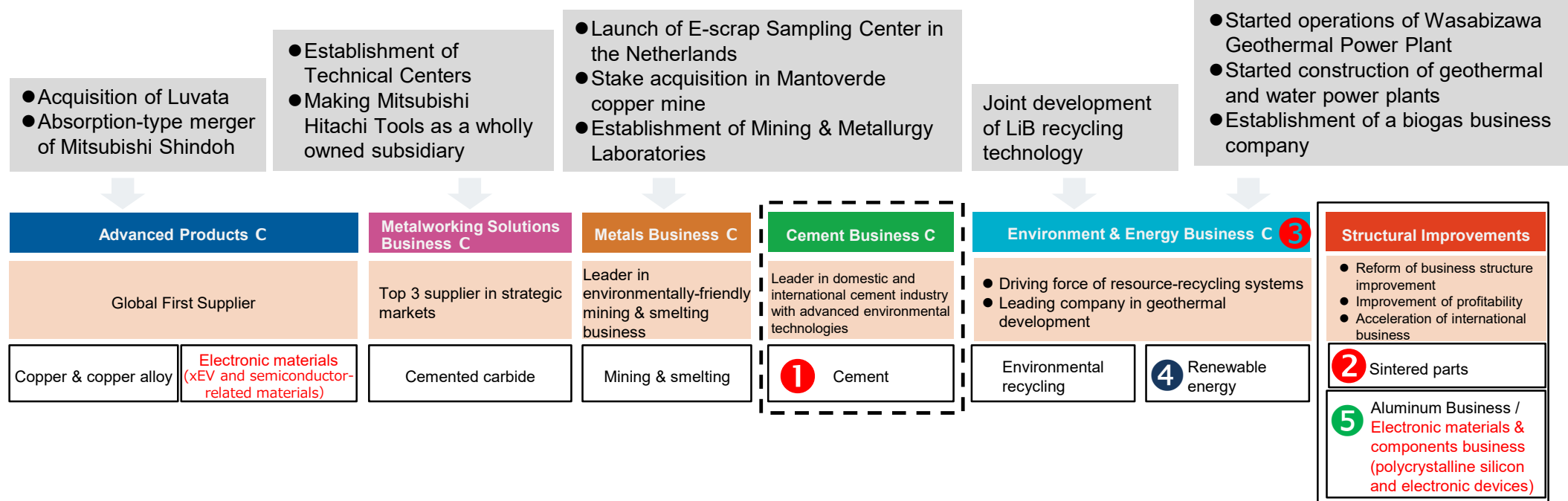
<Group-wide Policy>

- Optimization of Business Portfolio
- Comprehensive efforts to increase business competitiveness
⇒ Manufacturing excellence, quality management and digital transformation strategies
- Creation of new products and businesses
⇒ R&D and marketing strategy



Reformation of business structure

Legend C : Stands for "in-house company"
 : Long-term Goals of business



1

- Signed agreement concerning integration of Cement Business and related businesses with Ube Industries, Ltd.
- In April 2022, a new integrated company will be established.

2

- December 4, 2020, transfer of shares of Diamet Corporation completed.

3

- Transfer of shares of DIA CONSULTANTS CO., Ltd., which provides consulting in civil engineering geology, etc., will complete (scheduled for July 1, 2021).

4

- On September 4, New Energy Fujimino Co., Ltd. commenced operations (biogasification of food waste).

5

- Mitsubishi Aluminum Co., Ltd. Group is implementing measures for structural improvements (e.g. "increasing cost competitiveness", "Business selection and concentration").
 - January, 2021 Transfer of shares of a subsidiary in China completed.
 - April, 2021 Transfer of shares of TACHIBANA METAL MFG Co., Ltd. completed.

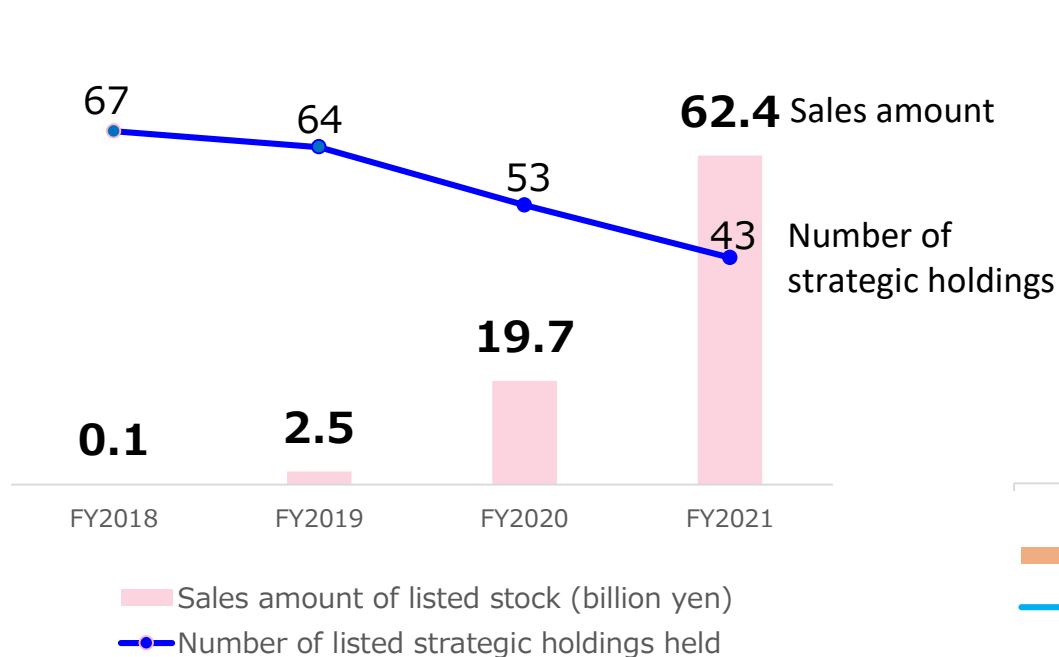
Basic policy and transition on Strategic Holdings

■ Basic policy on Strategic Holdings

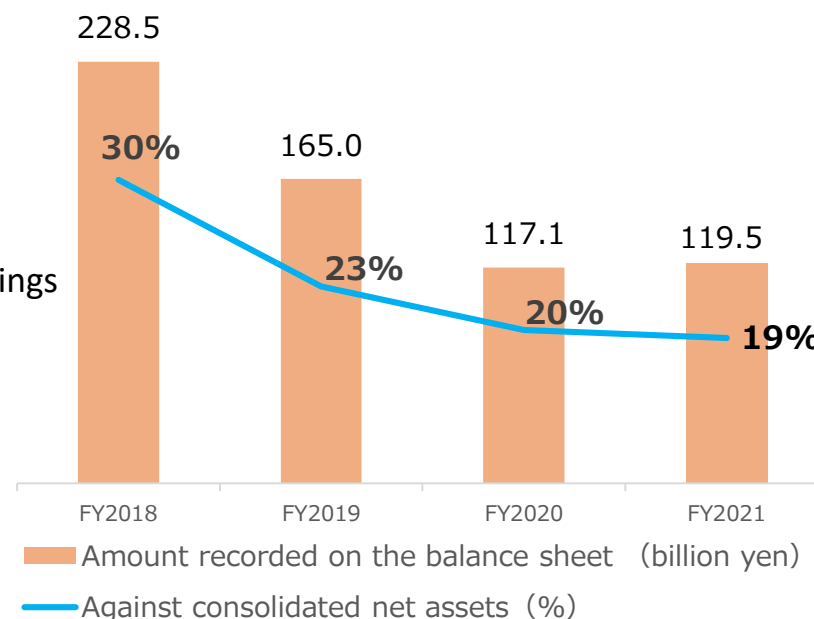
- ✓ The Company shall not acquire or hold Strategic Holdings unless doing so is necessary for the purpose of its business strategy.
- ✓ With regard to the Strategic Holdings, appropriateness of such holdings shall be specifically reviewed and examined at a meeting of the Board of Directors on an annual basis. As a result of such reviews and examinations, the Company will reduce any Strategic Holdings if it is not deemed to be necessary to hold such holdings.

■ Changes in Number of Strategic Holdings

Changes in Number of listed Strategic Holdings



Percentage of Strategic Holdings in consolidated net assets



21 MMDX* Themes and Key Perspectives

*MMDX: Mitsubishi Material Digital Business Transportation

Summary of MMDX Themes As of April 2021

Business Digital Transformation	Product-based business	Metalworking C DX	1. MI* ² : Digital customer touch points
			2. MI* ² : Utilization of market information
			3. Ability to propose solutions
			4. Demand and supply management
		Advanced Products C DX	5. Improvement of customer touch points
			6. Supply chain integration
			7. Advance development and production data utilization
			8. Income platform
		Companywide	9. Companywide standardization
		Recycling-Based Business	10. Strengthening E-Scrap processing
	11. Environmental recycling digital transformation		
Advancement of Manufacturing Excellence (Including digital technology utilization for process-oriented businesses)			12. Security and safety
Key Operations			13. Maintenance
Data Infrastructure			14. Advance procurement
Operational Efficiency			15. Digital transformation of the Central Research Institute
Human Resource Base			16. ERP
			17. Upgrading of business administration
			18. Data infrastructure and utilization
			19. Operational efficiency
			20. Talent management
			21. Digital transformation talent development and literacy improvement

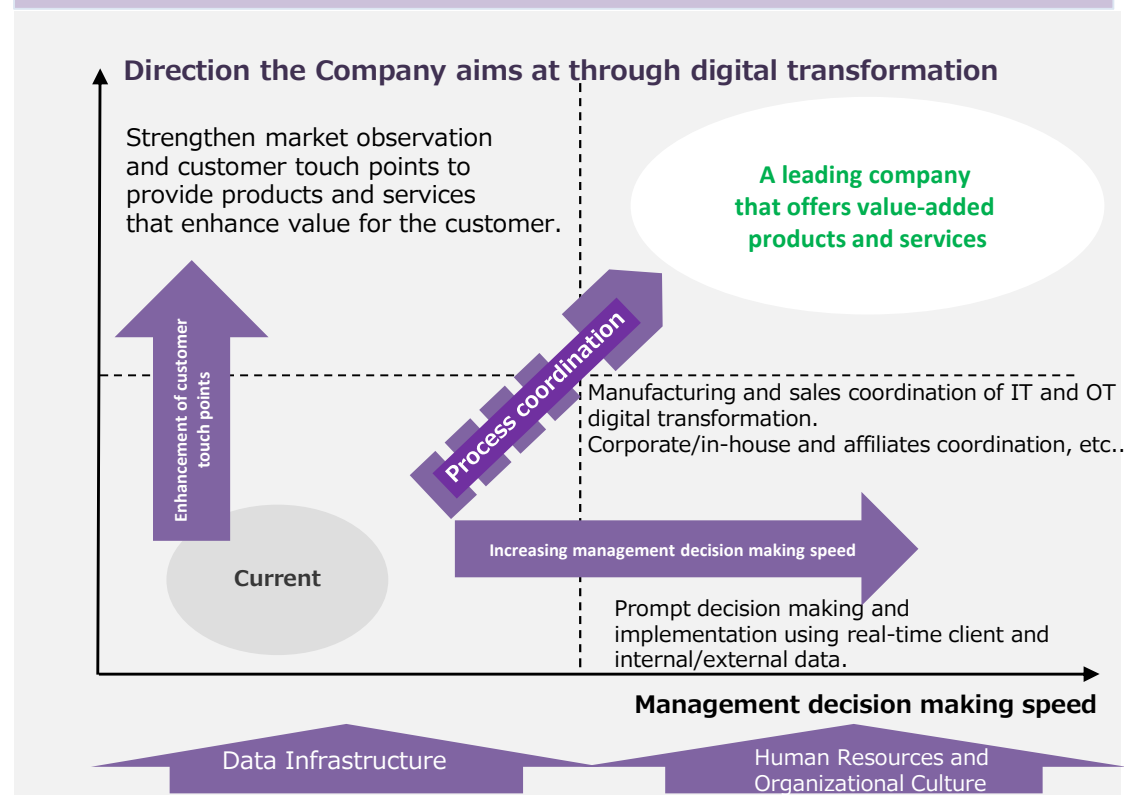
<Group-wide Policy>

- Optimization of Business Portfolio
- Comprehensive efforts to increase business competitiveness
⇒ Manufacturing excellence, quality management and **digital transformation strategies**
- Creation of new products and businesses
⇒ R&D and marketing strategy

Key Points for Implementing Measures

- Review the entire business processes with a focus on “getting closer to customers”.
- Create a foundation for catching up with competitors and winning on a global scale.
- Strengthen the management foundation through safety and security, enhanced business management, and increased efficiency.

Theme and Key Perspectives for MMDX



*2 MI : Market intelligence

- Make appropriate addition, integration and elimination of MMDX themes in response to the changes in the business environment and the progress of each theme.
- Under the MMDX plan, the company plans more than 40 billion yen investment over six years starting from FY2021 to FY2026.
- Developing 100s of digital human resources, including business and system-related digital transformation leaders and data scientists, through MMDX implementation.

Digital Transformation Strategy : Master Schedule of the Entire MMDX



Stage 1					
FY2021		FY2022		FY2023	
First half	Second half	First half	Second half	First half	Second half

Initial stage of MMDX implementation

- ✓ First, create a strategy to catch-up and a foundation to surpass competitors
- ✓ Solidify the management base, including security and safety, data infrastructure, and business administration

Stage 2		
FY2024	FY2025	FY2026

Full-scale operation phase of MMDX

- ✓ Introduction of key systems (ERP)
- ✓ Acceleration of MMDX in the Group

Business Digital
Transformation

Product-based business

(Metalworking
Solutions and
Advanced Products)

- Implementation of measures to realize the medium-term management strategy of each business
- Strengthening customer touch points, process coordination and enhancing global cooperation

- Enforce measures to catch up and surpass the competitors
 - ✓ Metalworking Solutions: Global Top 3
 - ✓ Advanced Products : "Global First Supplier"

Recycling-Based Business

- Building a foundation for the recycling business

- Promote utilization of recycling data

Manufacturing Digital transformation

- Implement digital transformation to achieve the goals of safety and security, maintenance, procurement, and R&D
- Promote data utilization in the fields and smart factory plans

- Accelerate digital transformation to enhance safety and security, maintenance, and procurement
- Accelerate manufacturing excellence and new business development by utilizing data and digital technologies

ERP

- Formulation of ERP introduction plan

- Define requirements/ Design
- Development / Testing

- Implement on a non-group-wide basis first and then gradually roll out to domestic and overseas companies in the Group

Data infrastructure/ Business Administration

- Build infrastructure for data analysis
- Training for data scientists and promote data utilization
- Improving business administration

- Build and utilize data infrastructure in the Group
- Visualization of management information, automation and sophistication of analysis
- Realize speedy management based on data

Operational Efficiency

- Standardization of operation, and thorough automation

- Standardize and improve efficiency of operations across the Group and shift human resources to high value-added operations

DX talent development

- Design digital transformation training system and MMDX activity across the entire Group
- Practice free and frank communication

- Digital transformation talent development and strengthening of digital transformation literacy
- All group members autonomously accelerate digital transformation

Creation of new products and businesses

Investment results through

“MMC Innovation Investment Limited Partnership”

MMC has established the "MMC Innovation Investment Limited Partnership" in order to develop medium- to long-term technologies of the Group, create innovation through collaboration, and create new value. And MMC has invested in the venture companies with material technologies that is new business candidate as follows.

<Group-wide Policy>

- Optimization of Business Portfolio
- Comprehensive efforts to increase business competitiveness
⇒ Manufacturing excellence, quality management and digital transformation strategies
- **Creation of new products and businesses**
⇒ R&D and marketing strategy

	Company name	Company's technologies/products	MMC's aim
October, 2019	Elephantech Inc.	Elephantech has manufacturing technology for electronic circuit boards by additive manufacturing using inkjet printing of metal nano inks and electroless copper plating.	MMC has started development of “copper nano ink” with Elephantech as an evaluation partner. MMC will aim to develop new copper products for circuit boards and get opportunities of its supply.
May, 2020	EneCoat Technologies Co., Ltd.	EneCoat Technologies is developing Perovskite Solar Cells characterized by high power generation efficiency, light weight, and flexibility compared to conventional silicon-based solar cells.	In collaborate with EneCoat Technologies, MMC will develop technologies that contribute to improving the performance of Perovskite Solar Cells and the peripheral materials etc. necessary for making them lead-free, aiming to get opportunities to supply materials when perovskite solar cells become widespread.
June, 2020	CONNEXX SYSTEMS Corporation	CONNEXX SYSTEMS has development and manufacturing technologies for new storage battery, high-power in-vehicle Lithium-ion battery (LIB), and next-generation battery that combine LIB and lead-acid battery.	MMC is developing technology for reusing and recycling used in-vehicle LIB. In collaboration with CONNEXX SYSTEMS, MMC will promote the reuse business that is the reuse of collected used in-vehicle LIB for stationary storage battery.
September, 2020	Nature Architects inc.	Nature Architects has unique structure design technologies such as giving strength only to the necessary parts and adding the function of absorbing vibration to hard parts.	By combining MMC's knowledge of non-ferrous metals and other material properties with Nature Architects' design technology, MMC will promote development of unique products with new added value by additive manufacturing using our materials.

3. Efforts by Business Segment

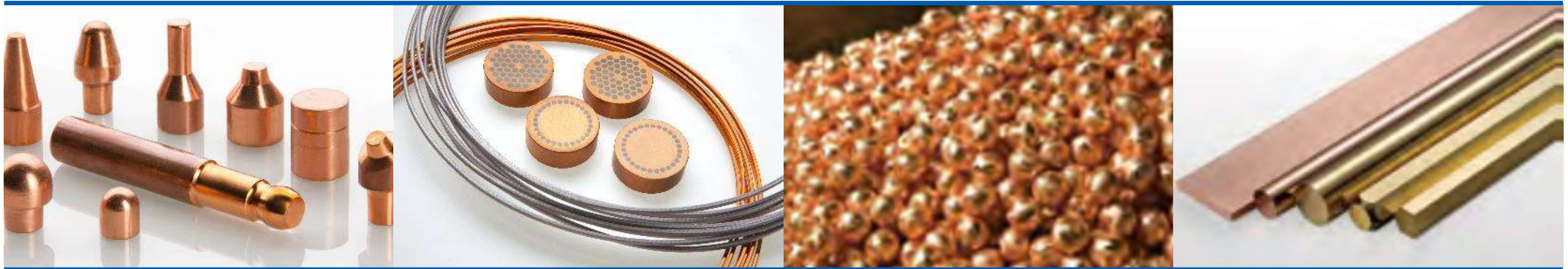


Advanced Products (Copper & copper alloy / Electronic materials & components)



Advanced Products

(Copper & copper alloy / Electronic materials & components)



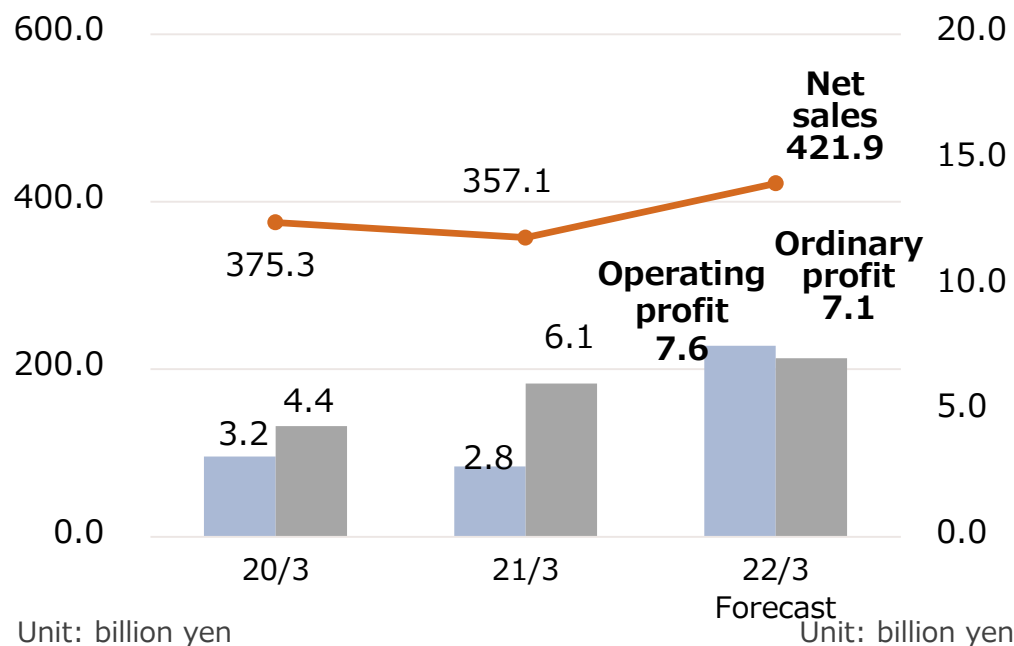


Advanced Products Business

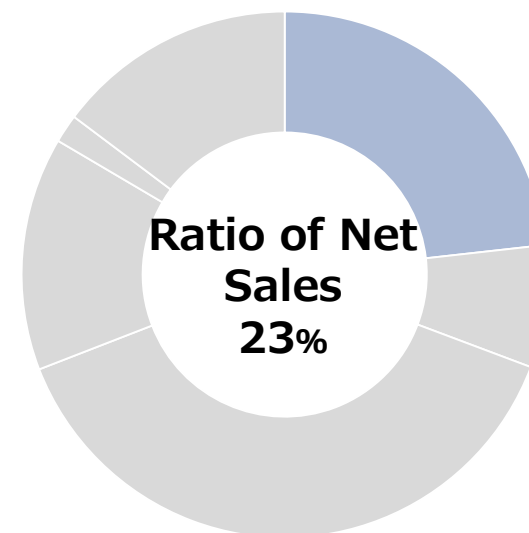
(Copper & Copper Alloy, Electronic Materials & Components)



Trends of Consolidated Earnings



Ratio of Net Sales by Business Segment



*FY2021 results (sales to outside customers)

FY2022 Business Overview

◆ Copper & copper alloy

Although the situation surrounding the shortage of semiconductors for automobiles and the resurgence of COVID-19 remains uncertain, the Company aims to capture renewed demands for automobile-related products.

Luvata Group expects a normalization of its automobile-related business, growth of its connector business, and recovery of the MRI market.

◆ Electronic materials & components

Expect steady demands for semiconductors-related products, as exemplified by 5G infrastructure, data centers, etc.

Expect a sales increase for electronics-related products and automobile-related products due to market recovery.



Advanced Products Business

(Copper & Copper Alloy, Electronic Materials & Components)



Long-term goals | Global First Supplier

Long-term strategy

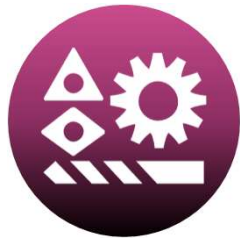
- Refine and combine core competencies (e.g., the development and manufacturing technology of oxygen-free copper base alloys, development of functional materials, welding technology, etc.), to create new products and businesses.
- Pursue winning patterns from a market perspective.

	Medium-term Management Strategy		
	Key strategies	FY2021 results	Plans for FY2022 and beyond
Business-wide	Appoint key account managers who work across business units/utilize AI and IoT for information analysis.	<ul style="list-style-type: none"> • Appointed key account managers • Introduced MA, SFA, CRM*, and promoted effective marketing and sales activities. 	<ul style="list-style-type: none"> • Activate MA, SFA, CRM operations, and visualize the activities by creating a dashboard of KPI performance trends. • Analyze global demand by coordinating with the marketing departments in Europe.
Copper & copper alloy	Restructure business and reinforce production systems of rolled and extruded products business./develop and launch products based on product roadmaps.	<ul style="list-style-type: none"> • Established a system to promote production increases in Wakamatsu and Sanbo plants. • Maintained the framework of the large-scale investment of approx. 30 billion yen. • Started mass-production of MSP® 5, an alloy for vehicle-mounted small connectors and for press fit. 	<ul style="list-style-type: none"> • Expansion of material supply capacity in Sakai plant started its construction in FY2021, and will start operations in FY2023. • Delaying long-term sales plan due to the impact of COVID-19. <p>(Rolled Products) Installation of new rolling machine in Wakamatsu, and slitter and packing facilities in Sanbo.</p> <p>(Extruded Products) Process streamlining by introducing a new extruding machine. Considering to increase the production of lead-free brass sticks.</p>
Electronic materials & components	Develop market and expand sales of products for next-generation vehicles. /build a system to increase the production capacity of silicone-processed goods.	<ul style="list-style-type: none"> • Reconstruction of the insulated heat dissipation components business. • Achieved targets for the number of products developed for automobile products. • Strengthened production system to respond to customer demand. 	<p>Semiconductors-related business remains robust due to strong demand.</p> <ul style="list-style-type: none"> • Maintain and improve profitability by building a system to boost production capacity and improving productivity. <p>xEV materials/components are expected to grow.</p> <ul style="list-style-type: none"> • Build partnerships with important customers by utilizing development roadmaps. • Promote development and reinforce production systems.

*MA: Marketing Automation, SFA: Sales Force Automation, CRM: Client Relationship Management



Metalworking Solutions Business



Metalworking Solutions Business

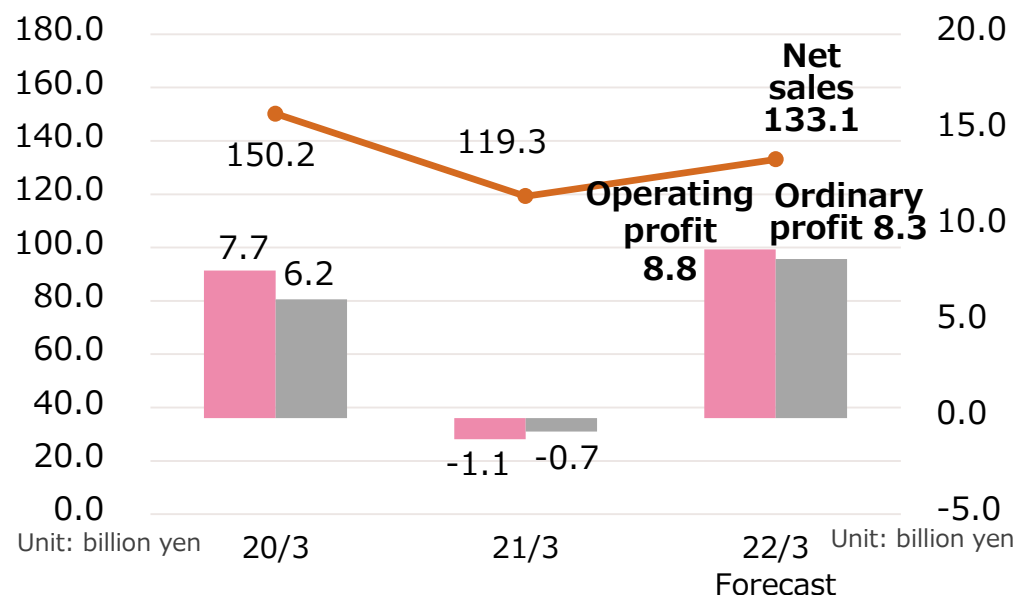




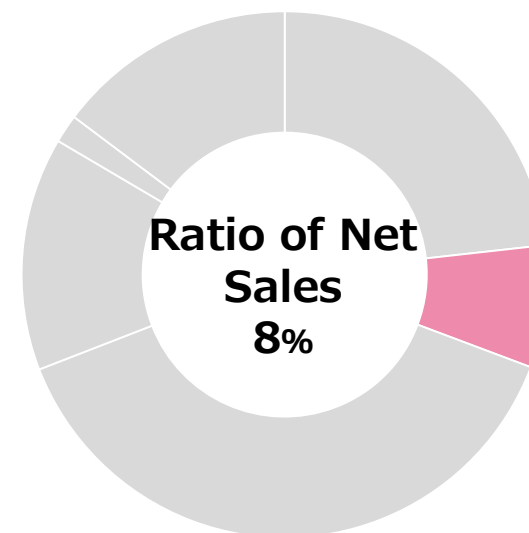
Metalworking Solutions Business



Trends of Consolidated Earnings



Ratio of Net Sales by Business Segment



*FY2021 results (sales to outside customers)

FY2022 Business Overview

◆ Cemented carbide products

- (By Region) Expect a recovery of sales to the same level as FY2020 before the impact of the spread of COVID-19, etc., mainly by leveraging renewed demand in China
- (By Industry) In the automobile industry, it is concerned that the speed of recovery will slow down due to production adjustments made in preparation for semiconductor shortages. However, demand is expected to recover in response to production increase plans of major manufacturers. In the medical industry, demand is expected to recover due to an increase in regenerative treatment devices as surgical operations have resumed. In the aerospace industry, the severe business environment is expected to continue due to a large drop in demand for commercial aircrafts resulting from the decrease in passenger traffic, and a significant reduction in production. In molding industry, the future of the market remains uncertain, although a recovery in the precision molding market and the resurgence of domestic semiconductor manufacturing equipment manufacturers are expected.



Metalworking Solutions Business



Long-term business goals | Becoming the top 3 supplier in strategic markets

Long-term strategy

- Promote clean manufacturing
- Provide high-efficiency products by utilizing advanced technology
- Develop advanced metal powder business

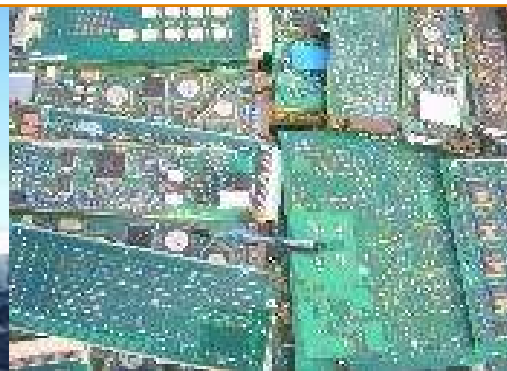
	Medium-term Management Strategy		
	Key strategies	FY2021 results	Plans for FY2022 and beyond
Cemented carbide products	Launch new products according to key themes	Launched eight new products (although field tests with customers were delayed due to the impact of COVID-19).	Will launch new products according to eight themes in FY2022.
	Expand advanced metal powder business for the rechargeable battery market	Started considering a technology alliance with Masan High-Tech Materials Corporation (MHT), in which the Company recently acquired a 10% stake, for tungsten powder production.	<ul style="list-style-type: none"> • Expand customer base of advanced metal powder for vehicle-mounted secondary batteries. • Consider technology alliance with MHT Group/resource utilization.
	Expand tungsten recycling	Achieved the recycling target of 35% by expanding scrap recovery area and recycling process resources.	<ul style="list-style-type: none"> • Raised recycling rate by expanding recovery and process volume of cemented carbide scraps. • Discuss joint operation of tungsten recycling business with MHT Group.
	Use of renewable energy	Conducted a survey of procurement methods. Formulated a roadmap to reach a renewable energy usage rate of 50% by 2030.	Formulate specific methods to utilize renewable energy in domestic/overseas locations.



Metals Business



Metals Business

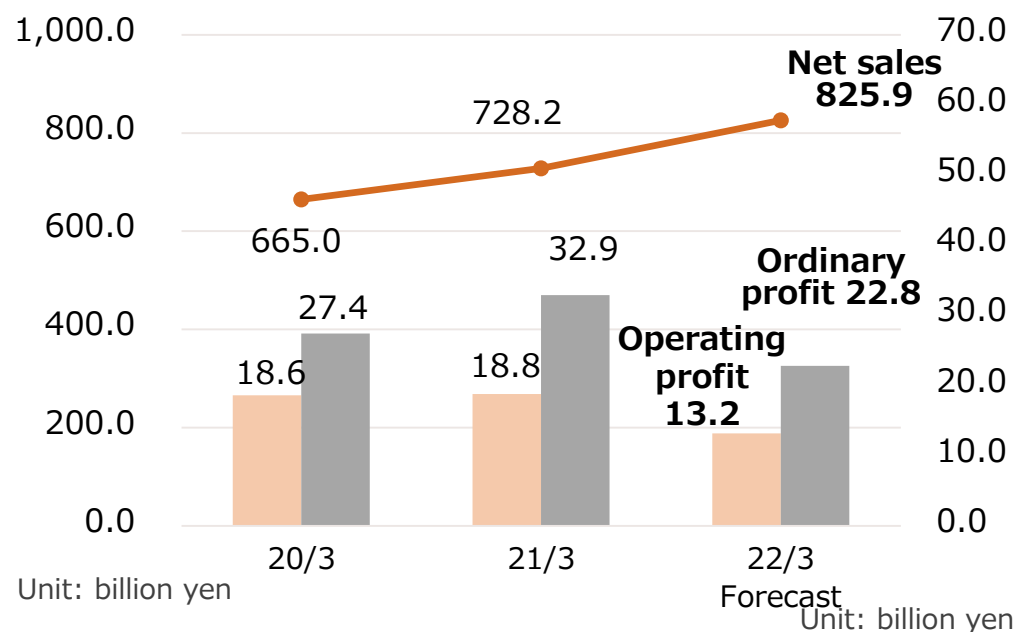




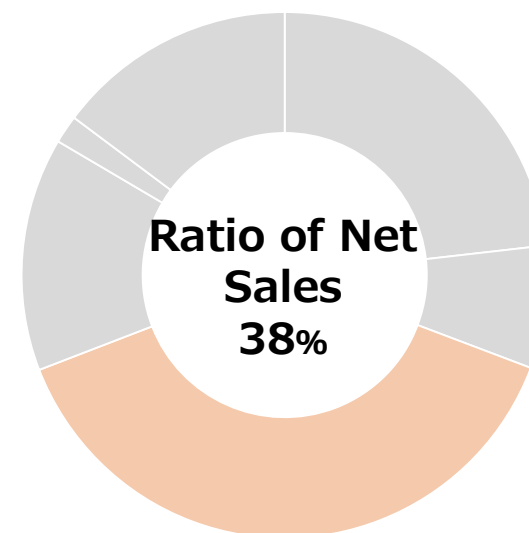
Metals Business



Trends of Consolidated Earnings



Ratio of Net Sales by Business Segment



*FY2021 results (sales to outside customers)

FY2022 Business Overview

◆ Copper mines

Dividends from the mining business is expected to decrease compared with FY2021 (during when it increased), due to the delay in mine expansion construction work.

◆ Copper smelting

Strive to increase the collection and processing of E-scrap, and reducing various costs of E-scrap. Meanwhile, the purchasing conditions of TC/RC has been deteriorating.

No large furnace repairs at Naoshima Smelter & Refinery and PT Smelting in Indonesia (implemented in FY2021).



Metals Business



Long-term business goals | Becoming a leader in environmentally-friendly mining & smelting business

Long-term strategy

Stable supply and circulation of copper and other non-ferrous metals

- Creation of a sustainable raw material portfolio consisting of clean copper concentrate and E-Scrap
- Promotion of recycling
- Combating climate change

	Medium-term Management Strategy		
	Key strategies	FY2021 results	Plans for FY2022 and beyond
Mines	Secure clean copper concentrate by investing in new mines	<ul style="list-style-type: none"> Completed the feasibility study in Zafranal mine, and preparing to apply for its environment impact assessment (EIA). 	<ul style="list-style-type: none"> Obtain EIA for Zafranal project, and finalize investment decision.
		<ul style="list-style-type: none"> Completed the arrangement of project financing scheme for Mantoverde mine. On February 12, 2021, signed the agreement of 30% share acquisition and officially participated in the project. 	<ul style="list-style-type: none"> Steady progress of the construction work for Mantoverde project.
		<ul style="list-style-type: none"> In order to strengthen the foundation of the mine investment business management in South America, established a subsidiary in Chile to manage/operate mine investment business. 	<ul style="list-style-type: none"> Gradually expand operations while gathering information and supporting smooth management of the Company's mine investment business in South America.
Smelting	Optimization of valuable metal material flow	<ul style="list-style-type: none"> Promoted the establishment of recovery flow of valuable metals across production sites as planned by strengthening recovery of valuable metals through slime process. improvements at Naoshima Smelter & Refinery and recovering tin at Hosokura Metal Mining Company, etc. 	<ul style="list-style-type: none"> Increase recovery rate of gold and silver, and increase production of by-products at precious metal plants.
	Reduce fossil fuels	<ul style="list-style-type: none"> Promoted reduction of fossil fuel usage by using recycled materials, e.g. E-Scrap, as fuel substitutes. 	<ul style="list-style-type: none"> Understand the factors that constrain E-Scrap input and aim for optimization.



Cement Business



Cement Business

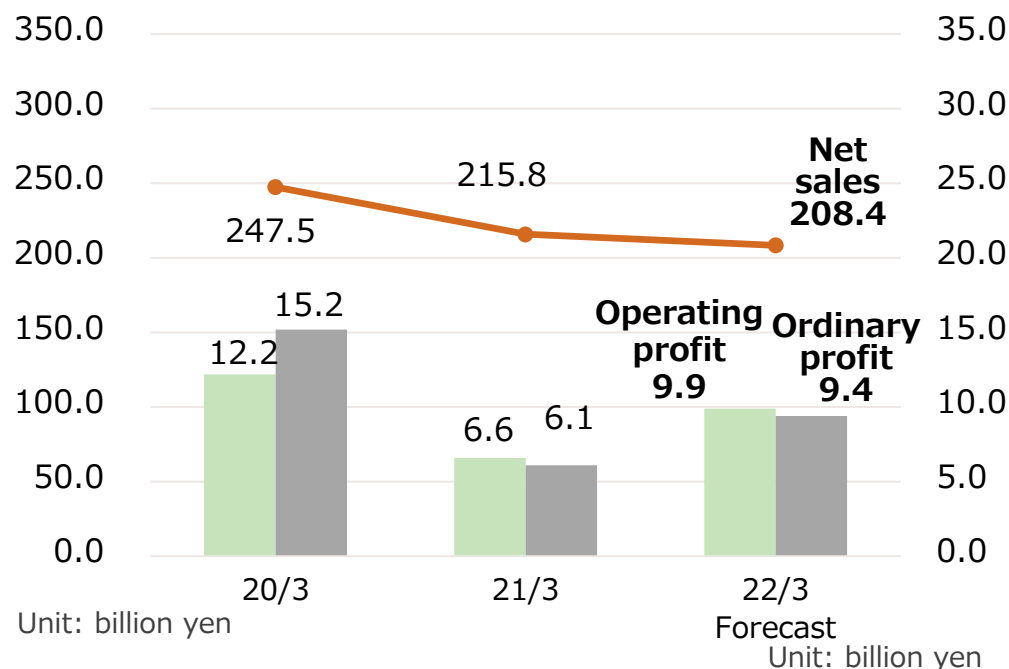




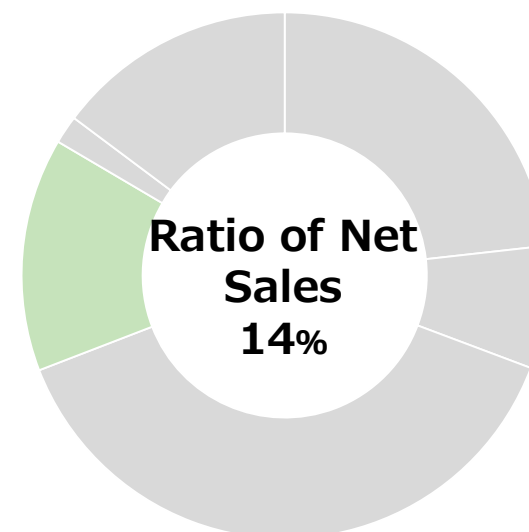
Cement Business



Trends of Consolidated Earnings



Ratio of Net Sales by Business Segment



*FY2021 results (sales to outside customers)

FY2022 Business Overview

◆ Domestic

Domestic demand for cement is expected to be 39.0 million tons, approx. the same as the previous fiscal year. This is because construction investment in the private sector is expected to remain weak due to the impact of COVID-19, although public demand will remain steady.

◆ Overseas

The Cement Business expects approximately similar sales volume levels as the previous fiscal year. The ready-mixed concrete business expects an increase in sales due to solid sales for large logistics related projects.



Cement Business



Long-term business goals | Becoming a leader in the cement industry in Japan and abroad using advanced environmental technologies

Long-term strategy

- Stable supply of basic building materials for the construction of social infrastructure, disaster prevention infrastructure, etc.
- Sophistication of waste treatment
- Responding to climate change by reducing CO2 emissions
- Construction of a resilient domestic business foundation through business restructuring and growth in overseas markets

	Medium-term Management Strategy		
	Key strategies	FY2021 results	Plans for FY2022 and beyond
Domestic	Optimization and streamlining of production system through restructuring of domestic business	<ul style="list-style-type: none"> • Signed the final agreement with Ube Industries, Ltd. regarding the integration of cement business, etc. on September 29, 2020 	<ul style="list-style-type: none"> • Continue preparation for business integration in April 2022 • Consider integration synergies
	Increase waste treatment volume, and reduce of CO2 emissions	<ul style="list-style-type: none"> • Expand coal ash processing capacity • Started installation of demonstration test facility for CO2 separation and capture 	<ul style="list-style-type: none"> • Strengthen Kyushu Plant Installation of recycled oil receiving and injection facilities • Strengthening of the capability of waste plastic processing facilities • Enhancement of 4K burner efficiency
Overseas	Expand U.S. business (Expand ready-mixed concrete business)	<ul style="list-style-type: none"> • Considered the acquisition of aggregate mines in Southern California at Robertson's Ready Mix, Ltd. (RRM) • Developed software for the efficiency and optimization of logistics system 	<ul style="list-style-type: none"> • RRM/Aim to obtain ready-mixed concrete business (plants) • RRM/Aim to obtain aggregate business (mines) • Plan to reduce maintenance costs and increase safety by promoting DX×IT.
	Entering new markets to expand business areas	<ul style="list-style-type: none"> • Discussed market-entry strategy and conducted market research 	<ul style="list-style-type: none"> • Identify the partners(acquisition/alliance), and implement the market-entry



Environment & Energy Business



Environment & Energy Business

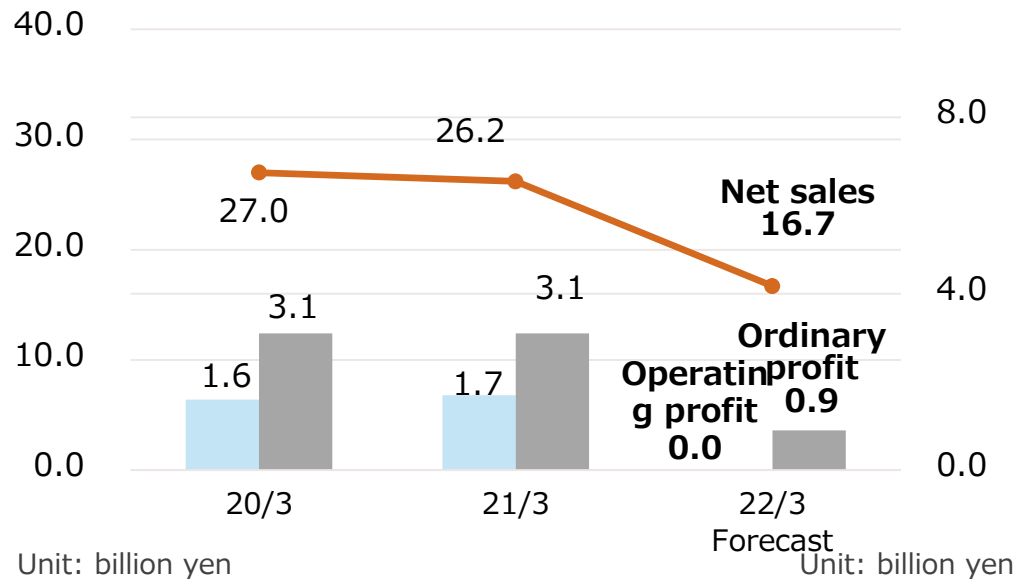




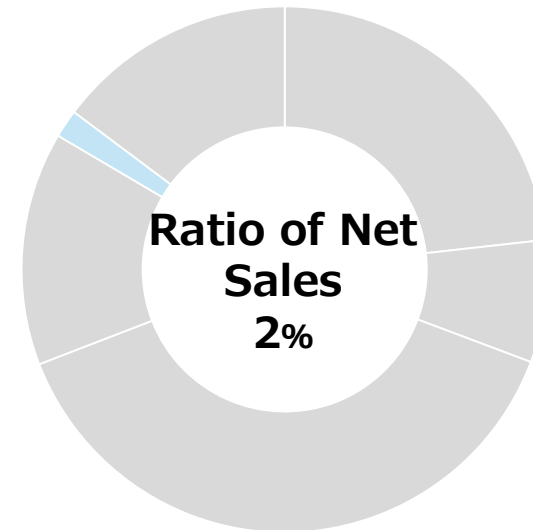
Environment & Energy Business



Trends of Consolidated Earnings



Ratio of Net Sales by Business Segment



*FY2021 results (sales to outside customers)

FY2022 Business Overview

◆ Environmental recycling

In the home appliance recycling business, promote introduction of automated technology, incl. DX and manpower reduction. In the car recycling business, continue to promote verification of LiB recycling system in Kita Kyushu, a government commissioned business by the Ministry of the Environment. In the fly ash recycling business, promote expansion of collection volume and optimization of processing at Kita Kyushu Ash Recycle Systems Co., Ltd. In the food waste biogasification business, increase collection volume and promote early and stable plant operations at New Energy Fujimino Co., Ltd.

◆ Renewable energy

Proceeded construction work of Komatagawa new hydroelectric power plant and Appi Geothermal Power Plant as planned, and started full-scale excavation work at Appi Geothermal Power Plant construction. Established Hachimantai Green Energy Company through the merger of Akita Power Company and Hachimantai Geothermal Energy Company in April 2021.



Environment & Energy Business



**Long-term business goals | (Environmental recycling) Becoming a leader in resource-recycling systems
(Renewable energy) Becoming a leading company in geothermal development**

Long-term strategy

- Provision of a safe recycling system with thorough traceability, etc.
- Decarbonization through the expansion of the Renewable energy business

	Medium-term Management Strategy		
	Key strategies	FY2021 results	Plans for FY2022 and beyond
Environment recycling	Home appliance recycling Promote automated dismantling, and value-addition of recovered materials	<ul style="list-style-type: none"> Introduced automatic picking robots in the dismantling lines for washing machines and outdoor air-conditioner units. Verified technologies and put into practical use 	<ul style="list-style-type: none"> Develop automatic dismantling technology in home appliance recycling, and aim to apply picking robots to other plants Use the cloud computing system (DX) in operation management systems, to share/utilize data
	Demonstrate LiB recycling technology, demonstrate solar panel recycling	<ul style="list-style-type: none"> Accepted a commissioned business from the Ministry of Environment (July 2020) Started demonstration business of LiB coherent proper processing system Designed improvements for solar panel recycling facilities 	<ul style="list-style-type: none"> Continue LiB recycling system demonstration business in Kita kyushu Introduce devices for deterioration diagnosis, LiB dismantling, thermal decomposition, and crush sorting in FY2022 Conduct construction work to move *EJRS after expansion, and conduct technical verification test
	Secure stable plant operations of the fly ash recycling business and the food waste biogasification business	<ul style="list-style-type: none"> Improve facilities for stable plant operations, and promote process optimization Started operations of New Energy Fujimino Co., Ltd. (NEFC) on September 4, 2020 	<ul style="list-style-type: none"> In the incineration fly ash recycling business, further increase receiving volume, promote process optimization, and secure stable plant operations In the food waste biogasification business, increase the collection volume at NEFC, while promoting early and stable operations, and considering the commercialization of the second plant
Renewable energy	Completion of Komatagawa new hydroelectric power plant Construction of Appi Geothermal Power Plant Survey of new geothermal sites Survey of new small hydropower	<ul style="list-style-type: none"> Continued excavation of tunnels, etc., as planned in Komatagawa new hydroelectric power plant Continued construction work to create entry paths and started excavation work of production well in Appi Geothermal Power Plant as planned 	<ul style="list-style-type: none"> Construction for the tunnel at Komatagawa new hydroelectric power plant will have full line opened in October 2021. Operations are expected to start in December 2022. In the new geothermal energy survey, acquire licenses/permits, and progress is expected through excavation survey

4. Overview of Medium-term Management Strategy Revisions (FY2021-2023)

Status of business portfolio optimization

<Group-wide Policy>

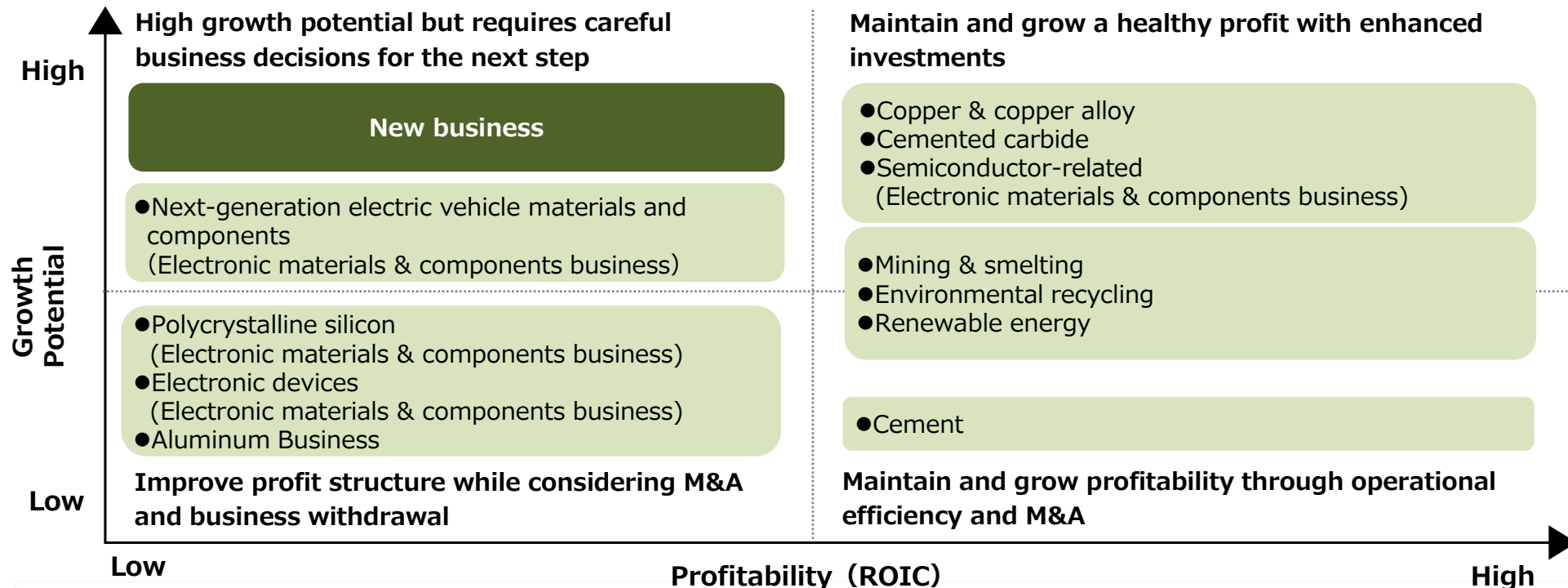
- **Optimization of Business Portfolio**
- Comprehensive efforts to increase business competitiveness
⇒ Manufacturing excellence, quality management and digital transformation strategies
- Creation of new products and businesses
⇒ R&D and marketing strategy

【Characteristics of businesses that the company should take ownership of】

- Businesses that are consistent with the Group's vision and mission
- Businesses that are governable by the Group
- Businesses that are capable of earning a leadership role in a specific region or the world
- Businesses that can deliver stable returns over capital costs on a medium- to long-term basis

【Building business portfolio】

- Profitability and growth potential determine the business direction
- Profitability is measured by ROIC (spread)
- Growth potential is measured by EBITDA growth rate, etc.



The Electronic materials & components business is a complex business entity comprised of multiple businesses. The company positioned its entire business as a single unit in the original FY2023 Strategy.

At this time of review, the company subdivided the Electronic materials & components business from the point of ownership, development recourses, relevance to the Company's technology, profitability and growth potential, and clarified its positioning in the business portfolio.

Going forward, the Company will manage each business depending on such positioning.

Financial Plan: (Consolidated) Financial Goals

【Outlook for current and future business environment】

Although business performance has been suffering from the impact of COVID-19, with increasing vaccine availability and acquisition of herd immunity, etc., it is gradually recovering. The Company has formulated a revised financial plan assuming that the Advanced Products Business and the Metalworking Solutions Business will recover to pre-COVID-19 performance levels by FY2023, while the Cement Business may be impacted by accounting changes to the equity method and the Metals Business may be impacted by a decreasing dividend income from mines. However, our forecast of FY2023 results will have significant downward revisions from the original target, and that the timing for reaching the original FY2023 target will be delayed later than FY2024.

(Unit: billion yen)

		FY2023 Original Target (※ 1)	FY2023 Revised Target (※ 1)	Increases & decreases
ROIC (%)		6.0	4.0	-2.0
ROA (ordinary income to total assets) (%)		4.0	2.0	-2.0
ROE (%)		7.0	6.0	-1.0
PL	Net sales	1,530	1,410	-120
	Net sales (excluding metal)	650	600	-50
	Operating profit	58	29	-29
	Ordinary profit	75	38	-37
BS	Total assets	2,040	1,820	-220
	Net interest-bearing debt	510	360	-150
	Shareholders' equity	630	560	-70
Net D/E ratio (times)		1.0 or less	1.0 or less	—

Financial Plan : (Consolidated) Financial Goals



(Unit: billion yen)

		FY2020 Result	FY2021 Result	FY2023 Target (※1)	Change rate from FY2020	Remarks
ROIC (%)		3.8	3.8	4.0	+0.2points	
ROA (ordinary income to total assets) (%)		2.6	2.3	2.0	-0.6points	
ROE (%)		-12.8	4.6	6.0		
PL	Net sales	1,516.1	1,485.1	1,410.0	-7%	【Ordinary income fluctuation factors】 Market conditions 5.5 Metal prices 3.0 Exchange rate 2.0 Dividend from mine -5.5 Impact of the change in accounting treatment of cement business becoming a minority share holding -10.0 Others -6.6 Total -11.6
	Net sales (excluding metal)	857.3	795.1	600.0	-30%	
	Operating profit	37.9	26.5	29.0	-23%	
	Ordinary income	49.6	44.5	38.0	-23%	
BS	Total assets	1,904.0	2,035.5	1,820.0	-4%	
	Net interest-bearing debt	413.1	476.3	360.0	-13%	
	Shareholders' equity	506.7	545.2	560.0	+11%	
Net D/E ratio (times)		0.8	0.9	1.0 or less		
Assumptions	Exchange rate (yen/\$)	109	106	110		【Sensitivity】 ◆ 1 yen increase in USD/JPY exchange rate: +0.8 billion yen ◆ 10¢/lb increase in copper price (LME) : +1.6 billion yen (Ordinary income)
	Exchange rate (yen/€)	121	124	130		
	Copper price (¢/lb)	266	312	330		

※1 Assuming transition to equity method in cement business

Financial Plan : (Consolidated) Financial Indicators



- Focus on medium- to long-term profitability and growth potential
- Profitability is measured by ROIC and growth potential by EBITDA, etc., for each business
- Complementary use of ROA in process-type businesses
- ROIC/ROE/ROA are used together as group-wide financial indicators

		FY2018-2020 Average	FY2023 Target
The whole MMC group	ROIC	4.2%	4.0%
	ROA	3.1%	2.0%
	ROE	-2.0%	6.0%

<Main Businesses>

		FY2018-2020 Average	FY2023 Target	By business division KGI	FY2018-2020 Average	FY2023 Target
Advanced Products Business	Copper & Copper alloy	3.8%	3.0%	EBITDA	14.4 billion yen	14.0 billion yen
	Electronic materials	2.5%	4.2%	EBITDA	4.1 billion yen	11.0 billion yen
Metalworking Solutions Business	Cemented Carbide	8.3%	5.3%	EBITDA	28.1 billion yen	22.0 billion yen
Metals Business		25.0%	12.9%	ROA※1	8.9%	7.2%
Environment & Energy Business	Environmental Recycling	1.4%	2.4%	ROA	2.0%	2.8%
	Renewable energy	4.3%	2.6%	ROA	5.6%	3.3%

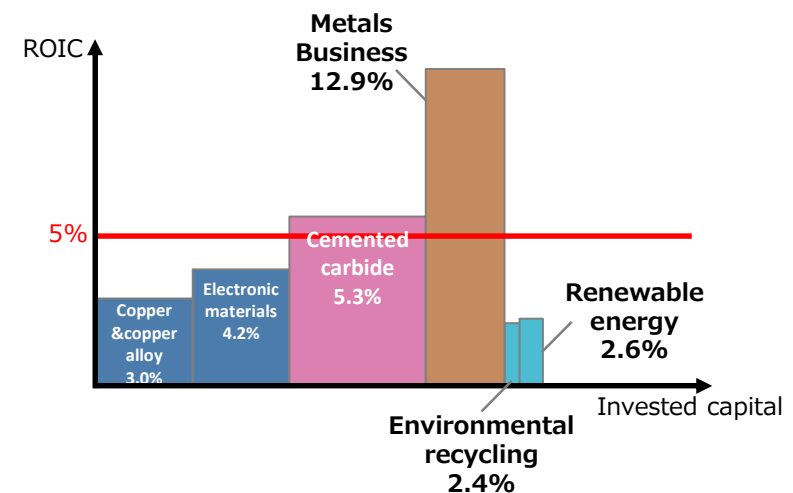
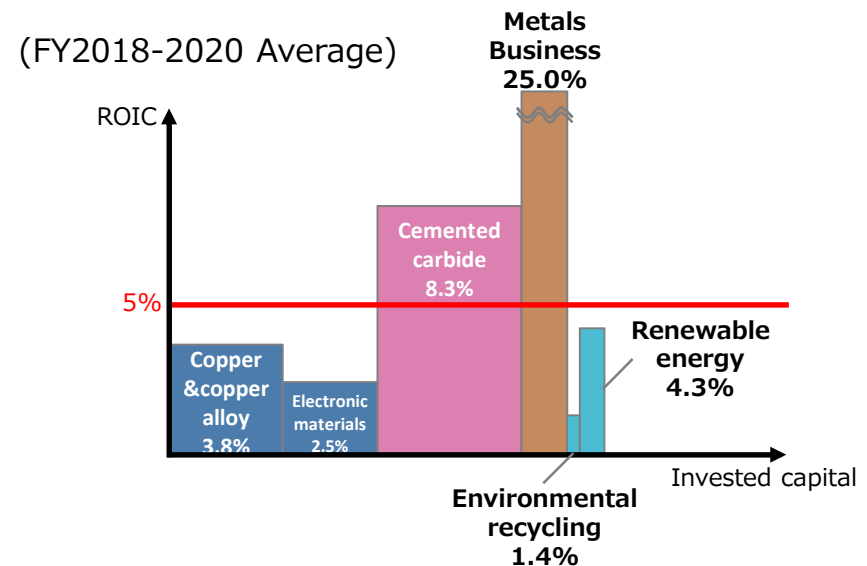
ROIC = NOPAT / invested capital

NOPAT : (Ordinary profit + interest on funds) x (1-effective tax rate)
Profit before tax includes share of profit/loss of investments accounted for using equity method and dividend income

Invested capital : Excludes amount equivalent to inventories that are risk-free because of price hedging

※1 Calculated by excluding the price of bullion

Changes in ROIC of main businesses in FY2023 Strategy



Financial Plan: Numerical Target of (Consolidated) Financial Indicators

- During the period of FY2023 Strategy, the Company will solidify our efficiency and profitability, which will be necessary pre-conditions for maintaining a solid growth trajectory.
- The Company aims to achieve the original FY2023 Strategy target promptly in or after FY2024.

Main Business		ROIC		EBITDA/ROA	
		FY2023 Original Target	FY2023 Revised Target	FY2023 Original Target	FY2023 Revised Target
Advanced Products Business	Copper & Copper alloy	4.0%	3.0%	20.0 billion yen	14.0 billion yen
	Electronic materials	6.0%	4.2%	16.0 billion yen	11.0 billion yen
Metalworking Solutions Business	Cemented Carbide	7.0%	5.3%	39.0 billion yen	22.0 billion yen
Metals Business		10.5%	12.9%	6.5%	7.2%
Environment & Energy Business	Environmental Recycling	4.0%	2.4%	6.0%	2.8%
	Renewable energy	4.0%	2.6%	5.5%	3.3%

Financial Plan : Measures to Improve Financial Indicators

Business	Short-term improvement measures	Medium- to long-term improvement measures
Copper & copper alloy	<ul style="list-style-type: none"> Strengthen customer connections through DX Sales expansion of in-vehicle related products (to respond to demand recovery) <u>Improve yields and reduce non-profitable inventory</u> <u>Full-scale improvement activities through CCC monitoring</u> 	<ul style="list-style-type: none"> Improve productivity through DX Further sales expansion of in-vehicle related products Sales expansion of products for terminals and connectors to capture the increasing demand for data usage Sales expansion of products in preparation for tighter lead regulations (EcoBrass) Establish overseas supply system through cooperation with Luvata Group Increase production of power semiconductors-related products
Electronic materials & components	<ul style="list-style-type: none"> Strengthen customer connections through DX Sales expansion of vehicle-mounted, electronics related products in order to respond to demand recovery <u>Reduce inventory of non-profitable products, reduce LT (reduce work in process)</u> 	<ul style="list-style-type: none"> Improve productivity through DX Sales expansion of semiconductors-related products <u>Business development based on the positions of business portfolio</u>
Metalworking Solutions	<ul style="list-style-type: none"> Improve customer connections, productivity, and quality levels through DX Reconstruction of production systems to flexibly respond to demand changes Global expansion of cemented carbide tools recycling process (recovery to renewal) <u>Streamline global logistics and supply chain</u> 	<ul style="list-style-type: none"> Advancement of customer connections and solutions through DX (increase sales) Expand production and sales functions (inc. M&A) Expand the Advanced metal powder business Strategic investment in growing markets <u>Manage demand-supply through DX (reduce work in process)</u>
Metals	<ul style="list-style-type: none"> Increase production volume (improve utilization rate of smelters) Increase margin revenue, reduce fuel costs (improve process rate of E-Scrap) Expand retail sales of precious metals <u>Collect loans which was provided to mine-borrowers in order to support their operation</u> 	<ul style="list-style-type: none"> Promote utilization of recycling data through DX Increase production volume (improve utilization of smelters) Increase margin revenue, reduce fuel costs (improve process rate of E-Scrap) Have a beneficial effect from invested mines (increase share of profits of investments accounted for using equity methods, and loan collections) Recovery of TC/RC
Environment recycling	<ul style="list-style-type: none"> Increase the processing volume of disposed home appliances and other recyclable materials Secure stable plant operations in the fly ash recycling business and the food waste biogas power generation business Advance automation, improve productivity through DX, and add value to recovered products 	<ul style="list-style-type: none"> Improve productivity through DX, and promote the utilization of recycling data Establish traceable recycling systems Construct new high-efficient recycling processing plants, and expand the number of plants Alliance, M&A (car recycling)
Renewable energy	<ul style="list-style-type: none"> Secure stable plant operations and discuss expansion of renewable energy business (New geothermal energy power generation, new small hydropower generation) Improve unit sales price (adding environmental value) 	<ul style="list-style-type: none"> Expand the number of bases of the Renewable energy business Increase the number of power generation bases (development, construction, and operations focusing on investment return)

Underlined items are the measures to reduce invested capital

Financial Plan : Review of resource allocation

Investment Policy

◆ Cumulative cash flows from FY2021 to 2023 (Consolidated)

Cash in (Unit: billion yen)

	Original Plan	Revised Plan	Increases & decrease
Operating CF	2 8 0	2 4 0	- 4 0
Others	6 0	1 4 5 ※1	8 5
Total	3 4 0	3 8 5	4 5

※1 Business restructuring and sales of strategic holdings

Cash out

(Unit: billion yen)

		Original Plan	Revised Plan	Increases & decreases
Investing CF	Investment for growth	1 9 0	1 9 5	5
	Investment for maintenance and upgrading	1 7 0	1 6 0	-10
	Subtotal	3 6 0	3 5 5	-5
Financing CF	Dividends ※2	4 6	4 2	-4
Total		4 0 6	3 9 7	-9

※2 Dividends paid, share buybacks, and cash dividends paid to non-controlling shareholders

◆ Cumulative investment plan from FY2021 to 2023 (Consolidated)

(Unit: billion yen)

	Advanced Products	Metalworking Solutions	Metals	Cement	Environment & Energy	Others
Original plan	82	107	74	30	15	52
Revised Plan	78	81	93	47	18	38
Increases and decreases	-4	-26	19	17	3	-14
Breakdown of major increases and decreases	Decrease of investment for growth	Decrease of investment for growth Increasing M&A	Increasing investment to mines	Increasing investment in business integration Increasing investment in environmental measures (US)	Increasing growth investment for household appliances and renewable energy	Decreasing capital expenditure in the Aluminum business

While operating CF is expected to decrease due to the impact from COVID-19, the Company will restrain growth investment during the FY2023 Strategy period in businesses where demand expansion will be slower than expected, and aggressively invest in mines and M&A that are expected to generate high profits due to copper price hike. In addition, the Company will ensure it invests in renewals to minimize opportunity cost due to problems with aging facilities and thereby securing a foundation for profitability and leading to future growth.

Shareholder return policy

- The Company will set the minimum annual dividend amount for the period of FY2023 Strategy at 50 yen per share
- By accelerating the sale of assets, among others, and making expeditious allocations of funds including share buybacks and additional dividends, the Company aims to return profits to its shareholders at the same level as the total amount of dividends initially planned during the period of FY2023 Strategy.

	Original Plan	Revised Plan
Dividends	80yen/share	50yen/share

Business Strategy : Review of Goals for Contributing to a Sustainable Society

The Company have revised the following three goals based on the outlook of the current and near future business environment

Contribution Goals	Original Goals	Revised Goals	Reasons for revision
Sales volume of copper materials for new hybrid and electric vehicles	FY2023 1,000t	<u>FY2023 1,200t</u>	- Change in the market trends (Reflection on sales status of new products)
Net sales of next-generation vehicles and environmentally friendly products	FY2023 20.3 billion yen	<u>FY2023 5.6 billion yen</u>	- Change in the net sales forecasts (Weak implementation of measures and impact of product changes)
Annual total power generation of renewable energy	FY2026 550GWh	<u>FY2031 533GWh</u>	- Change in the definition of the generation volume of each business (power generation and geothermal steam supply) multiplied by the Company's ownership share - Change in the target fiscal year to FY2031, which is also the target year of GHG reduction.

Business Strategy : Contribution Goals for a Sustainable Society



Sales volume of copper materials for new HV/EV

1.2 times or more

FY2020 Result
989t

FY2023 target
1,200t



Sales volume of materials for next-generation vehicles and environmentally friendly products

1.3 times or more

FY2020 Result*1
4.2billion yen

FY2023 target
5.6 billion yen



Ratio of recycled tungsten as raw material in cemented carbide tools

Up 25%

FY2020 Result
28%

FY2023 target
35%



E-Scrap processing capacity

Up 25%

FY2020
160,000t

FY2031 target
200,000t



Waste and by-products processing volume in cement production

Up 15%

FY2020 Result
3.9million tons

FY2031 target
4.5 million tons
(FY2020 production volume basis)



Annual processing volume of home appliance recycling

Up 27%

FY2020 Result
2.8million units

FY2023 target
3.5 million units



Annual total power generated by renewable energy

Up 22%

FY2020 Result
437GWh

FY2031 target
533GWh

Greenhouse Gas (GHG) Reduction Target

- Target setting for becoming a carbon neutral company by FY2051
- Aiming to reduce GHG emissions by 17% or more by FY2031 for the entire Group (compared with FY2014)
- Striving for at least 30% reduction in the Advanced Products and the Metalworking Solutions Businesses, where energy-derived emissions predominate

※1 Reviewed definition of the applicable automotive device products

※2 Revised definition of the generation volume of each business (power generation and geothermal steam supply) multiplied by the Company's ownership share

5. ESG Initiatives

ESG Effort (Topics for FY2021)

Environment

➤ Response to climate change

- Setting the targets of Greenhouse Gas (GHG) emission reduction
(The Company aims to be carbon-neutral by FY2051 and reduce carbon emissions by 17% or more by FY2031)
- Setting targets for the percentage of renewable energy used and for power generation
(At least 20% increase in usage compared with FY2031 and power generation target of 533GWh)
- Disclosure of the results of scenario analysis
- CCU* Starting Carbon Capture Utilization (synthesis of methanol, etc) technological development verification test
- PPA* Beginning operation of solar power energy generation facilities using power purchase agreement model
(promote electric power procurement from renewable energy)
- Participation in “Challenge Zero” of Japan Business Federation (Keidanren)

➤ Expansion of renewable energy business

- Started new small hydropower survey and exploration in addition to survey of new geothermal sites

➤ Pursuing a recycling-based business model

- Starting the operation of a food waste biogas power-generation plan
- Investment to Masan High-Tech Materials Corporation
(starting discussion about collaboration on expansion of tungsten recycling)

➤ Effort to reduce environmental load

- Developed “GloBrass” which is the next-generation lead-free cutting brass

Social

- Creation of new labor environment resulting from COVID-19 crisis
(Positioning and optimization of the head office as the communication hub)
- Offering “CLEANBRIGHT®”, which is a discoloration-resistant copper alloy with bacteria-resistant and virus-resistant properties (ballpoint pens and mechanical pencils)

Governance

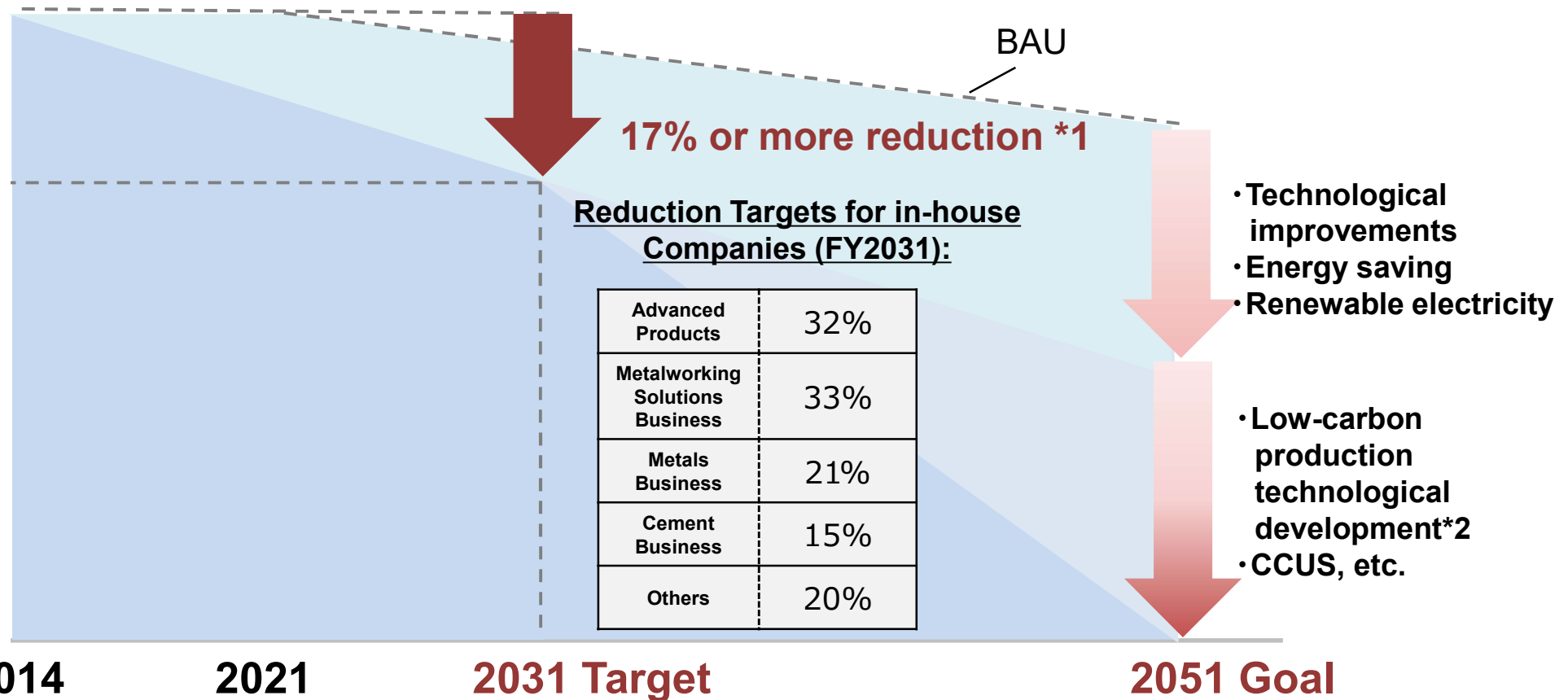
- Strengthening group governance system
- Increase the ratio of external directors from six among 11 during FY2020 to six among ten during FY2021
- Review of executive remuneration system
- Reducing strategic holdings of stocks (the total sales proceeds during FY2021 were approximately 62.4 billion yen, equivalent to approximately 54% of amount recorded on the balance sheet as of the previous fiscal year end)

*CCU : Carbon Capture and Utilization

*PPA : Power Purchase Agreement

Greenhouse Gas (GHG) Emissions Reduction Target

- Reduce GHG emissions of the MMC Group **by 17% or more by FY2031** (compared to FY2014)
- Reduce emissions by **30% or more in the Advanced Products and the Metalworking Solutions Business**, whose energy emissions are the most significant
- Use renewable energy sources for over 20% of the Group's total electricity consumption by FY2031.
- Aim to become **carbon-neutral company by the end of FY2051**



※1 Scope1 + Scope2

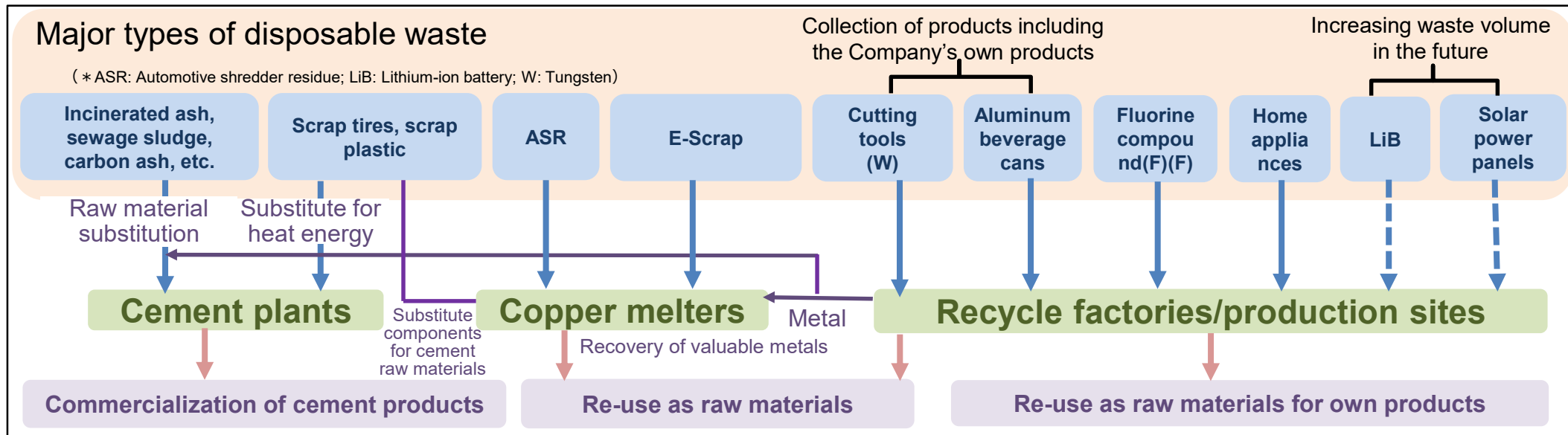
※2 Transition to a production process that utilizes hydrogen/electric energy

Achieve carbon neutrality

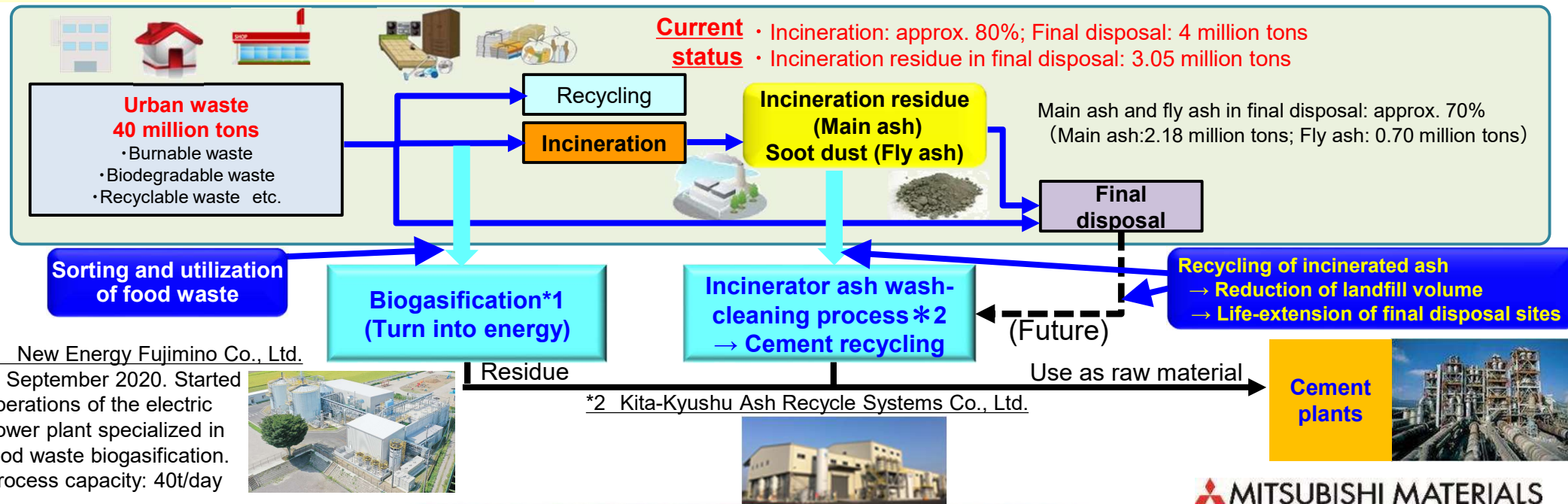
• Scope1 : Direct GHG emissions by business operators

• Scope2 : Indirect emissions resulting from the use of electricity, heat, and steam supplied by other companies

Overall Picture of Circular Business



Approach to urban waste disposal



Recycling Business Operated by the Group



Recycling of tungsten (Metalworking Solutions Business)

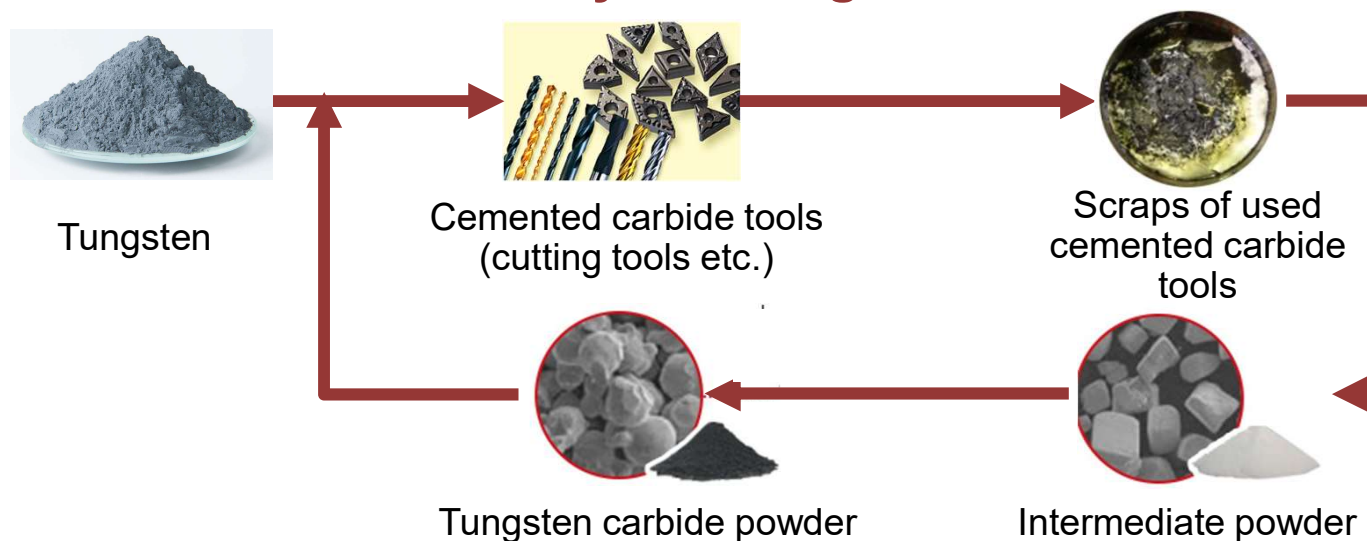
■ Target (FY2023)

Ratio of recycled tungsten included in raw materials: 35% (FY2020 result: 28.3%)

■ Initiatives

- It is imperative to increase the recycling ratio in order to secure the steady procurement of tungsten. Promote recycling by converting used cemented carbide tools into raw materials
- Investments in Masan High-Tech Materials (Vietnam), discussed collaboration in recycling business

■ Process to convert recycled tungsten into raw materials



Recycling Business Operated by the Group



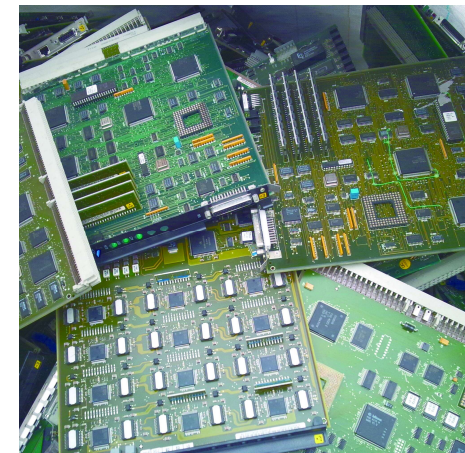
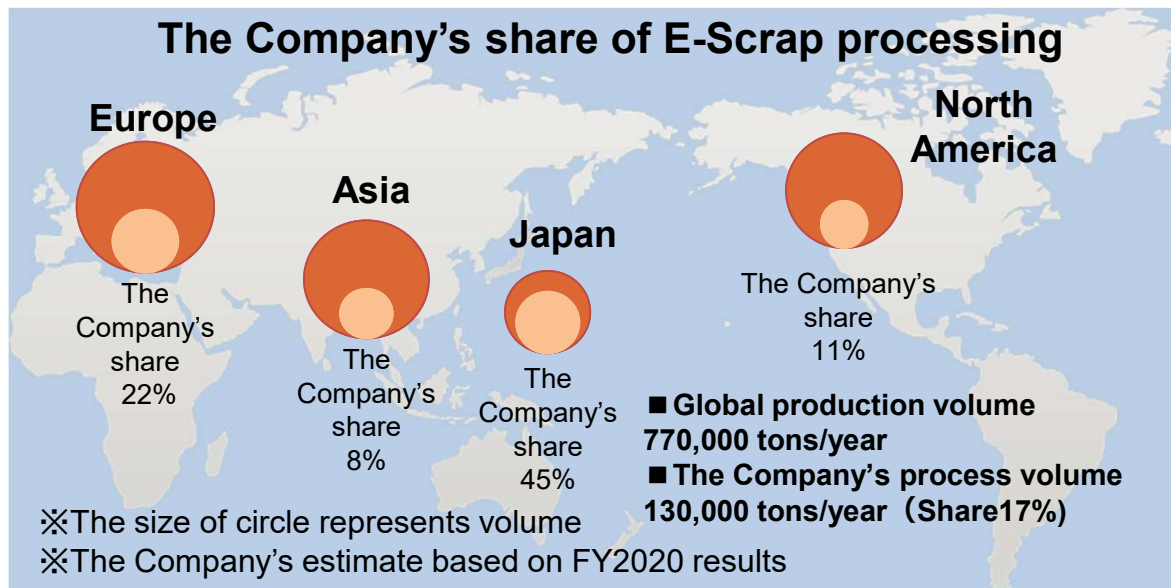
Recycling of E-Scrap (Metals Business)

■ Target (FY2031)

Processing capacity of E-Scrap: 200,000 tons/year
(FY2020 actual processing capacity: 160,000 tons/year)

■ Initiatives

- Collect E-scrap, such as electric boards and connectors collected from discarded home appliances, from around the world. (FY2020 result: collection from 47 countries)
- The Group's smelters efficiently recycle valuable metals such as copper, gold, silver, platinum, palladium, lead, tin, etc., included in the E-scrap (material grid).



**E-Scrap
(Electronic
substrate)**

For further information, please contact at:

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<Disclaimer>

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.