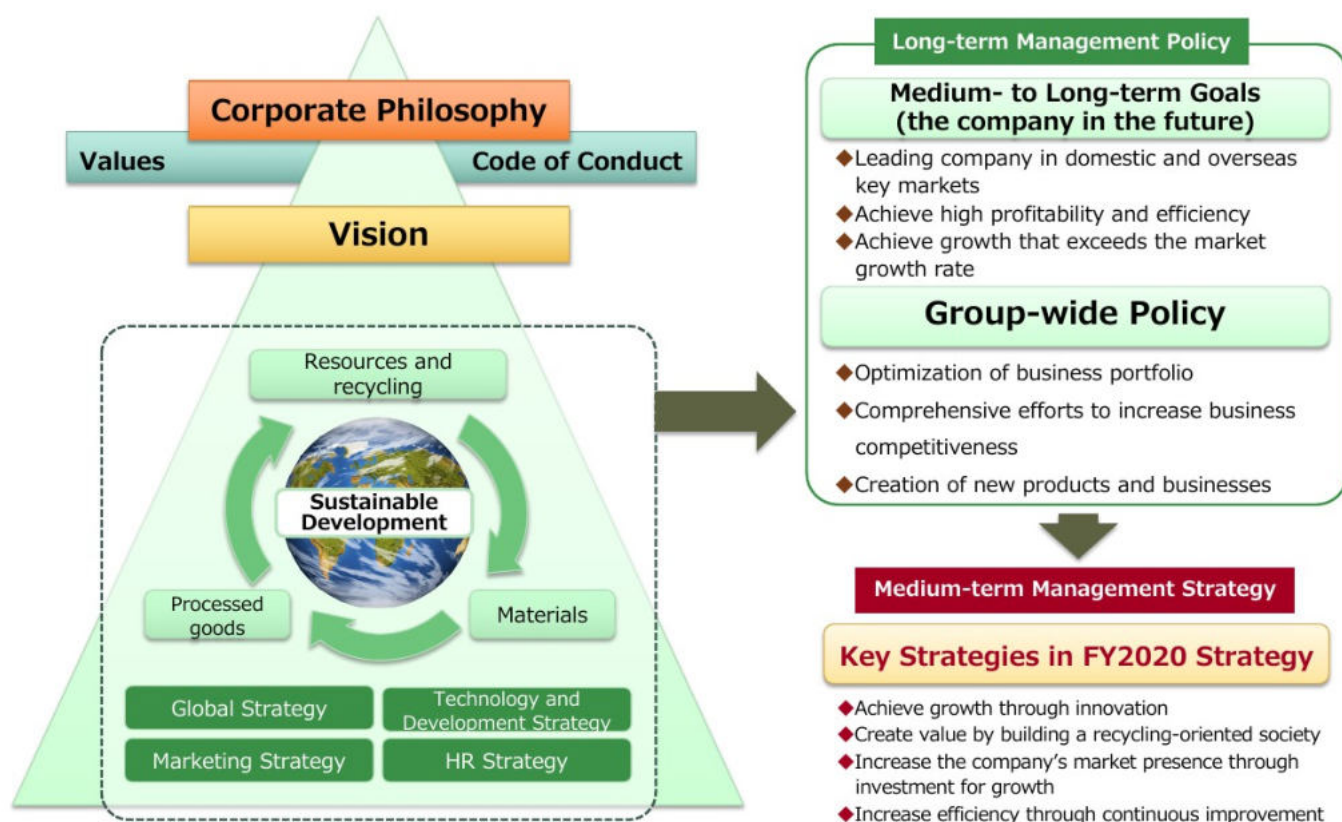


# Investor Conference Call for the Medium-term Management Strategy

**Mr. Naoki Ono (hereinafter "Ono"):** I am Ono, Chief Executive Officer of Mitsubishi Materials Corporation. Thank you for joining the conference call today. I also appreciate your continued interest in MMC's business. In this session, I will explain the Medium-term Management Strategy. Please understand that the presentation has been switched to a conference call due to the recent coronavirus outbreak. Now, I would like to begin explaining the following material. The outline of this presentation material is divided into two main parts, as you can see in the contents on page 2. The first is the "Review of Current Medium-term Management Strategy" which is called the "FY2020 Strategy". The second is the "Overview of New Medium-term Management Strategy, which is called the "FY2023".

## Overview

### I Review of FY2020 Strategy : **Overview**



Please look at page 3. This is an overview of the current FY2020 Strategy, which was announced in 2017.

# Results of Major Business Expansion and Progress of Key Strategic Measures

## I Review of FY2020 Strategy : Results of Major Business Expansion and Progress of Key Strategic Measures

Segments	Executed key strategic measures	Delayed key strategic measures
<b>Advanced Products Business</b>	<ul style="list-style-type: none"> <li>Acquired Special Products Division of Luvata</li> <li>Started collaboration with Denka Co., Ltd. for ceramic insulated circuit substrates with high thermal dissipation for environmentally friendly vehicles</li> <li>Pursued an absorption-type merger of Mitsubishi Shindoh, a consolidated subsidiary</li> </ul>	<ul style="list-style-type: none"> <li>Synergies effect with Luvata (Cause of delay: ❶)</li> <li>Enhancement of thermistor sensor for automobiles and refrigerators for market expansion (Cause of delay: ❷)</li> </ul>
<b>Metal-working Solutions Business</b>	<ul style="list-style-type: none"> <li>Expanded recycling capacity of tungsten by 1.5 times</li> <li>Established technical centers in various markets</li> <li>Resolved to make Mitsubishi Hitachi Tools a wholly owned subsidiary</li> </ul>	<ul style="list-style-type: none"> <li>Improvement of asset efficiency in manufacturing (Cause of delay: ❸)</li> </ul>
<b>Metals Business</b>	<ul style="list-style-type: none"> <li>Launched an E-Scrap sampling facility in the Netherlands</li> <li>Acquisition of stake in the Mantoverde copper mine in Chile</li> </ul>	<ul style="list-style-type: none"> <li>Expansion of E-Scrap processing (Cause of delay: ❹)</li> </ul>
<b>Cement Business</b>	<ul style="list-style-type: none"> <li>Expanded waste plastic process capacity of Kyushu Plant by 1.7 times</li> <li>Expanded into Northern California area</li> <li>Signed a Letter of Intent with Ube Industries, Ltd. regarding integration of cement business, etc.</li> </ul>	<ul style="list-style-type: none"> <li>Development of new overseas bases</li> <li>Improvement of the cement manufacturing technology in Japan and the US (Cause of delay: ❺)</li> </ul>
<b>Environment and Energy Business</b>	<ul style="list-style-type: none"> <li>Started joint development of recycling technology for lithium-ion battery</li> <li>Established a food waste biogas business company</li> <li>Started operations of Wasabizawa Geothermal Power Plant and construction of Appli Geothermal Power Plant</li> </ul>	<ul style="list-style-type: none"> <li>Incineration fly ash cleaning plant for cement recycling (Cause of delay: ❻)</li> </ul>
<b>Group wide</b>	<ul style="list-style-type: none"> <li>Sold all shares in Mitsubishi Materials Real Estate Corporation</li> <li>Invested in Incubation Alliance Inc., which develops and manufactures Graphene</li> <li>Established New Business Development &amp; Promotion Division and EV Material Development &amp; Recycling Business Promotion Department</li> <li>Established MMC Innovation Investment Business Limited Liability Partnership</li> <li>Established Smart Factory Promotion Center</li> </ul>	

**Cause of delay**

- ❶ Insufficient marketing activities
- ❷ Insufficient gathering of customer information
- ❸ Insufficient ability to solve manufacturing problems on site etc.

**Countermeasures**

- Strengthen marketing
- Promote digitalization
- Fortify manufacturing excellence

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Page 4 shows the progress and delay of key strategies in the FY2020 Strategy. Although the key strategies have some parts in common, they are divided according to segments, and the executed key strategic measures are listed in the left column. These include the acquisition of stake in the Mantoverde copper mine in the Metals Business announced in February 2020, the 100% acquisition of the Mitsubishi Hitachi Tool Engineering, Ltd., in the Metalworking Solutions Business, and the signing of a Letter of Intent regarding business integrations with Ube Industries, Ltd., in the Cement Business. On the right column are strategies that MMC planned to pursue during the FY2020 Strategy period, but were delayed. Next to the column, the causes of the delay that were detected are shown, which are classified into three main categories. The first category is insufficient marketing activities. The second category is the insufficient gathering of customer information. Both were due to a poor grasp of the customer's situation. The third category is the internal situation of MMC. R&D stage progressed as planned, however there were troubles in mass production which prevented smooth progress. As a result, MMC is now analyzing if there were insufficient ability to solve manufacturing problems on site. In response to these delay factors, MMC will implement measures such as "strengthening marketing", "promoting digitalization", and "fortifying manufacturing excellence" in this new FY2023 Strategy.

# Consolidated Performance

## I Review of FY2020 Strategy : Consolidated Performance

(Unit: billion yen)

		FY2018 Result	FY2019 Result	FY2020 Forecast (※1)	Estimated FY2020 (※2)
P/L	Consolidated net sales	1,599.5	1,692.9	1,520.0	1,620.0-1,840.0
	Consolidated net sales (excluding metal)	831.1	860.7	830.0	870.0-900.0
	Consolidated operating profit	72.8	36.8	27.0	86.0-95.0
	Consolidated ordinary income	79.6	50.6	40.0	82.0-100.0
ROA (ordinary income to total assets) (%)		4.1	2.6	2.1	4.5-5.0
ROE (%)		5.1	0.2	-	7.0-8.0
Net D/E ratio (times)		0.6	0.6	0.8	0.7
Assumptions	Exchange rate (yen/\$)	111	111	109	100-120
	Exchange rate (yen/€)	130	128	121	120
	Copper price (¢/lb)	292	288	268	250-270

※1 Announced on February 12, 2020

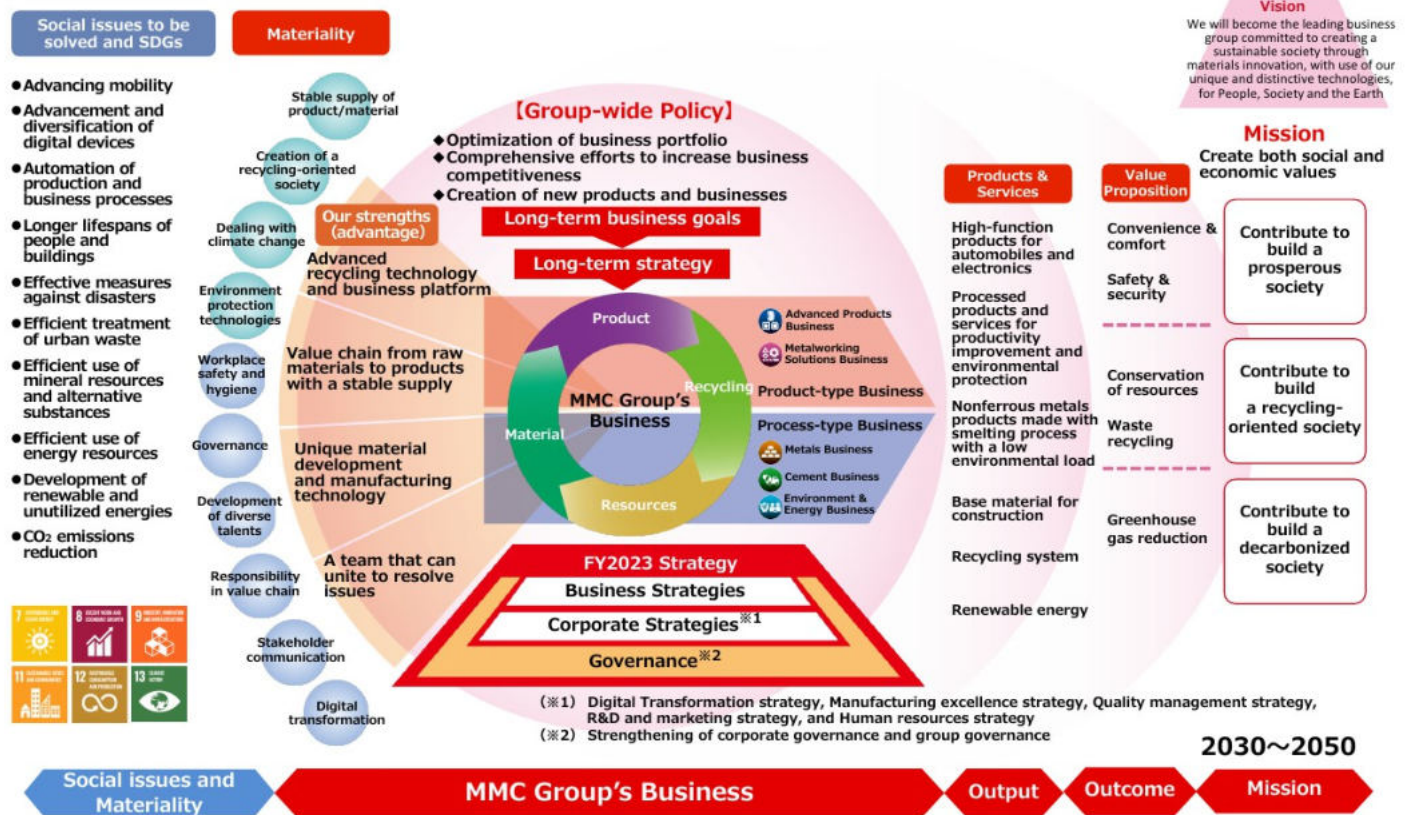
※2 Estimated value at the time of publishing FY2020 Strategy

Page 5 shows the forecast figures for FY2020 announced on February 12, 2020, which is the final year of the current FY2020 Strategy period. These figures are compared to the estimated values at the time of publishing FY2020 Strategy. The two columns on the right show a comparison between the two. The current situation, as announced on February 12, 2020, shows profit levels are very low, and consolidated operating profits and ordinary income in P/L are much lower than the estimated values at the time of publishing FY2020 Strategy. ROA is also low. In addition, because MMC is forecasting to post large extraordinary losses in FY2020, numbers for ROE are not represented as a result of net losses.



# Value Creation Process

## Value Creation Process



Then, I would like to explain the overview of the new FY2023 Strategy Please look at page 7. This picture, which has various things in it, shows the value creation process of MMC. In the far left is a list of the social issues and SDGs that MMC is trying to resolve. The ten circled items are Materiality that MMC recognizes in social issues to be solved and SDGs. The first four circled items are what are referred to so-called as social issues, and the other six items below Workplace safety and hygiene are considered as the Materiality that MMC recognizes for strengthening its management base. The large circle colored in pink in the center represents MMC's business activities themselves. On the left side are "Our strengths" which summarize MMC's cultivated strengths into four categories. By utilizing our strengths, MMC aims to generate the outputs as described on the right, under the "Group-wide Policy" in the center. These will be supplemented with the long-term business goals of each businesses, and the strategies in the FY2023 Strategy which I will explain in this presentation. In regard to Outputs, there are products and services that MMC provides and creates through MMC's business activities. Such products and services will lead to the value that MMC offers. This process shows how it links to the MMC's mission which will now be explained.

# Mission (Corporate Philosophy System)

## Mission (Corporate Philosophy System)



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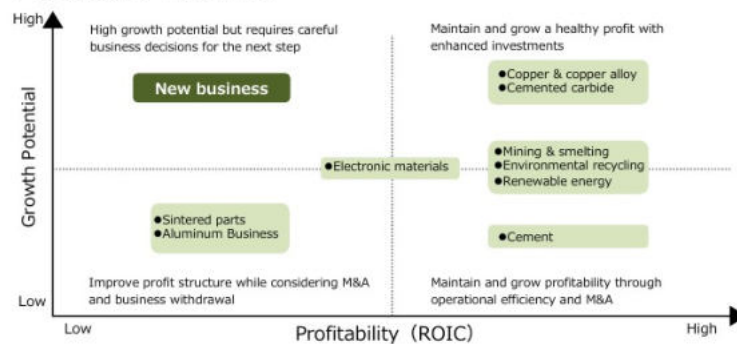
Please look at Page 9. These are the missions which I just mentioned. In order to formulate the FY2023 Strategy, MMC established MMC's mission from 2030 to 2050 based on the goal of creating both social and economic values. They are shown in the red box in the center and are summarized in three points. The first point is "contributing to build a prosperous society by providing nonferrous metal materials, predominantly copper, and high-value-added functional materials and products." The second is "contributing to build a recycling-oriented society by providing recyclable products and advanced technology-based waste recycling." The third is "contributing to build a decarbonized society by developing and promoting the use of renewable energies such as geothermal energy, and ensuring to consider the reduction of environmental impact in manufacturing." These are the three points that summarize our mission. All of them are consistent with our corporate philosophy, "For People, Society and the Earth" as stated at the top. In pursuing such mission, MMC considers the need to move forward with the support of the policies: "Optimization of business portfolio", "Comprehensive efforts to increase business competitiveness", and "Creation of new products and businesses" as stated, as the Group-wide policy at the bottom.



# Optimization of business portfolio

## Optimization of business portfolio

### Portfolio matrix



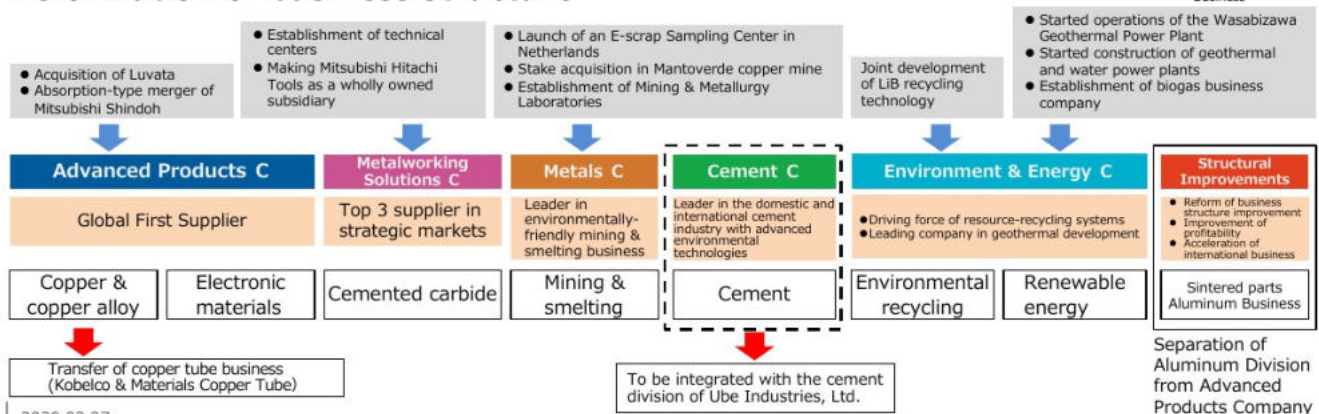
### [Characteristics of businesses that the company should take ownership of]

- 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.

### Reformation of business structure



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Please look at page 10. Now, I would like to explain “Optimization of business portfolio” which I first mentioned in the Group-wide Policy. Page 10 is divided into two parts :the upper part and the lower part. The upper part is the concept for the portfolio. First, on the right, the 4 points seen are shown as the characteristics of businesses that MMC should take ownership of and focus on. These are businesses that are consistent with the Group’s vision and mission, that are governable by the Group, that are capable of earning a leadership role in a specific region or the world, and that can deliver stable returns over capital costs on a medium- to long-term basis with capital cost conscious. These are the fundamental concepts. Based on these points, MMC will build a portfolio that considers the direction of MMC’s business based on two axes :profitability and growth potential. ROIC will be introduced from this time as a measurement of profitability. The figure on the left is a matrix that expresses the two axes of profitability and growth potential, and is divided into four categories from the perspective of profitability and growth potential. The upper right quadrant shows businesses with high profitability and high growth potential, which will be strengthened for further growth. The Copper & copper Alloy business and the Cemented carbide products business fall into this category. The lower right quadrant are businesses that are profitable but have relatively low growth potential. The Cement Business falls into this category. The solution for these businesses can be to streamline duties, or maintain and grow profitability through M&A or alliances with other companies. The Mining & smelting, the environmental recycling and renewable energy are currently placed at an intermediate position. The upper left quadrant shows businesses with high expectations for growth, but profitability currently remains low. Many new businesses are placed here. The lower left quadrant shows

businesses with low profitability and low growth potential. Such businesses should focus on improving profitability first, and then seek business structural improvements while considering alliances with other companies or withdrawing from the business. In MMC's current business, the Sintered parts and Aluminum businesses are placed here. Electronic materials is placed in the center. This is because the Electronic materials consists several businesses or several product groups, and each business or product group is scattered in each quadrant. On the bottom, "Reformation of business structure" is shown, which describes the progress of past and currently ongoing reforms. From the left side, "Advanced Products Company" and others are shown. These are the in-house companies' names by each segment. In contrast, the businesses and facilities, in the grey square above it, recently joined the in-house company as structural reforms. For example, the Advanced Products Company acquired Luvata and an absorption-type merger of Mitsubishi Shindoh Co., Ltd. with Mitsubishi Materials Corporation will be carried out in April 2020. On the other hand, the Copper tube business in the Copper & copper alloy products will be outsourced as shown at the bottom. The Cement Business Company in the center has signed a letter of intent with Ube Industries, Ltd. to begin discussions on integration with its Cement Business as they announced in February 2020. The far right side concerns structural improvements. These are shown in quadrant in the lower left of the upper figure. MMC considers that the Sintered parts and Aluminum business needs to improve their profits thorough business structural improvements or by accelerating strategic overseas expansion. Especially, the Aluminum business was previously positioned as the Advanced Products Company, but was separated from Advanced Products Company into the Aluminum Div., because such structural improvements are needed to be thoroughly implemented.

## Financial Goals

### Financial Plan : Financial Goals

(Unit: billion yen)

		FY2020 Forecast (※ 1)	FY2023 Target (※ 2)	Change rate	Remarks
ROIC (%)		-	6.0		
ROA (Ordinary income to total assets) (%)		2.1	4.0	+1.9points	
ROE (%)		-	7.0		
P/L	Consolidated net sales	1,520.0	1,530.0	+1%	<b>[Ordinary income fluctuation factors]</b> Market conditions 23.5 Performance of investment 17.0 Metal prices 3.5 Exchange rate 1.5
	Consolidated net sales (excluding metal)	830.0	650.0	-22%	
	Consolidated operating profit	27.0	58.0	+115%	
	Consolidated ordinary income	40.0	75.0	+88%	
B/S	Total assets	1,990.0	2,040.0	+3%	Impact of the change in accounting treatment of cement business becoming a minority share holding -9.0 Others -1.5 Total 35.0
	Net interest-bearing debt	450.0	510.0	+13%	
	Shareholders' equity	560.0	630.0	+13%	
Net D/E ratio (times)		0.8	1.0 times or less		
Assumptions	Exchange rate (yen/\$)	109	110		<b>[Sensitivity]</b> ◆ 1 yen increase in USD/JPY exchange rate: +0.8 billion yen ◆ 10¢/lb increase in copper price (LME) : +1.7 billion yen (Ordinary income)
	Exchange rate (yen/€)	121	125		
	Copper price (¢/lb)	268	290		

※1 Announced on February 12, 2020

※2 Assuming transition to equity method in cement business



Page 12 shows the overall financial goals. FY2020 Forecast shown with a "1" are published values announced on February 12, 2020 as I mentioned before, and FY2023 Target shown with a "2" are values for the final year of the FY2023 Strategy period. The Group-wide targets of ROIC, ROA and ROE are 6%, 4% and 7%, respectively, but consolidated net sales of P / L items will not increase significantly. I'll explain the background behind this. Due to the integration of the Cement Business with Ube Industries, Ltd. that is currently being negotiated towards a final agreement, the net sales of the Cement Business will be excluded from the consolidated net sales of the Group as the result of the change in accounting treatment of cement business becoming a minority share holding. The other businesses compensate for the decrease, while resulting in very low growth. This also has a slight impact on the consolidated operating profit and ordinary income.

## Financial Indicators

### Financial Plan : 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

		FY2017-2019 Average	End of FY2023 Target
The whole MMC group	ROIC	4.2%	6.0%
	ROA	3.4%	4.0%
	ROE	3.4%	7.0%

#### <Main Businesses>

		FY2017-2019 Average	End of FY2023 Target	By business division KGI	2016-2018 Average	End of FY2023 Target
Advanced Products Business	Copper & copper alloy <sup>※1</sup>	6.4%	4.0%	EBITDA	15.7 billion yen	20.0 billion yen
	Electronic materials	5.3%	6.0%	EBITDA	5.7 billion yen	16.0 billion yen
Metalworking Solutions Business	Cemented carbide	7.9%	7.0%	EBITDA	28.5 billion yen	39.0 billion yen
Metals Business		19.4%	10.5%	ROA <sup>※2</sup>	7.8%	6.5%
Cement Business		4.8%	6.0%	ROA	5.4%	6.0%
Environment & Energy Business <sup>※3</sup>	Environmental recycling	1.1%	4.0%	ROA	3.3%	6.0%
	Renewable energy	2.7%	4.0%	ROA	4.8%	5.5%

ROIC = NOPAT / invested capital

NOPAT : (Profit before tax + 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

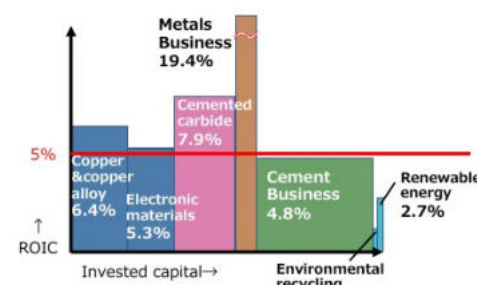
※1 Plans to invest approx. 30 billion yen starting from FY2021. Investment achievements will appear during next medium-term management plan period.

※2 Calculated by excluding the price of bullion

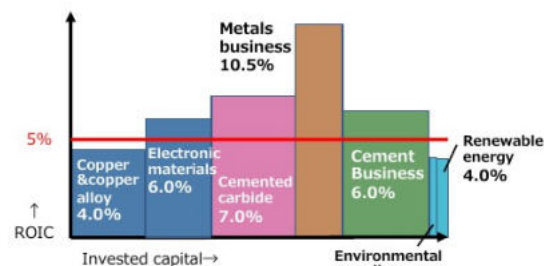
※3 Due to the launch timing of equipment under construction, the ROICs of Environmental Recycling Business and Renewable Energy Business are expected to exceed WACC in FY2024 and FY2027, respectively.

Changes in ROIC of main businesses in FY2023 Strategy

(FY2017-2019 Average)



(End of FY2023 Target)



On page 13, I would like to explain the targets determined predominately by ROIC, and how they will change in the future by business division. The upper left shows the Group-wide target financial indicators I just mentioned. Targets for ROIC, ROA and ROE are 6%, 4% and 7% respectively. Below them, the targets for the so-called main businesses for the end of FY2023 are shown. I think the graph on the right side is fairly easy to understand, so please have a look. There are two graphs. The one on the top shows the average ROIC of the main business segments over the three years from FY2017 to FY2019. The one on the bottom shows the target values for the end of FY2023, the final year of the FY2023 Strategy period. There is an underline in red at 5%, which is the current WACC of the entire the Group. Looking at this, there are various differences among the business divisions. For example, ROIC of the Copper & copper alloy products will fall in the final year of the FY2023 Strategy period.



The Environment & Energy Business will be in a similar situation in that its ROIC will not exceed WACC. Especially as for the Copper & copper alloy products, MMC will invest 30 billion yen over the next seven years, the investment will be preceded during the FY2023 Strategy period, and the results are unable to be harvested until FY2024 or later. The Renewable energy-related business will be is also in a similar situation, as its current construction will not complete by FY2023 Strategy period. Also, I would like you to see that the area of the part exceeding WACC constitutes the economic profit, and the horizontal direction indicates the amount of the invested capital, so increasing that area is important from viewpoint of enhancing MMC's corporate value.

## Resource Allocation (Investment Policy, Shareholder Return Policy, Strategic Holdings)

### Financial Plan : Resource Allocation (Investment Policy, Shareholder Return Policy, Strategic Holdings)

Investment Policy

- Make investments using cash flows from operations, and proceeds from business restructuring and asset sales
- If there are other attractive large-scale investment projects for growth, investments will be made proactively as long as a net D/E ratio of 1.0 times or less is maintained

◆ Cumulative cash flows from FY2021 to 2023

(Unit: billion yen)

Cash in		Cash out	
Operating CF	280	Investing CF	Investment for growth
Others※1	60		Investment for maintenance and upgrading
Total	340		Subtotal
		Financing CF	Dividends ※2
		Total	406

※1 Business restructuring, sales of strategic holdings, etc.

※2 Dividends paid and dividends paid to non-controlling shareholders

◆ Cumulative investment plan from FY2021 to 2023

Total Investment 360

Maintenance & upgrading 170	Growth Strategy 190
<div>22%</div> <div>(Copper &amp; copper alloy 15, Electronic materials 7)</div> <div>Advanced Products</div>	<div>30%</div> <div>(Cemented carbide 28, Sintered 2)</div> <div>Metalworking Solutions</div>
<div>21%</div> <div>Metals</div>	<div>8%</div> <div>Cement</div>
	<div>4%</div> <div>Environment &amp; energy</div>
	<div>15%</div> <div>(Affiliated 2, Aluminum9, Group-wide 4)</div> <div>Others</div>

Shareholder return Policy

- MMC intends to pay stable dividends despite fluctuating business results, and pay out an annual dividend of 80 yen per share.
- However, if the consolidated payout ratio becomes less than 25%, MMC will temporarily increase the dividend or conduct share buybacks.

	FY2020 (actual)	FY2021-2023
Dividends	80yen/share	80yen/share

Strategic holdings


































- Unless required for strategic objectives, MMC will not acquire or hold shares other than purely for investment purposes
- Expected reduction in FY2020: 12%

Page 14 shows the resource allocation and so on. First of all, the investment policy is as shown here. The cash out is 360 billion yen as the investing cash flow. The total cost of acquiring of stake in the Mantoverde Copper Mine and making Mitsubishi Hitachi Tools a wholly owned subsidiary, about 60 billion yen, is included in the investment for growth. Because it's already been decided and the cash out is supposed to be carried out in FY2021, this is included here to show a total investment amount of 360 billion yen. If these are subtracted, the investment for growth is 130 billion yen and the investment for maintenance and upgrading is 170 billion yen, as a result the total is 300 billion yen, which is not much different from 280 billion yen posted in the current FY2020 Strategy. The middle row shows the allocation by segments. In line with the optimization of business portfolio previously explained, the Group will invest substantially into both Advanced Products Business and Metalworking Solutions Business, followed by the Metals Business. As for the Cement Business, since the integration

is in FY2023, the percentage is slightly lower than before due to assuming of the change in accounting treatment of cement business becoming a minority shareholding. The text in green at the bottom is the shareholder return policy, which is the same as the current FY2020 Strategy. Since MMC intends to pay stable dividends, MMC will continue to pay 80 yen per share. The bottom is MMC's strategic holdings. In principle, MMC will not acquire new shares. In line with MMC's policy to not own, MMC is reducing MMC's holding shares. So here, it is shown that the proceeded reduction was about 12% by the end of FY2020.

## Long-term Business Goals/Long-term Strategy and ESG/SDGs

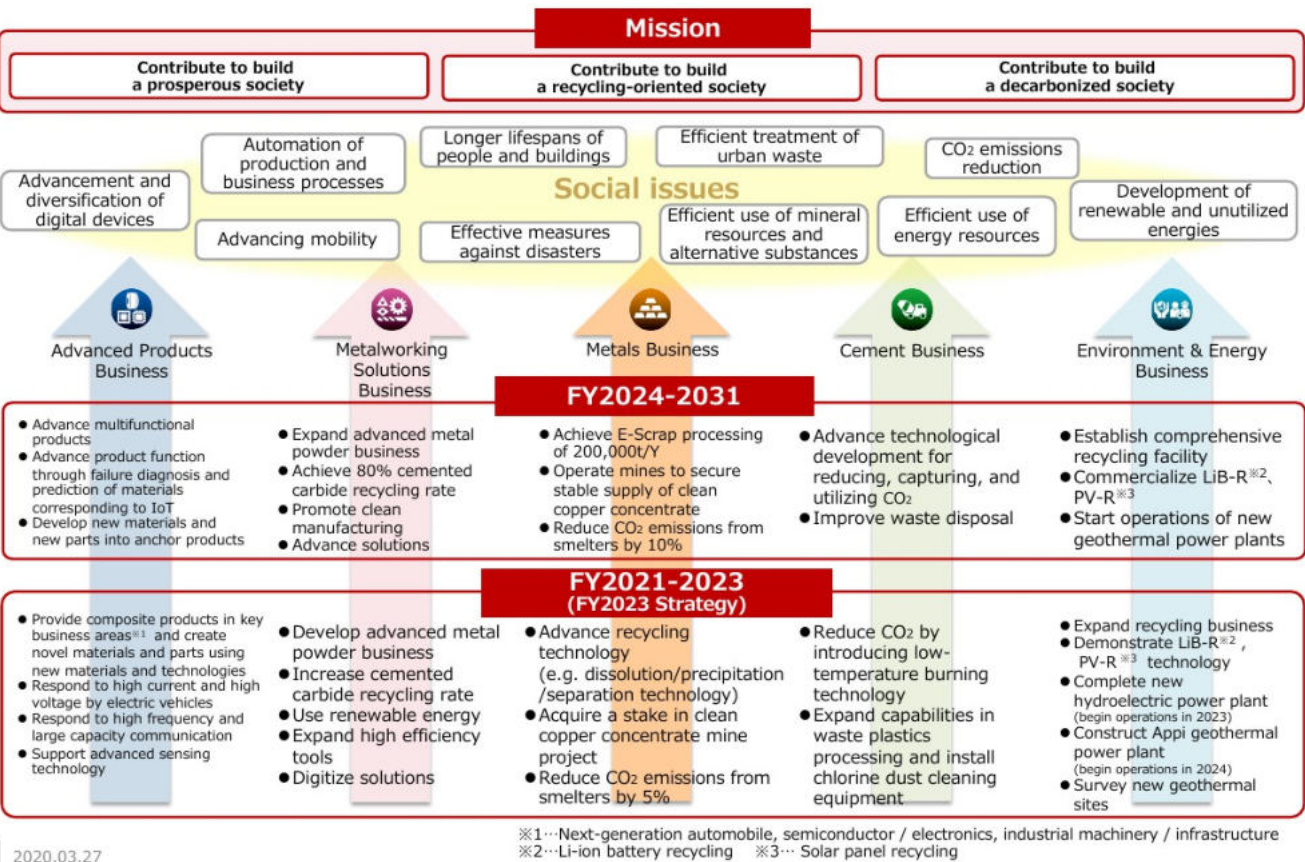
Business Strategy : Long-term Business Goals/Long-term Strategy and ESG/SDGs

	Long-term business goals	Long-term strategy	ESG/SDGs			Mission		
			E (Environment)	ES (Society)	S (Society)	Contribute to build a prosperous society	Contribute to build a recycling-oriented society	Contribute to build a decarbonized society
Advanced Products Business	Global First Supplier	<ul style="list-style-type: none"> <li>Create new businesses and products through the sophistication and integration of our core competencies (e.g. production and development of oxygen-free copper, oxygen-free copper base alloys, and functional materials as well as technical capabilities such as bonding different metals, etc.)</li> <li>Accelerate marketing activities to replicate successful practice</li> </ul>	  	  		<ul style="list-style-type: none"> <li>Advance and diversifying mobility and digital devices</li> <li>Automate production and business processes</li> </ul>	<ul style="list-style-type: none"> <li>Develop and use materials with low environmental impact</li> <li>Efficiently use mineral resources and alternative resources</li> </ul>	<ul style="list-style-type: none"> <li>Efficiently use energy resources</li> <li>Reduce CO<sub>2</sub> emissions</li> <li>Develop and supply products that contribute to decarbonization</li> </ul>
Metalworking Solutions Business	Top 3 supplier in strategic markets	<ul style="list-style-type: none"> <li>Promote clean manufacturing</li> <li>Provide high-efficiency products with advanced technology</li> <li>Expand advanced metal powder business in electronic devices</li> </ul>	  	  		<ul style="list-style-type: none"> <li>Provide high-efficiency products and digital solutions</li> </ul>	<ul style="list-style-type: none"> <li>Promote the use of recycled cemented carbide materials</li> </ul>	<ul style="list-style-type: none"> <li>Promote manufacturing renewable energy</li> <li>Expand electrification business by advanced metal powder technology</li> </ul>
Metals Business	Leader in environmentally-friendly mining & smelting business	<ul style="list-style-type: none"> <li>Stable supply and recycling of nonferrous metal materials, predominantly copper</li> <li>Creation of a sustainable raw material portfolio consisting of clean copper concentrate and E-Scrap</li> <li>Promotion of recycling</li> <li>Response to climate change</li> </ul>	  	  		<ul style="list-style-type: none"> <li>Provide copper-based materials for advanced products</li> </ul>	<ul style="list-style-type: none"> <li>Provide recyclable products</li> <li>Recycle waste</li> </ul>	<ul style="list-style-type: none"> <li>Promote the development and use of CO<sub>2</sub> reduction technologies</li> <li>Achieve manufacturing that considers environmental load</li> </ul>
Cement Business	Leader in the domestic and international cement industry with advanced environmental technologies	<ul style="list-style-type: none"> <li>Stable supply of basic building materials for social infrastructure and disaster prevention infrastructure</li> <li>Sophistication of waste disposal</li> <li>Response to climate change by reducing CO<sub>2</sub></li> <li>Construction of a resilient domestic business foundation through business restructuring and business growth in overseas markets</li> </ul>	  	  		<ul style="list-style-type: none"> <li>Create a safe, secure, and functional city</li> </ul>	<ul style="list-style-type: none"> <li>Recycle waste</li> <li>Promote sustainable resource recycling</li> </ul>	<ul style="list-style-type: none"> <li>Reduce CO<sub>2</sub> emissions by improving manufacturing processes</li> </ul>
Environment and energy Business	(Environmental recycling) <b>Driving force of resource-recycling systems</b> (Renewable energy) <b>Leading company in geothermal development</b>	<ul style="list-style-type: none"> <li>Provision of a safe recycling system with thorough traceability, etc.</li> <li>Decarbonization by expanding renewable energy business</li> </ul>	  	  		<ul style="list-style-type: none"> <li>Ensure a stable supply of clean energy and recycled products</li> </ul>	<ul style="list-style-type: none"> <li>Solve urban waste problems</li> <li>Build a sustainable social system</li> </ul>	<ul style="list-style-type: none"> <li>Provide renewable energy</li> </ul>

From now on, I will explain each business strategy. Pages 16 to 18 are organized in terms of the relationship between each business strategy and ESG and SDGs, or the relationship with the mission that I described at the beginning.

# Business Strategy for Solving Social Issues

## Business Strategy : Business Strategy for Solving Social Issues

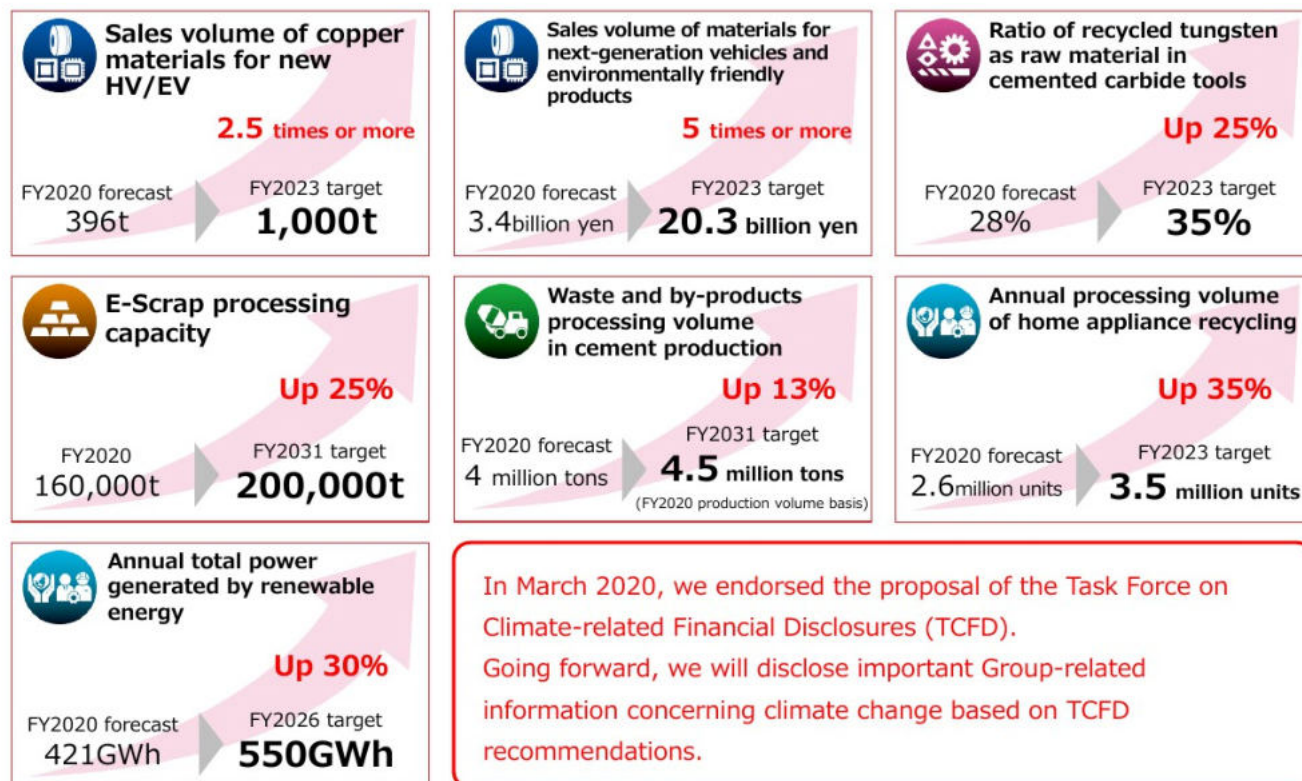


Page 17 describes MMC’s relationship with solving social issues from a different point of view. Please allow me to skip the details due to time constraints, but MMC’s approaches to social issues and how they relate to our mission is summarized here.



# Contribution Goals for a Sustainable Society

## Business Strategy : Contribution Goals for a Sustainable Society



Page 18 illustrates how MMC contributes to solving social issues with quantitative targets. Seven items are shown, but please note that the quantitative targets for “E-Scrap processing capacity” and “Waste and by-products processing volume in cement production” in the second column is not for FY2023 but for FY2031. Although MMC cannot increase them suddenly, MMC is trying to gradually increase them by this amount. The target for “Annual total power generated by renewable energy” shown in the lower left is also not for FY2023 but for FY2026. This is because, as I mentioned earlier, the facilities will start operations at that time. In addition, the lower right shows that MMC has agreed with TCFD.



## Global First Supplier

### Long-term Strategy

- Create new businesses and products through the sophistication and integration of our core competencies  
(e.g. production and development of oxygen-free copper, oxygen-free copper base alloys, and functional materials as well as technical capabilities such as bonding different metals, etc.)
- Accelerate marketing activities to replicate successful practice

#### Specific Measures of the FY2023 Strategy

- Assign key account managers acting cross-sectionally
- Enhance information analysis by digital marketing such as the employment of AI or IoT
- Share product roadmaps with customers (co-creation capabilities)
- Develop new products through collaboration with Central Research Institute
- Fortify production capabilities such as establishing a mass production system and improving productivity
- Pursue opportunities to execute M&A or business alliances

#### Projected Achievements at the End of FY2023

In our main business fields\*, we will have:

- Earned customers' trust
- Released new products by integrating our technical capabilities
- Generated new applications of our products

※ Next-generation vehicles, semiconductors/electronics, industrial machinery/infrastructure

Each business strategy is described from page 19. First of all, to put it briefly, "Global First Supplier" is MMC's long-term business goal for the Advanced Products. The core of MMC's long-term strategy to achieve that goal is to improve MMC's core competencies in oxygen-free coppers, oxygen-free copper base alloys, or bonding technologies and launch new products and businesses based on market demands.



**Key measures**

**Large-scale investment in core business (copper & copper alloy)**  
**Collaboration among global footprint** (incl. manufacturing, selling and developing bases)

**Key strategies for copper & copper alloy business**

**Expand copper alloy sales**

- Seamless value chain by integrating Mitsubishi Shindoh
- Agile investment with direct market information

**Execute large-scale investments**

- Expanding rolling business
- Restructuring of extrusion business (About 30 billion yen capital investments from FY2021 to 2027)

**Accelerate global & downstream business**

- Strengthening and optimizing value chain
- Enhancing cooperation with the Luvata Group

**Enhance marketing & technical development function**

- Development of new users
- Advancing new product developments by identifying next-generation market needs

**Acting promptly to market needs**  
**(Next-generation vehicles, AI/IoT, environmental load reduction, etc.)**

Page 20 is especially for Copper & copper alloy business. As already announced, MMC will make large-scale investments and focus on expanding sales of copper alloys. MMC will also deepen MMC's collaboration with the Luvata Group to strengthen MMC's overseas businesses and downstream businesses.





## Top 3 supplier in strategic markets

### Long-term Strategy

- Promote clean manufacturing
- Provide high-efficiency products with advanced technology
- Expand advanced metal powder business in electronic devices

### Specific Measures of the FY2023 Strategy

- Increase recycling rate in our tool recovery system and utilize renewable energy
- Provide high efficiency tools and digital solutions
- Transition to smart factory and optimization of logistics and supply chain
- Expand advanced metal powder business to rechargeable battery market

### Projected Achievement at the End of FY2023

- Establishment of a competitive global business base capable of expanding in strategic markets using digital technologies

Page 21 concerns the Metalworking Solutions Business. As the long-term business goal, MMC is aiming to become the top 3 supplier in each strategic market :the automotive industry, the aerospace industry and the medical industry. In the Metalworking Solutions Business, MMC's core technologies include material technology and coating technology. MMC will use these technologies to provide highly efficient products, while also expanding MMC's use of renewable energy. At the same time, MMC is working to enhance the functions of the Technical Center, thereby strengthening MMC's ability to propose solutions based on it.

# Metalworking Solutions Business-2

Business Strategy : **Metalworking Solutions Business-2**



## Key measures

- Expansion of the utilization of new technologies and services that can solve customer issues
- Enhancement of the global supply system and functions

### Expansion in strategic market

Automotive, aerospace, and medical industries

- Reinforce marketing functions focused on target customers
- Expand manufacturing and sales capability through M&A or other measures
- Use digital technologies for technical assessments and simulations
- Expand advanced metal powder business for the battery market

### Strategic investment in markets with high growth potential

### Build a competitive global business foundation

- Develop a global recycling system of the used cemented carbide tools
- Use digital technologies to achieve high quality and efficient manufacturing processes
- Optimize global logistics and supply chain in response to market fluctuations
- Establish manufacturing BCP to maintain stable supplies
- Encourage global collaboration of technical center functions



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On page 22, the details of key strategies are described.



## **Leader in environmentally-friendly mining & smelting business**

### **Long-term Strategy**

#### **Stable supply and recycling of nonferrous metal materials, predominantly copper**

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

#### **Specific Measures of the FY2023 Strategy**

- Secure clean copper concentrate by investing in new mines
- Develop impurity removal technology in copper concentrate
- Optimize valuable metal material flow
- Reduce fossil fuels

#### **Projected Achievement at the End of FY2023**

- Optimization of valuable metal material flow derived from E-Scrap
- Reduction of smelter CO<sub>2</sub> emissions by 5%

Page 23 concerns the Metals Business. MMC's long-term business goal is to be a "Leader in the environmentally-friendly mining & smelting business." The long-term strategies are as shown, but details are given on page 24.





### Key measures

### Stable procurement of raw materials and optimization of smelting process

#### Stable supply of materials

##### Secure clean copper concentrate by investing in new mines

- Acquisition of stake in the Mantoverde copper mine
- Implementation of Zafranal project



##### Expand opportunities to participate in blue-chip projects

- Invest from the early stages of projects
- Organize consortium

##### Develop impurity removal technology in copper concentrate

- Establish Mining & Metallurgy Laboratories (expansion of resource technology development), and conduct joint research with a third party
- Develop/train resource engineers

#### Promotion of recycling

##### Optimize material flow

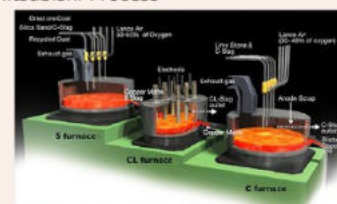
- Material grid  
Optimize material flow connecting each smelter and enhance the recovery of valuable metals at each smelter  
→ Efficient recycling of Cu, precious metals and trace components in E-Scrap
- Improve the yield of Au and Ag by enhancing the precious metal factory process
- Understand E-Scrap input amount constraint and optimize processing process



#### Response to climate change

##### Demonstrate the superiority of the Mitsubishi process

Utilize the environment-friendly Mitsubishi Process



##### Reduce fossil fuels

- Replace fuel with recycled oil, etc.
- Substitute fuel using E-Scrap

##### Improve energy conversion efficiency

- Improve heat transfer efficiency of boiler
- Improve power generation efficiency

##### Improve energy use efficiency

- Efficiently use steam
- Improve electrolysis current efficiency

##### Use renewable energy

#### Improve the ratio of stable raw-material procurement

Amount of copper contained with copper concentrate under off-take\* or long-term contract, and E-Scrap  
Amount of total copper production

※Off-take: long-term takeover rights linked to mine investment interests

The key measures are described in three parts. The first is to secure clean copper concentrate. MMC basically secures ores that contain low arsenic such as in the Mantoverde copper mine and the Zafranal mine that MMC announced the other day. In addition, the removal of impurities in copper concentrate is also important. MMC will establish Mining & Metallurgy Laboratories in the Naoshima Smelter & Refinery and proceed with research. On the other hand, the increase of impurities is unavoidable as MMC treats E-Scrap. MMC aims to build the optimal material flow by splitting the tasks among some of MMC's plants in order to collect as many such impurities as possible, as valuable metals. In addition, when dealing with climate change, MMC will utilize the superiority of the "Mitsubishi Process" that has a low environmental impact to reduce fossil fuels and enhance energy efficiency.



## **Leader in the domestic and international cement industry with advanced environmental technologies**

### **Long-term Strategy**

- Stable supply of basic building materials for social infrastructure and disaster prevention infrastructure
- Sophistication of waste disposal
- Response to climate change by reducing CO<sub>2</sub>
- Construction of a resilient domestic business foundation through business restructuring and business growth in overseas markets

### **Specific Measures of the FY2023 Strategy**

- Improve and optimize production system through domestic business restructuring
- Expand capabilities in waste plastic processing and installation of chlorine dust cleaning equipment
- Introduce low-temperature burning technology and develop CO<sub>2</sub> reduction, capture, and recycling technologies
- Expand US business and develop new overseas bases

### **Projected Achievement at the End of FY2023**

- Domestic business restructuring
- Optimized production systems and promotion of overall business efficiency

Please see page 25 for a description of the Cement Business. The most notable point is to proceed with business integrations with Ube Industries. MMC addresses the issue of strengthening MMC's domestic business foundation through business restructuring and growth in overseas markets. As to the integrated new corporation with Ube Industries, the growing limestone resources business of Ube Industries will be the basis for growth.

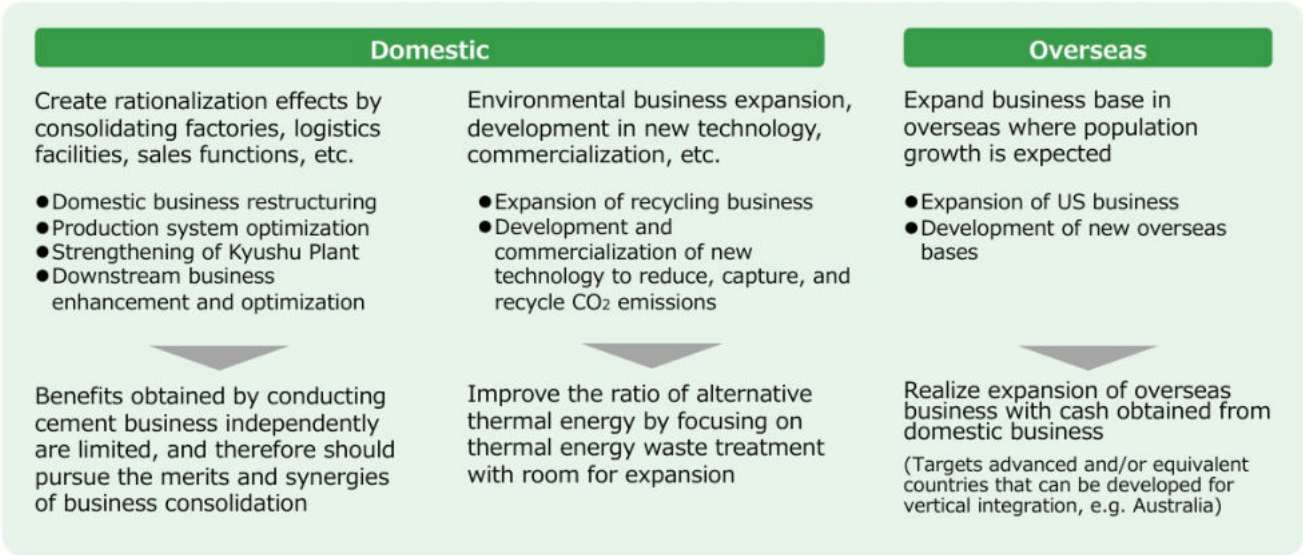


Key measures

Reorganization of domestic business and development of new overseas bases

Reorganize the domestic business, optimize the production system, and establish a stable profit base through economies of scale in order to respond to the demand decrease for cement in Japan

Secure domestic advantage and grow overseas markets through the expansion of US and overseas businesses



On page 26, “the issue MMC should work on first” is shown, as strengthening the Kyushu Plant which is MMC’s main plant in Japan. Meanwhile, MMC will also work on reducing carbon dioxide as it has become an urgent issue in the cement industry. In the global market, MMC simultaneously aims to expand businesses in the U.S. previously established or develop new overseas bases.



# Environment and Energy Business-1

Business Strategy : **Environment and Energy Business-1**



(Environmental recycling) **Driving force of resource-recycling systems**  
(Renewable energy) **Leading company in geothermal development**

## Long-term Strategy

- Provision of a safe recycling system with thorough traceability, etc.
- Decarbonization by expanding renewable energy business

### Specific Measures of the FY2023 Strategy

- Expand home appliance recycling business, advancement of automation, and improvement of added value of recovered products
- Demonstrate LiB recycling technology and solar panel recycling technology
- Secure stable plant operations in fly ash recycling business and biogasification business
- Complete Komatagawa new hydroelectric power plant, construction of Appi geothermal power plant, and survey of new geothermal sites

### Projected Achievement at the End of FY2023

- Establishment of a stable business base for the environmental recycling business
- Expansion and stable operations of renewable energy plants and search for new geothermal sites

The last of MMC's business strategies concerns the Environmental & Energy Business, which is separated into Environmental recycling and Renewable energy. A long-term business goal of Environmental recycling is the "Driving force of resource-recycling systems". It means that it can extract resources out of used products to be used and recycled again. In order to implement this, it is necessary to ensure traceability and build up a system that makes MMC's customers feel safe. On the other hand, as to renewable energy, the highlight is geothermal development which MMC aims to be the leading company in Japan.

# Environment and Energy Business-2

## Business Strategy : Environment and Energy Business-2



### Key measures

- Enhanced competitiveness and expansion of environmental recycling businesses
- Completion of Komatagawa new hydroelectric power plant, construction of Appi geothermal power plant, and survey of new geothermal sites

### Environmental recycling initiatives

By making the most of the characteristics and functions of the materials company, we will contribute to the construction of a recycling-oriented society by developing and expanding the recycling business that does not rely on final disposal sites and can be trusted by stakeholders.



Food waste  
Biogasification



Home appliance recycling  
Refrigerator processing line



Car recycling



Incineration fly  
ash recycling

- : Home appliance recycling
- : Car recycling
- : Incineration fly ash recycling
- : Biogas



- ▲ : Geothermal
- (▲) : Under investigation
- ▲ : Hydropower
- ▲ : Mega Solar



Mega solar

Fukui City,  
Fukui Prefecture  
Fukui Solar Power Plant



Geothermal

Hachimantai City,  
Iwate Prefecture  
(Appi: Under construction)



Hydropower

Kitaakita City,  
Akita Prefecture  
(Komatagawa New Hydro:  
under construction)

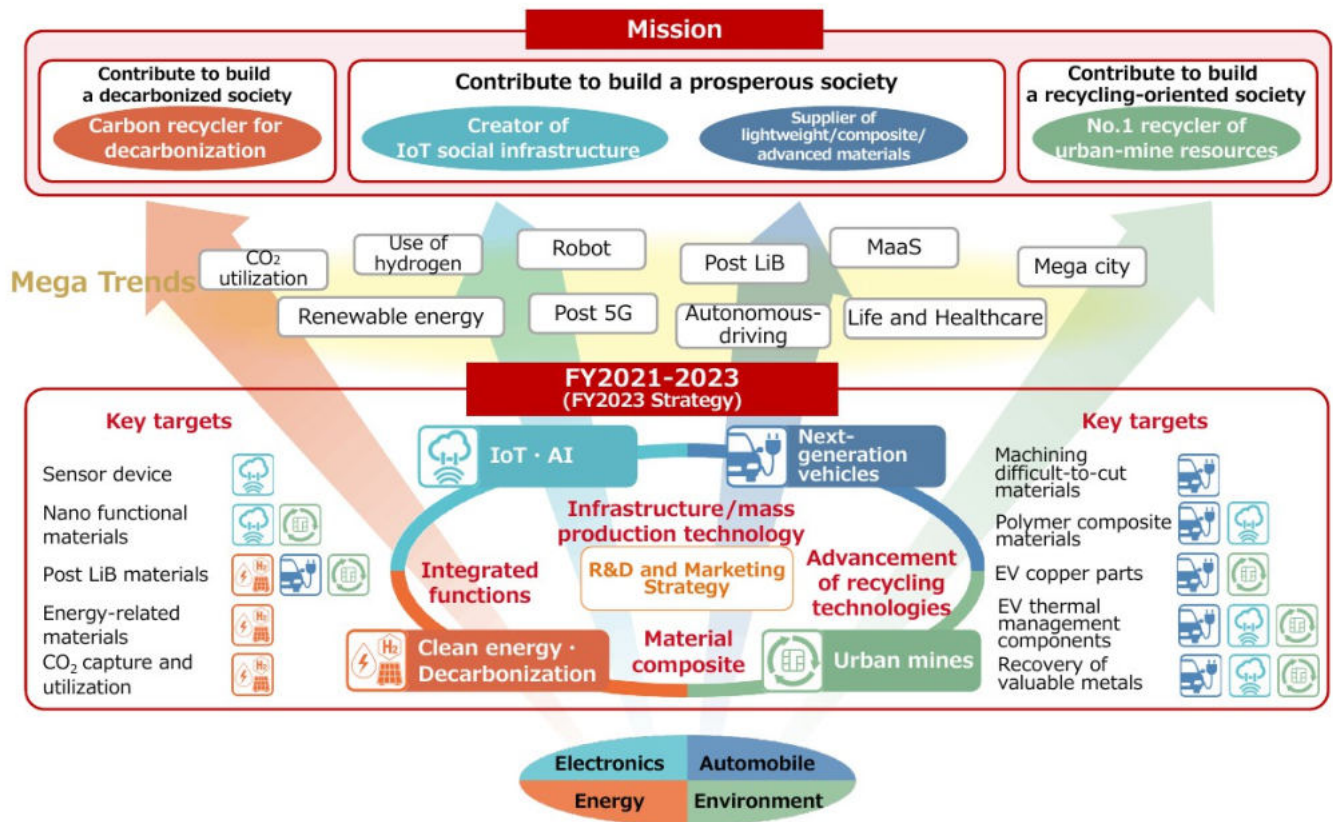
### Renewable energy initiatives

Based on the management resources we have cultivated, we will expand the renewable energy business and contribute to the construction of a decarbonized society by providing a stable energy supply with a low environmental impact.

On page 28 is a map of MMC's environmental recycling and renewable energy plants.

# R&D and Marketing Strategy

## Corporate Division's Strategy : R&D and Marketing Strategy



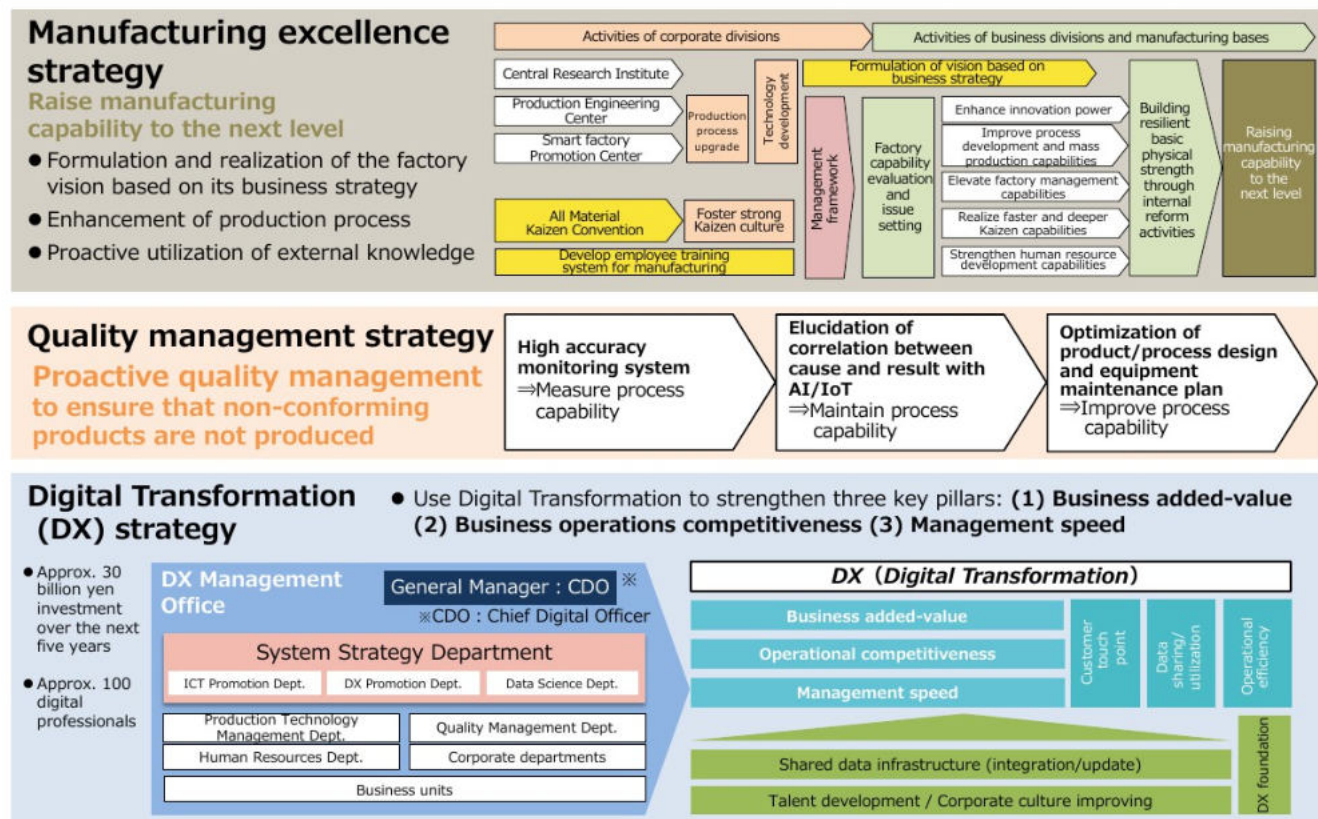
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From here forward, I will explain MMC's corporate division's strategies. Page 30 shows the R&D and marketing strategies necessary for the development of new products and businesses. The four fields that are to be focused on the most are listed at the bottom, and they are the same as current FY2020 Strategy. More details of them are given in a red box above on the basis of that. Among them, MMC will focus on next-generation vehicles, IoT, and AI, and materials, components, and composite materials etc. of MMC's key targets tied with them are defined. These targets eventually lead to MMC's Mission through mega trends.



# Manufacturing Excellence Strategy/Quality Management Strategy/Digital Transformation Strategy

Corporate Division's Strategy : **Manufacturing Excellence Strategy/Quality Management Strategy/Digital Transformation Strategy**



Page 31 shows the manufacturing excellence, quality management, and digital transformation strategies that support the group-wide policy of thoroughly pursuing business competitiveness. As to manufacturing excellence, MMC will ensure that each of our plants can proceed with business strategy aligned with factory vision based on the group strategies. In other cases, MMC will analyze the plants to determine areas to improve and strengthen them. This, MMC calls the management framework. Through a combination of these efforts, MMC seeks to strengthen MMC's manufacturing excellence. As for quality management in the middle row, MMC has aimed not to deliver non-conforming products to customers. Now that MMC has established such a quality management system, from now on MMC will aim to produce non-conforming products in MMC's manufacturing process. This means utilizing the data obtained so far from the automation of inspections and so on for process design and for equipment maintenance plans. As for the digital transformation strategy mentioned on the bottom, the Digital Transformation Management Office will launch in April 2020. MMC have also recruited a talent as CDO from outside MMC. In order to enhance MMC's business values and competitiveness in various fields, MMC is planning to invest about 30 billion yen over the next 5 years to increase customer touchpoints and data sharing. Also, MMC is planning to have more than 100 employees as digital professionals.

# Strengthening Corporate Governance



## Governance : **Strengthening Corporate Governance**

- ◆ Changed to a company with a Nomination Committee in June 2019  
Purpose: Accelerate decision-making by delegating authority, strengthen the Board of Directors' management supervisory functions, and improve the management transparency and fairness

### **Continuous improvement of the functions of the Board of Directors**

- Continuous improvement of the monitoring functions performed by the Board of Directors
- Ensure diversity of director composition

### **Formulation of basic corporate governance policy (effective April 1, 2020)**

- Clarification of policies to respond to each item set forth in CG code

### **CEO appointment and dismissal, planning and execution of successor development plan**

- Adoption of appointment and dismissal process
- Establishment of the selection of a successor candidate, as well as the planning and execution of its development plan with the involvement of the Nomination Committee

### **Review of executive remuneration system**

- Remuneration Committee establishment of an incentive-based executive remuneration system with a variable remuneration ratio (Start operations from FY2021)

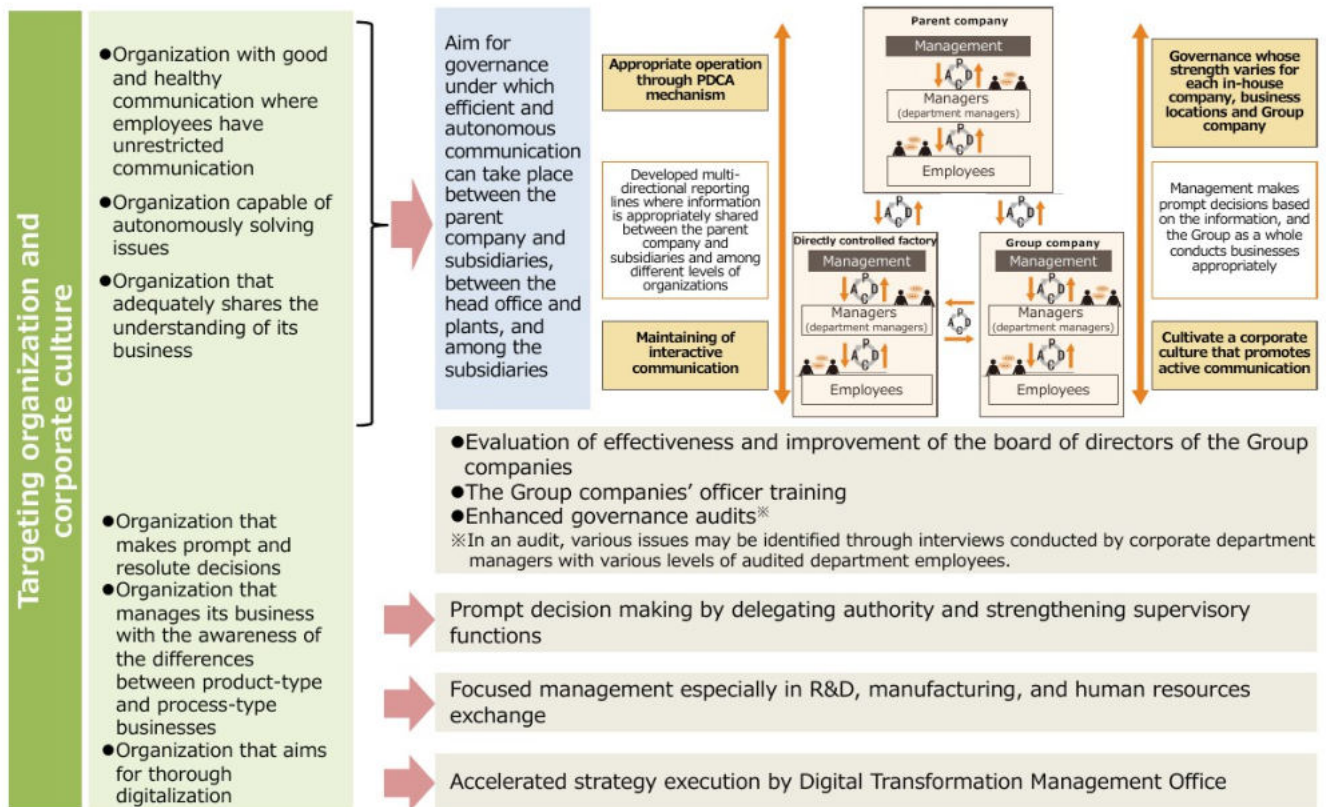
### **Enhancement of governance of subsidiaries**

- Review of systems for director nomination and remuneration
- Proactive management of the Board of Directors

The last part is about governance. Governance in MMC is classified into two types :corporate governance and group governance. Page 33 shows the issues MMC will focus on to strengthen corporate governance. These relate to change to a company with a nomination committee in June 2019.

# Strengthening Group Governance

## Governance : Strengthening Group Governance



The strengthening of group governance is explained on page 34. MMC's six goals in regard to "Targeting organization and corporate culture" are outlined on the very left. The first three points are good and healthy communication, autonomous problem-solving, and understanding the business adequately. In order to achieve these points, it is important as ever to ensure communication in each level, as stated on the right. MMC is now aiming to deepen it further.



# Human Resources Strategy and Change of Organizations

## Governance : Human Resources Strategy and Change of Organizations

HR Strategy	Secure and foster talents adaptive to change and forge a healthy organizational culture	
	◆Talent	① Secure human resources: Reinforce hiring activities and systems, including within the Group companies, etc. ② Develop human resources: Visualize capabilities of employees (talent management), etc.
	◆Organizational culture	① Enhance motivation: Introduce professional talent system, etc. ② Enhance management capabilities of the Group companies: Promote personnel exchange within the Group, etc.
	◆Improvement of social value	① Employ diverse talents: Recruitment rate of new female graduates: 25% or more, etc. ② Health & productivity management: Health company declaration, White 500 certified
Change of organizations	Business Divisions	
	1. <b>Promotion of Environmental and Energy Business Division to in-house Company:</b> Positioned as a core business that can contribute to solving social issues	
	2. <b>Separation of Aluminum Division from Advanced Products Company:</b> Fundamental improvement of profitability and acceleration of strategic review, including overseas expansion	
	Corporate Division	
Change of organizations	1. <b>Establishment of Marketing Department:</b> Strengthening of corporate marketing functions	
	2. <b>Establishment of Corporate Communications Department:</b> Centralizing information dissemination to stakeholders	
	Company-wide organization	
	1. <b>Establishment of Digital Transformation Management Office:</b> Promotion of digitalization strategy	
Change of organizations	2. <b>Establishment of Sustainable Management Office:</b> Ensuring business sustainability	
	Establishment of subcommittees for Communications, Governance, Compliance, Risk Management, Climate Change, Environmental Management, Quality Management, Information Security, and Promotion of Zero Disasters	

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Finally, on page 35, I will give you a brief explanation of MMC's HR strategy and Change of Organizations. The HR strategy is as stated here. I believe that human resources are most important for the management of company business and therefore will adopt the following measures in order to secure and develop human resources. MMC will also introduce a professional talent system, promote the interaction of human resources to enhance management capabilities in the whole group, recruitment rate of new female graduates, and health & productivity management. Please allow me to omit a detailed explanation of the other organizational changes since they are as stated within, but I would like to mention that MMC will establish newly the Marketing Department in the Corporate Division. In addition, MMC will establish a Corporate Communications Department from April 2020 to centralize information dissemination for stakeholders. And as stated on the bottom, there are two management offices that are part of the company-wide organization. One is the Digital Transformation Management Office. The other is the Sustainable Management Office, which has sub-organizations to ensure sustainability of management and business sustainability.

This is the end of the presentation.

# Q&A: Concerning the Future Directions for the Aluminum Business and Cement Business

**Questioner 1:** Looking at other companies' financial results and their medium-term strategies, if a company with an unsatisfied business performance places non-core businesses directly under corporate division, it's common that divestitures and restructurings occur afterwards.

I think that the Aluminum business is in a difficult situation, with issues such as changes in the market structure and import products. What direction will you follow? Could you please let us know about the future of the Aluminum business and whether it can restructure by itself?

## Financial Plan : Resource Allocation (Investment Policy, Shareholder Return Policy, Strategic Holdings)

Investment Policy

- Make investments using cash flows from operations, and proceeds from business restructuring and asset sales
- If there are other attractive large-scale investment projects for growth, investments will be made proactively as long as a net D/E ratio of 1.0 times or less is maintained

◆ Cumulative cash flows from FY2021 to 2023

(Unit: billion yen)

Cash in		Cash out	
Operating CF	280	Investing CF	Investment for growth
Others※1	60		Investment for maintenance and upgrading
Total	340		Subtotal
		Financing CF	Dividends ※2
		Total	406

※1 Business restructuring, sales of strategic holdings, etc.

※2 Dividends paid and dividends paid to non-controlling shareholders

◆ Cumulative investment plan from FY2021 to 2023

Total Investment 360

Maintenance & upgrading 170		Growth Strategy 190			
22%	30%	21%	8%	4%	15%
(Copper & copper alloy 15, Electronic materials 7)	(Cemented carbide 28, Sintered 2)			(Affiliated 2, Aluminum9, Group-wide 4)	
Advanced Products	Metalworking Solutions	Metals	Cement	Environment & energy	Others

Shareholder return Policy

- MMC intends to pay stable dividends despite fluctuating business results, and pay out an annual dividend of 80 yen per share.
- However, if the consolidated payout ratio becomes less than 25%, MMC will temporarily increase the dividend or conduct share buybacks.

	FY2020 (actual)	FY2021-2023
Dividends	80yen/share	80yen/share

Strategic holdings

- Unless required for strategic objectives, MMC will not acquire or hold shares other than purely for investment purposes
- Expected reduction in FY2020: 12%

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In addition, in regard to the Cement Business, the announced business integration made me a bit difficult to grasp a clear picture of its future and its investments. While I understand the measures, it will be posted as an equity in earnings of affiliates to the third year, then decisions may be based on that. However, please tell us about the developments that will be made regarding the direction of the Cement Business.

**Ono:** First of all, as for the Aluminum business, as you know, MMC's Aluminum business consists of products that are rolled and fabricated, etc. by Mitsubishi Aluminum Co., Ltd., and produced the Aluminum beverage can business by Universal Can Corporation.

Regarding Mitsubishi Aluminum's business, MMC is currently working on a review based on both product and region axes. However, Mitsubishi Aluminum business does not have a large production capacity that can keep up with scale, so the only option is to proceed in a niche rich direction.

MMC recognizes that it is necessary to proceed with business structure reforms and improvements on its own, while simultaneously narrowing down products and scaling down things which have become too large.

Next, concerns the Universal Can Corporation. The market in Japan is unlikely to increase as far as population trends are concerned, so it is necessary to accelerate the study of strategies such as how to move overseas, and MMC is currently investigating directions to be pursued.

Next, concerns the direction of the Cement Business. MMC can expect a synergy effect especially in the Production Div., however this requires discussions between the two companies to reach a final agreement at the end of September 2020.

At this stage, discussions between the two companies have not yet reached a conclusion, so it is difficult to explain it with specific numbers. However, for example, by integration, MMC can share roles within the factory flexibly more than ever, allocate product manufacturing and make good use of the surplus capacity of each facility's operations. I also think that coal will still be one of the major energy sources for some time, but that it would be largely beneficial to combine the harbor functions of both companies in procuring necessary coal.

It is important to do such things within this integration first. If anything, because the FY2023 Strategy describes only the measures of MMC, in the process of discussions between two companies progress, there may be a slight deviation from MMC's overall direction.

Also, as you pointed out earlier, the third year's investment is not included in this document, which explains the low allocation of investment figures in the Cement Business.

**Questioner 1:** In short, these numbers don't mean that you will neglect the Cement Business, but that the third year numbers are not included, so the allocation of investment is slightly smaller. I understand. Thank you very much.



# Q&A: Concerning the Aims of Introducing ROIC and Corporate Governance

**Questioner 2:** The first point is about ROIC.

## Financial Plan : 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

		FY2017-2019 Average	End of FY2023 Target
The whole MMC group	ROIC	4.2%	6.0%
	ROA	3.4%	4.0%
	ROE	3.4%	7.0%

### <Main Businesses>

		FY2017-2019 Average	End of FY2023 Target	By business division KGI	2016-2018 Average	End of FY2023 Target
Advanced Products Business	Copper & copper alloy <sup>※1</sup>	6.4%	4.0%	EBITDA	15.7 billion yen	20.0 billion yen
	Electronic materials	5.3%	6.0%	EBITDA	5.7 billion yen	16.0 billion yen
Metalworking Solutions Business	Cemented carbide	7.9%	7.0%	EBITDA	28.5 billion yen	39.0 billion yen
Metals Business		19.4%	10.5%	ROA <sup>※2</sup>	7.8%	6.5%
Cement Business		4.8%	6.0%	ROA	5.4%	6.0%
Environment & Energy Business <sup>※3</sup>	Environmental recycling	1.1%	4.0%	ROA	3.3%	6.0%
	Renewable energy	2.7%	4.0%	ROA	4.8%	5.5%

ROIC = NOPAT / invested capital

NOPAT : (Profit before tax + 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

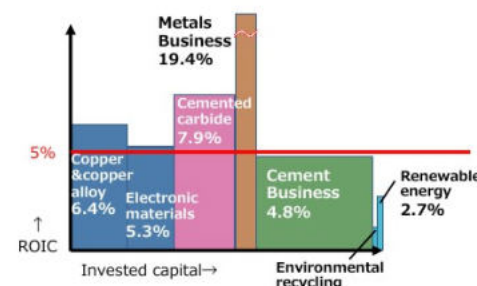
※1 Plans to invest approx. 30 billion yen starting from FY2021. Investment achievements will appear during next medium-term management plan period.

※2 Calculated by excluding the price of bullion

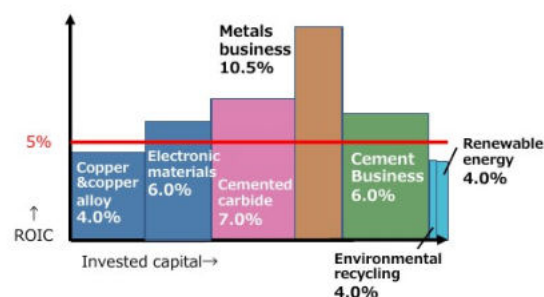
※3 Due to the launch timing of equipment under construction, the ROICs of Environmental Recycling Business and Renewable Energy Business are expected to exceed WACC in FY2024 and FY2027, respectively.

Changes in ROIC of main businesses in FY2023 Strategy

(FY2017-2019 Average)



(End of FY2023 Target)



Please tell us about the purpose of the introduction and how thoroughly you are going to manage ROIC, including whether MMC uses ROIC to conduct the performance evaluation for each division.

The second point is about Governance. I am paying attention to it as MMC changed to a company with a nomination committee last year, however, two of the ten candidates for Director are from the banks of Mitsubishi Group. Please tell us if the decision was really the best in terms of securing diversity and strengthening supervisory functions as described in the materials.

For example, what do you think of last year's General Meeting of Shareholders in which less than 80% of the votes were in favor?

**Ono:** The first point concerns the aims of introducing ROIC. It goes without saying that there are many financial indicators and each has its own merits and demerits, but I have thought what has been missing in MMC so far is how well MMC is aware of the cost of capital.

The introduction of ROIC was based on the evaluation that ROIC is superior regarding the higher validity of comparison with cost of capital.

Improving ROIC means improving various operations and reducing invested capital, which I think will be an opportunity to evaluate the reorganization of product groups that are declining or in a recession phase.

I think that this approach is good for also restructuring various product groups in the business and finely segmented businesses.

Regarding Division Management and evaluation methods, evaluating executive officers and those above by using these figures directly is not thought, but I think such things will be included in the overall comprehensive evaluation.

On the other hand, it isn't appropriate to judge the performance for each site using only ROIC, so it becomes necessary to drill down and evaluate sites using a management framework as mentioned in manufacturing excellence strategy earlier. MMC recognizes that it is necessary to use a combination of various financial indicators.

The second point is about Governance.



## Governance : **Strengthening Corporate Governance**

◆ Changed to a company with a Nomination Committee in June 2019

Purpose: Accelerate decision-making by delegating authority, strengthen the Board of Directors' management supervisory functions, and improve the management transparency and fairness

### **Continuous improvement of the functions of the Board of Directors**

- Continuous improvement of the monitoring functions performed by the Board of Directors
- Ensure diversity of director composition

### **Formulation of basic corporate governance policy (effective April 1, 2020)**

- Clarification of policies to respond to each item set forth in CG code

### **CEO appointment and dismissal, planning and execution of successor development plan**

- Adoption of appointment and dismissal process
- Establishment of the selection of a successor candidate, as well as the planning and execution of its development plan with the involvement of the Nomination Committee

### **Review of executive remuneration system**

- Remuneration Committee establishment of an incentive-based executive remuneration system with a variable remuneration ratio (Start operations from FY2021)

### **Enhancement of governance of subsidiaries**

- Review of systems for director nomination and remuneration
- Proactive management of the Board of Directors

There are two candidates for Director from the banks of Mitsubishi Group, but MMC would like to start by saying that MMC is not violating the independence standards set forth by the Tokyo Stock Exchange. Regardless of where they are from, I would like to stress that each of them have a wealth of management experience and a great deal of knowledge as members of the Board of Directors.

However, I also recognize that there is a certain number of votes that oppose their origins. As I said, in terms of the composition of the Board of Directors and the skill matrix, I don't consider it an inappropriate decision to introduce these members.

## Q&A: Financial Goals and E-Scrap Processing Capacity at the End of FY2031

### Financial Plan : Financial Goals

(Unit: billion yen)

		FY2020 Forecast (※ 1)	FY2023 Target (※ 2)	Change rate	Remarks
ROIC (%)		-	6.0		
ROA (Ordinary income to total assets) (%)		2.1	4.0	+1.9points	
ROE (%)		-	7.0		
P/L	Consolidated net sales	1,520.0	1,530.0	+1%	<b>[Ordinary income fluctuation factors]</b> Market conditions 23.5 Performance of investment 17.0 Metal prices 3.5 Exchange rate 1.5
	Consolidated net sales (excluding metal)	830.0	650.0	-22%	
	Consolidated operating profit	27.0	58.0	+115%	
	Consolidated ordinary income	40.0	75.0	+88%	
B/S	Total assets	1,990.0	2,040.0	+3%	Impact of the change in accounting treatment of cement business becoming a minority share holding -9.0 Others -1.5 Total 35.0
	Net interest-bearing debt	450.0	510.0	+13%	
	Shareholders' equity	560.0	630.0	+13%	
Net D/E ratio (times)		0.8	1.0 times or less		
Assumptions	Exchange rate (yen/\$)	109	110		<b>[Sensitivity]</b> ◆ 1 yen increase in USD/JPY exchange rate: +0.8 billion yen ◆ 10¢/lb increase in copper price (LME) : +1.7 billion yen (Ordinary income)
	Exchange rate (yen/€)	121	125		
	Copper price (¢/lb)	268	290		

※1 Announced on February 12, 2020

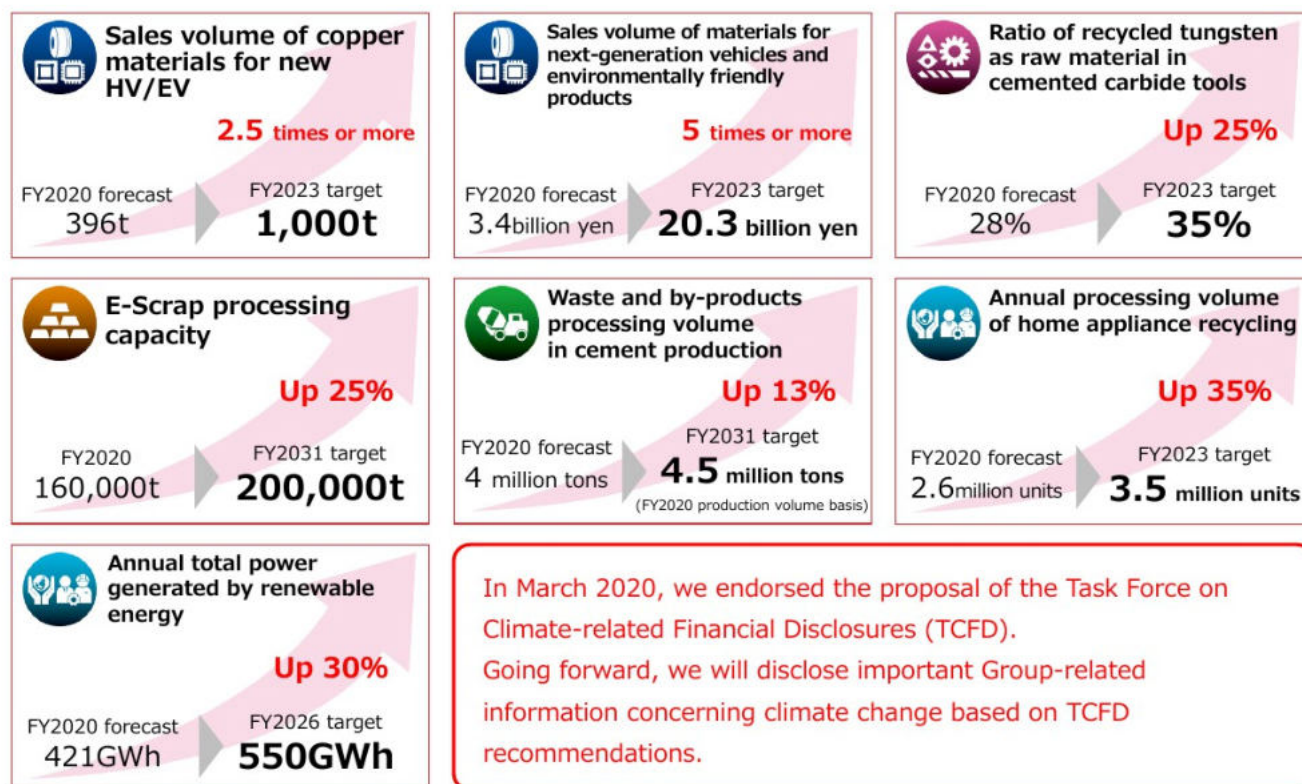
※2 Assuming transition to equity method in cement business

**Questioner 3:** Please let me ask about performance and financial goals. The ordinary income fluctuation factors are the market conditions of 23.5 billion yen, and the performance of investment 17.0 billion yen. Can you confirm the breakdown of these numbers? Also, does the metal prices on remarks page 12 mean copper prices? This is my first question.



My second question concerns the E-Scrap processing capacity mentioned on page 18.

## Business Strategy : **Contribution Goals for a Sustainable Society**



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At the end of FY2031, it will become 200,000 tons, but I feel that the rate of capacity increase become lower than before. In regard to scrap processing capacity, please let me know if there have been any changes of thinking way toward this business.

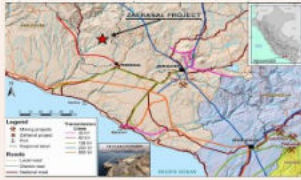
**Ono:** Let's start with the second point. The E-Scrap processing capacity is currently about 160,000 tons, and I think I have said that MMC would increase it to 200,000 or 210,000 tons. As you know, in FY2019, there was a problem that the recovery efficiency of valuable metal was largely reduced due to the increase in impurities.

MMC implemented countermeasures from the latter half of FY2019 to FY2020, and at this stage MMC has recovered to the level before the issue occurred.

As MMC increases its E-Scrap processing capacity, it becomes important to continue to improve our recovery efficiency to deal with E-scrap including larger volumes of impurities or that impurities are not evenly mixed sharply.


**Key measures**
**Stable procurement of raw materials and optimization of smelting process**
**Stable supply of materials**
**Secure clean copper concentrate by investing in new mines**

- Acquisition of stake in the Mantoverde copper mine
- Implementation of Zafranal project


**Expand opportunities to participate in blue-chip projects**

- Invest from the early stages of projects
- Organize consortium

**Develop impurity removal technology in copper concentrate**

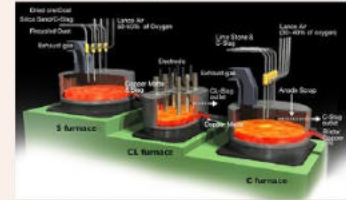
- Establish Mining & Metallurgy Laboratories (expansion of resource technology development), and conduct joint research with a third party
- Develop/train resource engineers

**Promotion of recycling**
**Optimize material flow**

- Material grid  
Optimize material flow connecting each smelter and enhance the recovery of valuable metals at each smelter  
→ Efficient recycling of Cu, precious metals and trace components in E-Scrap
- Improve the yield of Au and Ag by enhancing the precious metal factory process
- Understand E-Scrap input amount constraint and optimize processing process


**Response to climate change**
**Demonstrate the superiority of the Mitsubishi process**

Utilize the environment-friendly Mitsubishi Process


**Reduce fossil fuels**

- Replace fuel with recycled oil, etc.
- Substitute fuel using E-Scrap

**Improve energy conversion efficiency**

- Improve heat transfer efficiency of boiler
- Improve power generation efficiency

**Improve energy use efficiency**

- Efficiently use steam
- Improve electrolysis current efficiency

**Use renewable energy**
**Improve the ratio of stable raw-material procurement**

$\frac{\text{Amount of copper contained with copper concentrate under off-take* or long-term contract, and E-Scrap}}{\text{Amount of total copper production}}$

※Off-take: long-term takeover rights linked to mine investment interests

One of the solutions for removing impurities is to optimize material flow, as described earlier, and to process them at locations owned by the Group at the same time. Not doing so will not lead to any significant growth, so MMC has set this as a target.

As for the first point, I mentioned that about 17 billion yen of the financial goal is for performance of investment and ROIC in the Copper & copper alloy products did not go up to more than 5%, but MMC will invest in the expansion of the Roll and fabricate business, and the Metalworking Solutions Business will benefit from the investment performances in the Advanced metal powder business. So the Advanced Products Business and the Metalworking Solutions Business are very much part of the performance of investment. Also, metal prices on page 12 mean copper price.

**Questioner 3:** Does the 23.5 billion yen increase due to market conditions mean that the market demand will increase?

**Ono:** Since the impact of the coronavirus outbreak has not been reflected in the target as of the end of FY2023, it is assumed that by the end of FY2023, the cruise speed will return to the level at which it was before the coronavirus outbreak.

As stated, before the coronavirus outbreak, a certain degree of growth will be expected in the semiconductors industry and in the electronics field. And also, it is assumed that the trend toward EVs will accelerate, especially for next-generation vehicles in the automotive industry.

# Q&A: Concerning Profitability Improvement Measures and Planned Cash Flow

**Questioner 4:** My first point includes my impressions. I think that you have budgeted for aggressive capital expenditure in the current FY2020 Strategy, which has been implemented for three years at a level that exceeds depreciation. The situation has changed over the years, and the net income attributable to owners of the parent has slightly diverged, but in terms of spending money, I believe MMC is proceeding as planned.

I think the total investment plan of the FY2020 Strategy was about 320 billion yen including acquisition of Luvata, but this time I believe that the total investment of FY2023 Strategy will increase due to the additional acquisition of shares in Mitsubishi Hitachi Tools and so on. During this time, the direction will be to continue investments that exceed depreciation.

It seems that the plan is to increase ROIC while increasing fixed costs, but it was also newly mentioned that MMC should be conscious of capital costs. Overall, leverage is increasing, interest-bearing debts are also increasing so capital costs themselves to expand appear to be increasing.

Methods to raise individual profitability were earlier explained in the session of the performance of investments, but my impression is that these methods were not clearly illustrated.

For example, the profitability of the Advanced Products Business will temporarily decline due to upfront investments. Can you please tell me how you intend to increase profits, for example by reducing costs or increasing efficiency?



The second point concerns planned cash flow.

## Financial Plan : Resource Allocation (Investment Policy, Shareholder Return Policy, Strategic Holdings)

Investment Policy

- Make investments using cash flows from operations, and proceeds from business restructuring and asset sales
- If there are other attractive large-scale investment projects for growth, investments will be made proactively as long as a net D/E ratio of 1.0 times or less is maintained

◆ Cumulative cash flows from FY2021 to 2023

(Unit: billion yen)

Cash in		Cash out	
Operating CF	280	Investing CF	Investment for growth
Others※1	60		Investment for maintenance and upgrading
Total	340		Subtotal
		Financing CF	Dividends ※2
		Total	406

※1 Business restructuring, sales of strategic holdings, etc.

※2 Dividends paid and dividends paid to non-controlling shareholders

◆ Cumulative investment plan from FY2021 to 2023

Total Investment 360

Maintenance & upgrading 170		Growth Strategy 190			
22%	30%	21%	8%	4%	15%
(Copper & copper alloy 15, Electronic materials 7)	(Cemented carbide 28, Sintered 2)				(Affiliated 2, Aluminum9, Group-wide 4)
Advanced Products	Metalworking Solutions	Metals	Cement	Environment & energy	Others

Shareholder return Policy

- MMC intends to pay stable dividends despite fluctuating business results, and pay out an annual dividend of 80 yen per share.
- However, if the consolidated payout ratio becomes less than 25%, MMC will temporarily increase the dividend or conduct share buybacks.

	FY2020 (actual)	FY2021-2023
Dividends	80yen/share	80yen/share

Strategic holdings

- Unless required for strategic objectives, MMC will not acquire or hold shares other than purely for investment purposes
- Expected reduction in FY2020: 12%

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In addition to an increase of interest-bearing debts I mentioned earlier, the interest-bearing debts are piling up due to an imbalance between inflows and outflows. In terms of the plan of operating cash flows, the current market is rather cautious of a global recession, so it is difficult to foresee when market conditions are going to recover. In the case where it is not certain whether operating cash flows will meet the plan over a three-year period, which investment do you intend to prioritize?

How do you intend to prioritize your funding plan in the current business environment that is cautious of a recession? For example, do you intend to reinforce the inflow by accelerating asset sales, or implement a more flexible budget for growth strategy investments that could be tightened when necessary?

**Ono:** Concerning the first point, indeed, looking at the figures, investments are preceding. Concerning the point about the difficulties of visualizing efforts for cost reduction, MMC is planning to promote and fully implement the digital transformation strategy.

Of course, such an effort requires investment, but the digital transformation strategy will affect manufacturing sites through process advancement and will also affect the Corporate Division through improved efficiencies of various duties. So MMC will work on these overall efforts.

As I explained in the session of MMC's manufacturing excellence strategy, efforts of each sites are directed to reach a sufficient level for the whole company. MMC first needs to confirm its position, then understand what MMC needs to address in order to progress. That will lead to a further reduction in costs. And I firmly believe that MMC should do this.

The second issue about the balance between cash inflow and cash outflow is as you pointed out. In to the material, in addition to the 280 billion yen of operating cash flow, other cash inflows are the 60 billion yen that includes asset sales. However, given the current situation, it is not easy to determine if that will be the case.

Of course, it is possible that cash flow could be less than expected. A reduction in cash flow is most likely to be linked to a delay in demand or to a delayed timing in customer demand of products; therefore, if such a case should occur, I think that MMC has to balance the cash in and the cash out by deferring the timing of investment in accordance.

Concerning M&A, MMC keeps a "wish list" and it is also included in the investment for growth which MMC is considering. MMC also needs to consider resistance dealing, which makes the timing of M&A difficult to pinpoint, however I think it is necessary in terms of cash management to carefully choose the timing of M&A.

**Questioner 4:** Just to confirm, such a case requires flexibility in investments to a certain degree. As a result, do you adopt the position that the guideline for discipline must achieve a figure of 1.2 times the D/E ratio?

**Ono:** MMC's basic policy is to invest no more than 1.0 times the net D/E ratio.

## **Q&A: Concerning Assumptions of Copper Price and Reflections on the Previous FY2020 Strategy**

**Questioner 5:** Please allow me to ask two questions. It is slightly related to the previous question, but it concerns cash flow.

Can you inform me of the average copper price over that period that used for the calculation of the cumulative operating cash flow, if the information is available?

In addition, in the section that describes "Others" which is the table of cash in on page 14, business restructuring and the sales of strategic holdings are mentioned. Could you tell me if this 60 billion yen includes the numbers determined, highly probable numbers expected over the three year period, or numbers including prospects?

The second point is a reflection on the overall FY2020 Strategy.

## I Review of FY2020 Strategy : Results of Major Business Expansion and Progress of Key Strategic Measures

Segments	Executed key strategic measures	Delayed key strategic measures
<b>Advanced Products Business</b>	<ul style="list-style-type: none"> <li>Acquired Special Products Division of Luvata</li> <li>Started collaboration with Denka Co., Ltd. for ceramic insulated circuit substrates with high thermal dissipation for environmentally friendly vehicles</li> <li>Pursued an absorption-type merger of Mitsubishi Shindoh, a consolidated subsidiary</li> </ul>	<ul style="list-style-type: none"> <li>Synergies effect with Luvata (Cause of delay: ❶)</li> <li>Enhancement of thermistor sensor for automobiles and refrigerators for market expansion (Cause of delay: ❷)</li> </ul>
<b>Metal-working Solutions Business</b>	<ul style="list-style-type: none"> <li>Expanded recycling capacity of tungsten by 1.5 times</li> <li>Established technical centers in various markets</li> <li>Resolved to make Mitsubishi Hitachi Tools a wholly owned subsidiary</li> </ul>	<ul style="list-style-type: none"> <li>Improvement of asset efficiency in manufacturing (Cause of delay: ❸)</li> </ul>
<b>Metals Business</b>	<ul style="list-style-type: none"> <li>Launched an E-Scrap sampling facility in the Netherlands</li> <li>Acquisition of stake in the Mantoverde copper mine in Chile</li> </ul>	<ul style="list-style-type: none"> <li>Expansion of E-Scrap processing (Cause of delay: ❹)</li> </ul>
<b>Cement Business</b>	<ul style="list-style-type: none"> <li>Expanded waste plastic process capacity of Kyushu Plant by 1.7 times</li> <li>Expanded into Northern California area</li> <li>Signed a Letter of Intent with Ube Industries, Ltd. regarding integration of cement business, etc.</li> </ul>	<ul style="list-style-type: none"> <li>Development of new overseas bases</li> <li>Improvement of the cement manufacturing technology in Japan and the US (Cause of delay: ❺)</li> </ul>
<b>Environment and Energy Business</b>	<ul style="list-style-type: none"> <li>Started joint development of recycling technology for lithium-ion battery</li> <li>Established a food waste biogas business company</li> <li>Started operations of Wasabizawa Geothermal Power Plant and construction of Appi Geothermal Power Plant</li> </ul>	<ul style="list-style-type: none"> <li>Incineration fly ash cleaning plant for cement recycling (Cause of delay: ❻)</li> </ul>
<b>Group wide</b>	<ul style="list-style-type: none"> <li>Sold all shares in Mitsubishi Materials Real Estate Corporation</li> <li>Invested in Incubation Alliance Inc., which develops and manufactures Graphene</li> <li>Established New Business Development &amp; Promotion Division and EV Material Development &amp; Recycling Business Promotion Department</li> <li>Established MMC Innovation Investment Business Limited Liability Partnership</li> <li>Established Smart Factory Promotion Center</li> </ul>	

### Cause of delay

- ❶ Insufficient marketing activities
  - ❷ Insufficient gathering of customer information
  - ❸ Insufficient ability to solve manufacturing problems on site
- etc.



### Countermeasures

- Strengthen marketing
- Promote digitalization
- Fortify manufacturing excellence

You mentioned "Insufficient marketing activities". Please concretely tell me how MMC will change insufficiencies in marketing in this FY2023 Strategy.



		FY2020 Forecast (※ 1)	FY2023 Target (※ 2)	Change rate	Remarks
ROIC (%)		-	6.0		
ROA (Ordinary income to total assets) (%)		2.1	4.0	+1.9points	
ROE (%)		-	7.0		
P/L	Consolidated net sales	1,520.0	1,530.0	+1%	<b>[Ordinary income fluctuation factors]</b> Market conditions 23.5 Performance of investment 17.0 Metal prices 3.5 Exchange rate 1.5 Impact of the change in accounting treatment of cement business becoming a minority share holding -9.0 Others -1.5 Total 35.0
	Consolidated net sales (excluding metal)	830.0	650.0	-22%	
	Consolidated operating profit	27.0	58.0	+115%	
	Consolidated ordinary income	40.0	75.0	+88%	
B/S	Total assets	1,990.0	2,040.0	+3%	
	Net interest-bearing debt	450.0	510.0	+13%	
	Shareholders' equity	560.0	630.0	+13%	
Net D/E ratio (times)		0.8	1.0 times or less		
Assumptions	Exchange rate (yen/\$)	109	110		<b>[Sensitivity]</b> ◆ 1 yen increase in USD/JPY exchange rate: +0.8 billion yen ◆ 10¢/lb increase in copper price (LME) : +1.7 billion yen (Ordinary income)
	Exchange rate (yen/€)	121	125		
	Copper price (¢/lb)	268	290		

※1 Announced on February 12, 2020

※2 Assuming transition to equity method in cement business

**Ono:** Regarding the forecast for Copper prices, the table on page 12 states "290 cents / pound" as an assumption for FY2023. I think this will stay true for FY2022 and FY2023.

About whether the cash in of 60 billion yen has already been fixed, I cannot certainly say, for example, whether the sale of strategic holdings is fixed here. In that sense, please understand it as a forecast at the time of preparing the plan. The amount is, of course, a forecast of what MMC can generate in three years.

On the second point about marketing, MMC considers several points. First, MMC is working on strengthening marketing in each business division. Another way to phrase this is "strengthening customer touchpoint capability".

MMC believes that it is important to establish a so-called key account for both the Advanced Products Business and the Metalworking Solutions Business, and to have some talent engage in deepening and strengthening the touchpoints with mainly those important customers. I believe that one of the things MMC needs to do is to work not on manual but digital transformation, and to proceed with it efficiently.

The other one is to establish a Marketing Department in the Corporate Division, which I only briefly mentioned in the organization section.

<b>HR Strategy</b>	Secure and foster talents adaptive to change and forge a healthy organizational culture	
	◆ <b>Talent</b>	① Secure human resources: Reinforce hiring activities and systems, including within the Group companies, etc. ② Develop human resources: Visualize capabilities of employees (talent management), etc.
	◆ <b>Organizational culture</b>	① Enhance motivation: Introduce professional talent system, etc. ② Enhance management capabilities of the Group companies: Promote personnel exchange within the Group, etc.
	◆ <b>Improvement of social value</b>	① Employ diverse talents: Recruitment rate of new female graduates: 25% or more, etc. ② Health & productivity management: Health company declaration, White 500 certified
<b>Change of organizations</b>	<b>Business Divisions</b>	
	<b>1. Promotion of Environmental and Energy Business Division to in-house Company:</b> Positioned as a core business that can contribute to solving social issues	
	<b>2. Separation of Aluminum Division from Advanced Products Company:</b> Fundamental improvement of profitability and acceleration of strategic review, including overseas expansion	
	<b>Corporate Division</b>	
<b>Change of organizations</b>	<b>1. Establishment of Marketing Department:</b> Strengthening of corporate marketing functions	
	<b>2. Establishment of Corporate Communications Department:</b> Centralizing information dissemination to stakeholders	
	<b>Company-wide organization</b>	
	<b>1. Establishment of Digital Transformation Management Office:</b> Promotion of digitalization strategy <b>2. Establishment of Sustainable Management Office:</b> Ensuring business sustainability Establishment of subcommittees for Communications, Governance, Compliance, Risk Management, Climate Change, Environmental Management, Quality Management, Information Security, and Promotion of Zero Disasters	

If only the business divisions conduct marketing, they will only focus on the areas surrounding their current business fields, because they wish to pursue profitability. This alone is not enough to grow the overall company, so MMC needs to strengthen marketing in areas that are a little further away.

In that sense, MMC considers it necessary to conduct marketing on the corporate side while also collaborating with new business divisions to face further challenges and trials in the future. MMC intends to pursue both sides in terms of marketing.

## Greetings

**Ono:** Thank you very much for taking the time to join the conference call today. In this time, MMC announced the new FY2023 Strategy, but the most important thing is how these strategies will be executed and how flexibly MMC will deal with each situation.

As mentioned in the last question, I understand that it is necessary for MMC to steer firmly, and I appreciate your continued attention and support. Thank you very much for today.