ESG Briefing Session

November 20, 2023

Mitsui Mining & Smelting Co., Ltd.

We promote the well-being of the world
through a spirit of exploration
and diverse technologies.

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2. E: Opportunities and Risks Relative to Environmental Issues	KAWAHARA Makoto	Executive Officer in charge of ESG
3. S: Diversity Initiatives	TASHIRO Misato	General Manager of Diversity, Equity and Inclusion Office, Human Resource Department
4. G: Governance	KIBE Hisakazu	Representative Director and Senior Managing Director

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Message from the President

We promote the well-being of the world through a spirit of exploration and diverse technologies.

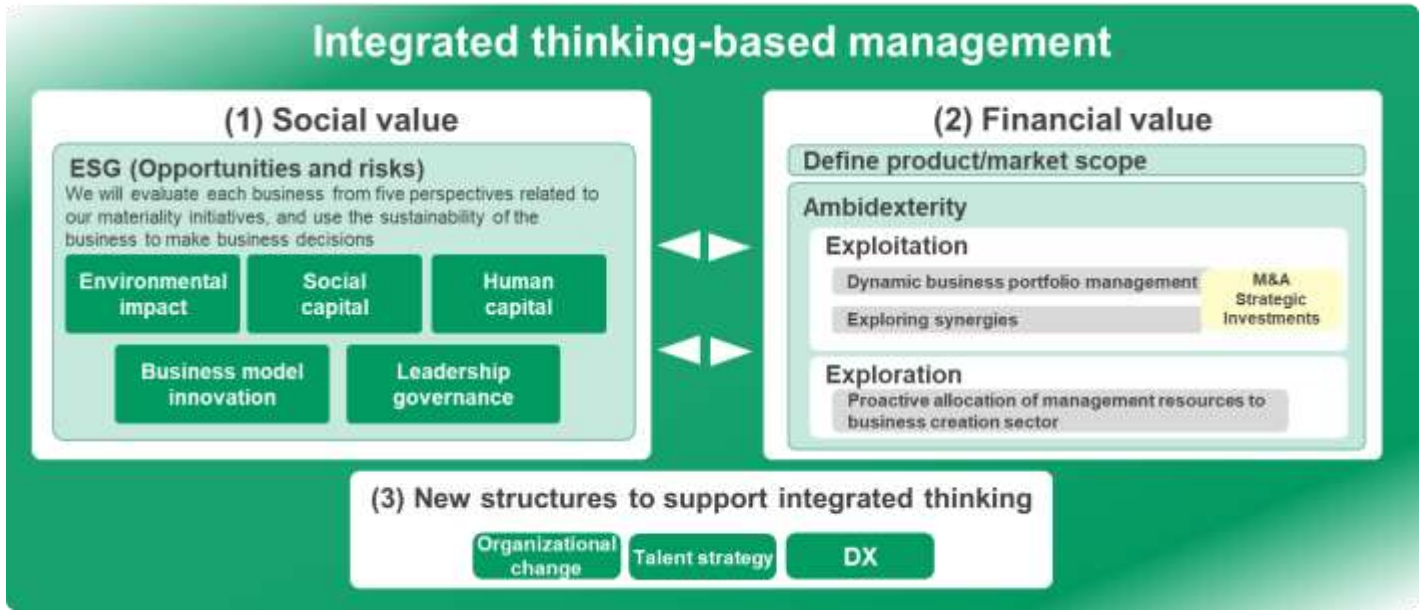
After one and half years have passed since we started our 2022-2024 Medium Term Business Plan, our Vision for 2030 and performance goals for FY2030 remain unchanged. Toward realizing the Vision and goals, we will continue to pursue integrated thinking-based management in order to generate social value and financial value.

Vision for 2030 (Our Vision)

Building new businesses—and the future—with our material intelligence

Performance goals for FY2030

- Net sales: ¥800 billion;
  Ordinary income: ¥80 billion



■ Progress of the 2022-2024 Medium Term Business Plan

- Financial value
  Expected to achieve performance goals* for FY2024 set initially under the 2022-2024 Plan one year behind.
  * Net sales: ¥725 billion; ordinary income: ¥60 billion
- Social value
  Progressing as planned for each of the ESG initiatives

Ensure that enhanced social/environmental value will bring about enhanced financial value in the medium to long term

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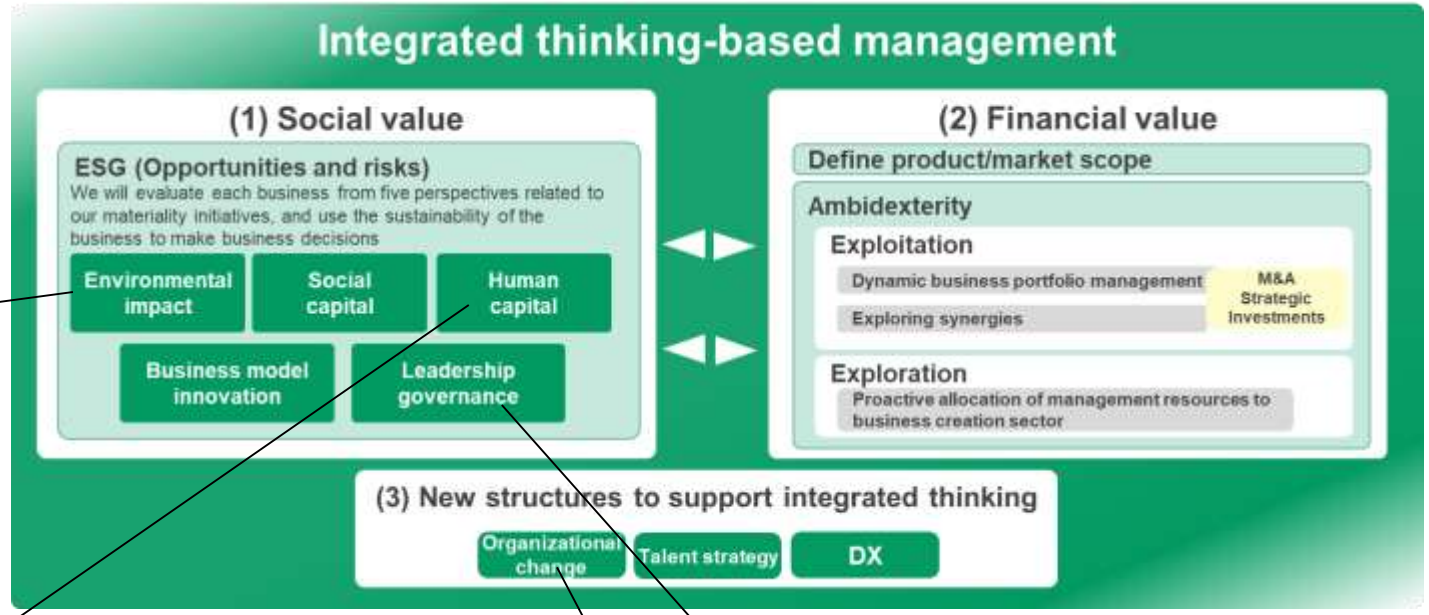
The following are major initiatives implemented to enhance social value since the start of the 2022-2024 Plan. All are progressing smoothly.

- **TCFD scenario analysis**
  Promote corporate-wide application; have started reappraisal of the metals and copper foil businesses that are particularly susceptible to climate change.
- **Introduction of ICP***
  Introduce ICP schemes to assess profitability of prospective investments as a measure to promote environmental investments

* ICP: Internal Carbon Pricing



- **Diversity, Equity & inclusion initiatives**
  Create a workplace where all employees with diverse values can thrive at work
- **Job-based personnel system**
- **Human resources business partner**
  Redesign personnel systems to promote job/role-based employment and performance-linked effective talent deployment

- **ESG index-linked executive compensation scheme**
  Provide an incentive for the management team to improve corporate value in a sustainable manner while boosting shareholder value

- **Technology Sector (newly established)**
  Supervise the four technology departments—Production Engineering, Quality Assurance, Environment & Safety, Intellectual Property—in order to ensure effective implementation of GX*, DX* and other reform initiatives

* GX: Green Transformation; DX: Digital Transformation

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Inclusion in ESG Investment Indexes Adopted by GPIF

Mitsui Kinzoku has been included in the FTSE Blossom Japan Index in recognition of our activities for improving social/environmental value,
resulting in the Company being a component of five out of the six ESG investment indexes adopted by GPIF.

[ESG investment indexes adopted by GPIF]

● Mitsui Kinzoku included in:

- Comprehensive index
  - ● **FTSE Blossom Japan Index**
  - ● **MSCI Japan ESG Select Leaders Index**
  - ● **FTSE Blossom Japan Sector Relative Index**
- Thematic index
  - E (Environmental)
    - ● **S&P/JPX Carbon Efficient Index**
  - S (Social)
    - **MSCI Japan Empowering Women (WIN) Select Index**
    - ● **Morningstar Japan ex-REIT Gender Diversity Tilt Index**

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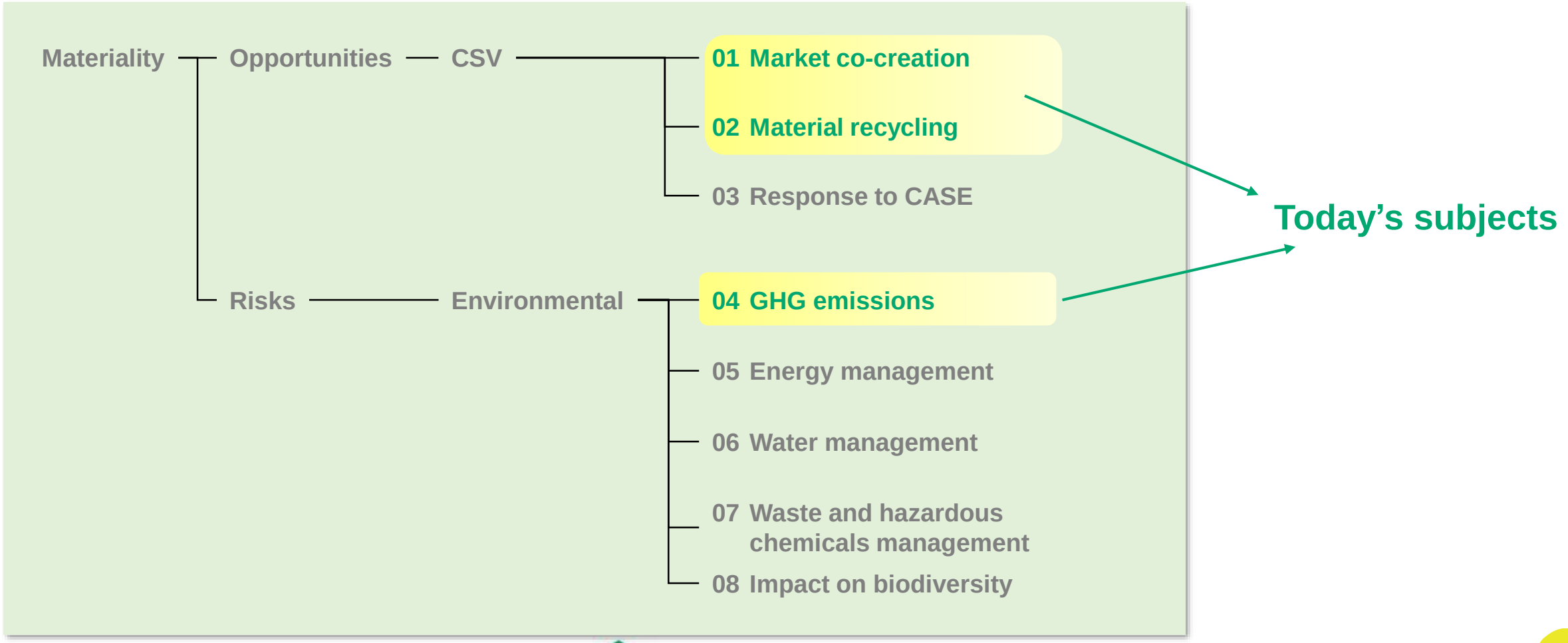
Opportunities and Risks Associated with Environmental Action

Various initiatives are underway with the aim of creating opportunities and reducing risks associated with environmental action.

We will create opportunities so as to increase financial value effectively while reducing risks to improve social/environmental value as a sustainable business.



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CSV_Business Creation Sector—Initiatives for Promoting the Well-being of the World

We promote the well-being of the world through a spirit of exploration and diverse technologies.

E: Create Opportunities

"Promote the well-being of the world" in cooperation with co-creation partners

* Partners such as customers, universities, research institutions, startups, and suppliers that share the vision of a society we aim to realize

Contribute to a carbon neutral society

- Technologies that facilitate the transition to EVs and FCVs
- Technologies that support a hydrogen society
- Technologies that contribute to the reduction of GHG emissions

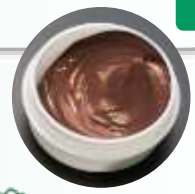
Solid electrolyte A-SOLiD®

Under development

New products

Specialty carrier for the next-generation semiconductor packaging HRDP®

Under development



Cu sinter paste for power semiconductors

Contribute to circular economy

- Technologies that contribute to energy and resource conservation
- Materials that support material recycling and resource circulation

Contribute to harmonious coexistence of nature and humans

- Technologies that support the bioeconomy

eSep

Downsizing and energy conservation for chemical processing

CHITOSE

Industrial structure transformation driven by photosynthesis-based technology

Helical Fusion

Commercialization of nuclear fusion technology

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CSV_Business Creation Sector— A-SOLiD® Solid Electrolyte for All-Solid-State Batteries

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E: Create Opportunities

Solid electrolyte A-SOLiD®

- Powdered sulfide solid electrolyte
- essential for All-Solid State Battery
- (ASSB)
- Features high ionic conductivity due to
- argyrodite-type crystal structure and
- exhibits excellent battery properties

All-solid-state battery, a next-generation storage battery

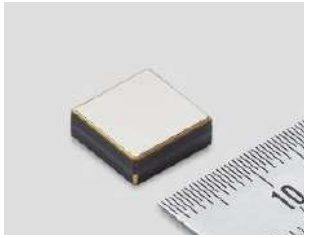

Photo provided by Maxell, Ltd.

Photo provided by LIBTEC

Social/environmental value

Safer and more comfortable EVs

Possibility of battery use expanded by increasing environmental adaptability (high/low temperatures, etc.)

A-SOLiD® mass-production testing facility building
(Ageo City, Saitama Prefecture)

2015 — Develop solid electrolytes

2020 — Decide to introduce mass-production testing facility

Start to supply samples

2025

EV uses: Developers accelerating R&D → Commercialization

Industrial uses: Commercialization → Application expanded

2030

Decide to double the production capacity in response to soaring demand for samples from companies in Japan and overseas

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CSV_Business Creation Sector—HRDP® Specialty Carrier for Next Generation Semiconductor Packaging

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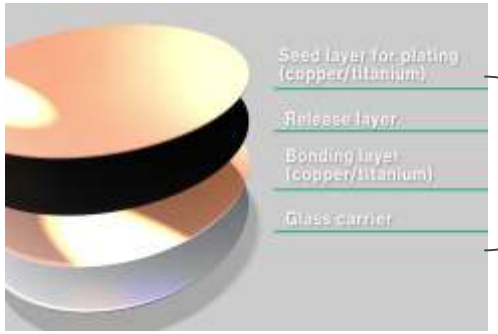
E: Create Opportunities

Characteristics



Functional layer thickness: 0.65 μm

- Specialty carrier for high production efficiency of next-generation semiconductor packaging
- Contribute to customers' process yield
- maximization in next-generation semiconductor package manufacturing

Social/environmental value

Contribute to advancement of technologies for high-speed communication, high-speed processing, self-driving, medical procedures, etc.

Reduce power consumption and improve energy efficiency

2018 — 2020 — 2025 — 2030

Develop HRDP®
Establish a mass-production system jointly with GEOMATEC Co., Ltd.

Start mass production (multi-chip module manufacturers in Japan)

Start mass production (IC-chip packaging device manufacturers overseas)

Start operation of DOE*1 facility

Expand production capacity (install second line)
Enhance DOE facility

Market expanded

Automatic release mechanism for HRDP® (part of the DOE facility)

*1. DOE: Design of Experiments. This methodology is applied to build a development facility for identifying and resolving issues in advance by verifying customer designs.

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CSV_Business Creation Sector—Cu Paste for Power Semiconductors

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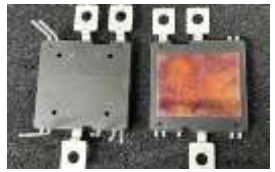
Cu sinter*1 paste for power semiconductors

Characteristics

- Bonding material with high heat dissipation and high heat resistance, a property essential for next-generation power devices (SiC/GaN)
- Low temperature sintering and high reliability achieved through integrated design and development processes for powder and paste formation
- Provide a cost advantage over silver sinter paste, which is taking a lead in market penetration

End products

- EV/PHEV
- Renewable energy (wind power, solar power)
- Electrical railroad systems
- Industrial equipment (base station, etc.)



Next-generation power devices

Social/environmental value

Facilitate the popularization of power semiconductors, a key to decarbonization and energy conservation

Topics

- To facilitate the popularization of next-generation power devices, demand for reducing manufacturing cost is growing. Leading global players have started evaluating alternatives to silver sinter paste products.
- Small mass-production facilities have been installed, starting to respond to requests for samples from many manufacturers.
- DOE*3 functions have been set up within the Company, starting to support the evaluation of performance and process of customers' operations.

*1. Sintering: bonding technique by heating and pressurizing the material to promote atomic migration between the bonded interfaces
*2. Source: "2023 Present Situation and Future Outlook of Next-Generation Power Device & Power Electronics Market" (Fuji Keizai Co., Ltd.)
*3. DOE: Design of Experiments

Mitsui Kinzoku's DOE functions

Equipment for process testing and evaluation

Sintering equipment for mass production

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CSV_Engineered Materials Segment — Environmental Contribution Products

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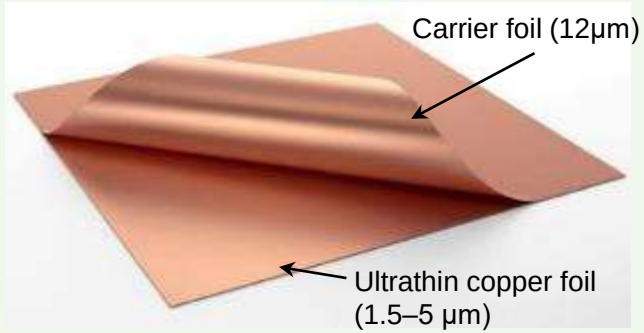
E: Create Opportunities

The following three items have been certified as environmental contribution products in FY2023 as of now.
We will increase the percentage of environmental contribution products aiming to achieve the Vision for 2030.

Engineered Materials Segment Vision for 2030	FY2030 targets for environmental contribution products : ¥180 billion net sales; ¥40 billion real-terms ordinary income; at least 70% of products newly launched; at least 50% of sales

MicroThin™ carrier foil 12 μm products

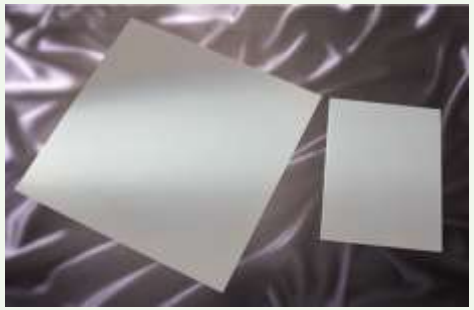
- Copper carrier foil thickness reduced (18 μm to 12 μm)



- The product can diminish the amount of copper used, thus reducing environmental impact related to the entire manufacturing process.
- We have begun to suggest a switch to carrier foil 12μm products to green-minded customers.

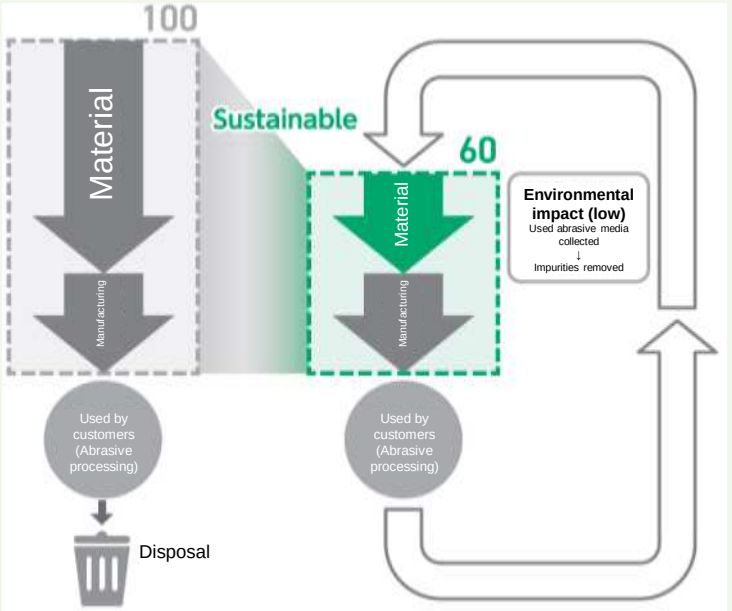
SnO2-X sputtering targets

- Applied to low-e glass (environmentally friendly glass)



- Low-e (double-glazed) glass is environmentally friendly because it can help reduce energy consumption for room air conditioning significantly compared with single-glazed glass.
- Sales are expected to grow threefold by 2030.

Recycled abrasives



- Recycled abrasives can reduce environmental impact by 40%.
- We are expanding sales targeting green-minded customers.

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CSV_Metals Segment—Material Recycling

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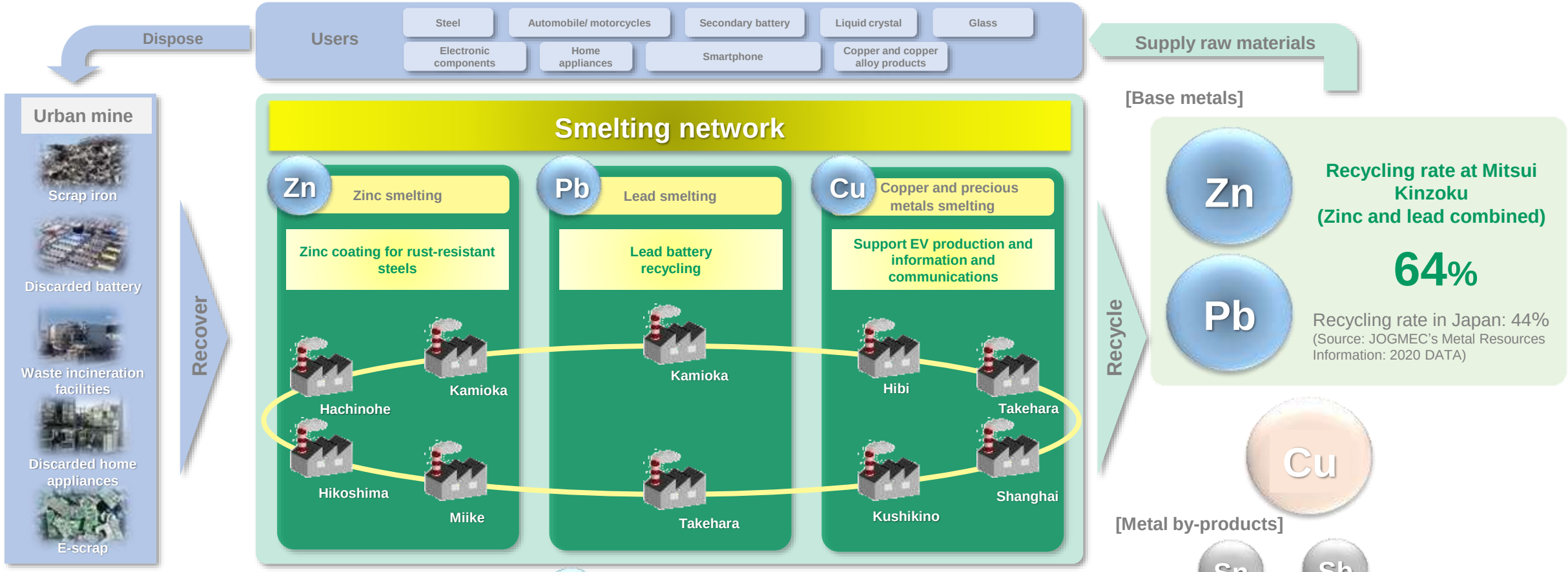
E: Create Opportunities

The recycling rate for zinc and lead has increased to 64%, thanks to the cooperation of our smelting network. We are working to increase the amount of industrial waste treatment and lead-based materials processed for recycling, according to the 2022-2024 Plan.



Increase the amount of industrial waste Zn and lead-based materials processed for recycling, Pb according to the 2022-2024 Plan

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Hachinohe Smelting Playing a Central Role in Supporting a Sustainable Society

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E: Create Opportunities

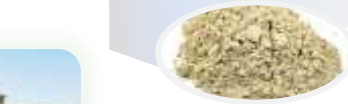
Hachinohe's ISP* operations play a central role in the smelting network by enabling the processing various metal materials containing zinc, lead, copper, and precious metals for recycling.

Mitsui Kinzoku's metal recycling network centered around Hachinohe Smelting

Non-Mitsui primary treatment service

Miike Smelting
(MF furnace, metal separation and enrichment)

Crude zinc oxide



Blast furnace flue dust

EAF flue dust

Electric furnace manufacturer

Waste combustion furnace

Industrial waste
Household waste

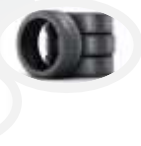
Scrap, etc.

Lead bullion

Gold bullion

Silver bullion

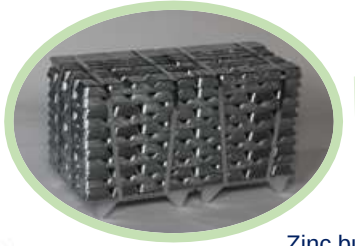
Takehara Refinery
(Lead and precious metal production)



Hikoshima Smelting
(Electric furnace, zinc bullion production)

Hachinohe Smelting
(ISP furnace, zinc bullion production)
Variety of waste metals handled (elements)
ISP furnace > electric furnace

Crude lead, copper-containing dross (including gold, silver, etc.)



Zinc bullion

Steel material

* ISP：Imperial Smelting Process
A technique for simultaneous zinc and lead smelting in a single blast furnace using coke as the heat source and reducing agent.
The process can handle a wide variety of waste metals for recycling, and is thus particularly suitable for recovering gold, silver, copper, and other valuable metals, despite the issue of emitting CO_2 due to coke being used in the process.

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Medium- to Long-Term Carbon Emissions Reduction Goals and Initiatives

E: Reduce Risks

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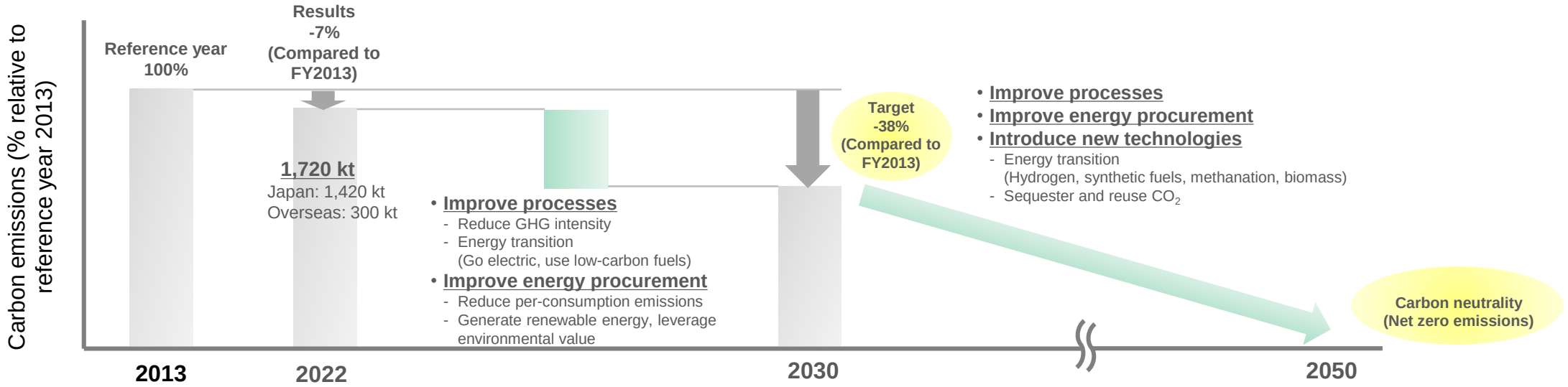
- Reduce carbon emissions by 38% globally by FY2030 (Scopes 1 and 2, compared to FY2013).
- Achieve carbon neutrality (net zero emissions) by FY2050.



Create projects to reduce CO_2 emissions

Implementation of the roadmap towards carbon neutrality (The first version was developed in FY2022.)
- ◆ Continuous review of environmental investment (determination of technology, and reduction of costs)
- ◆ ICP simulation (targets and investment amount)

Keeping track of Scope3 CO_2 emissions
- ▪ Started tracking the figures from FY2021
- ▪ Identify company-wide figures and consider targets by 2023

Identifying areas of improvement through LCA*1
- ◆ Expansion of LCA across the company (to be completed by FY2024)
- ◆ Quantification of CO_2 emissions by product and process

Building strategies based on the TCFD scenario analysis
- ◆ **Expansion of the TCFD scenario analysis across the company (to be completed by FY2024)**
- ◆ Formulation of strategies and tactics for reducing CO_2 emissions

Implement projects for reducing carbon emissions

Apply ICP*2 as a guide for environmental investment
- ◆ Use ICP to assess profitability of prospective investments in carbon reduction and invest accordingly (Launch in FY2023)

Participate in GX League

Address new regulations and new technologies
- ◆ Build a system for emissions trading
- ◆ Gather information and materialize new technologies through collaboration with member companies

*1. LCA: Life cycle assessment
*2. ICP: Internal Carbon Pricing

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Medium- to Long-Term Carbon Emissions Reduction Goals and Initiatives

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Apply ICP*1 as a guide for environmental investment

*1. ICP: Internal Carbon Pricing

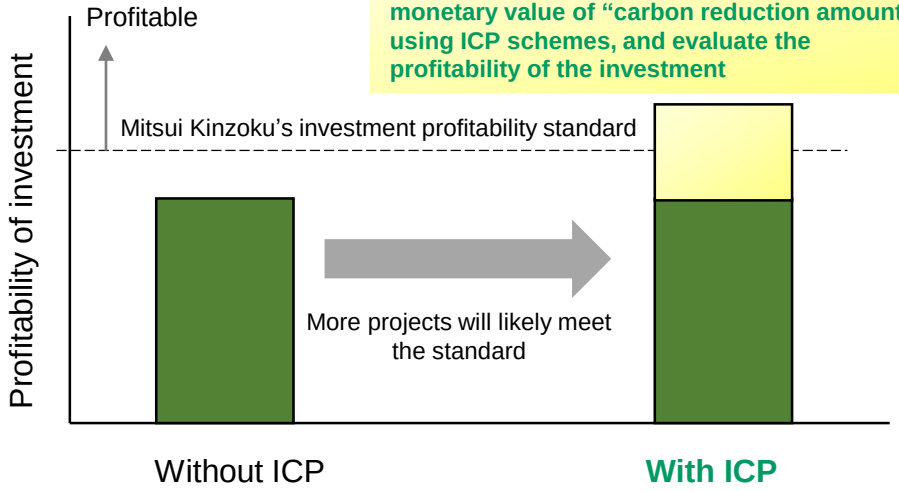
◆ Apply ICP to assess profitability of prospective investments in **carbon** reduction and invest accordingly **(Launch in FY2023)**

The carbon price for Scope 1 is set to be higher than that for Scope 2, in order to give an incentive for facilitating measures for Scope 1, which is the more challenging of the two.

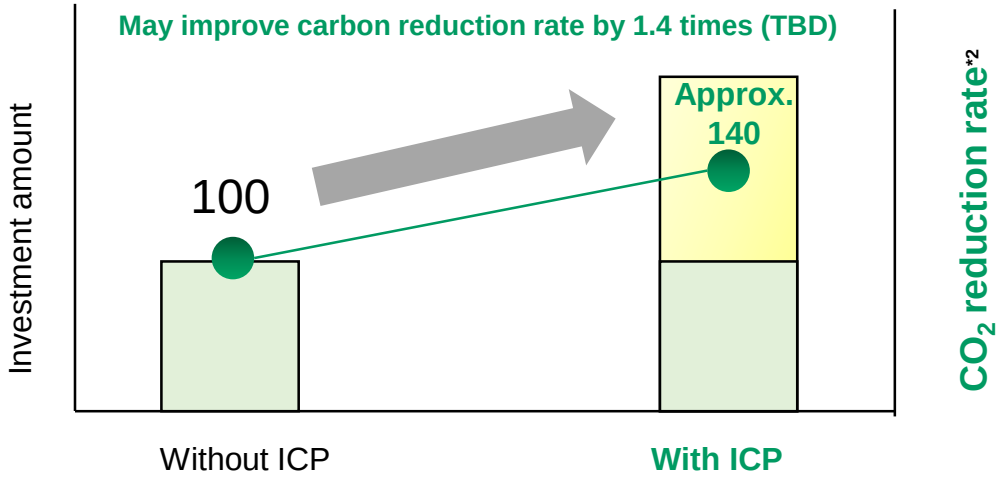
Internal carbon price	**Scope 1: ¥30,000/t-CO_2** **Scope 2: ¥20,000/t-CO_2**
Target	Investments in equipment and development projects that effect changes in carbon emissions
Application method	Apply ICP to determine the cost of carbon emissions related to target investments and evaluate the profitability of the investments to provide a reference for investment decisions

・Application model

Estimate investment effect by calculating the monetary value of "carbon reduction amounts" using ICP schemes, and evaluate the profitability of the investment



・Effect of introducing ICP (estimate)



*2. 100=CO_2 reduction rate without ICP

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Medium- to Long-Term Carbon Emissions Reduction Goals and Initiatives

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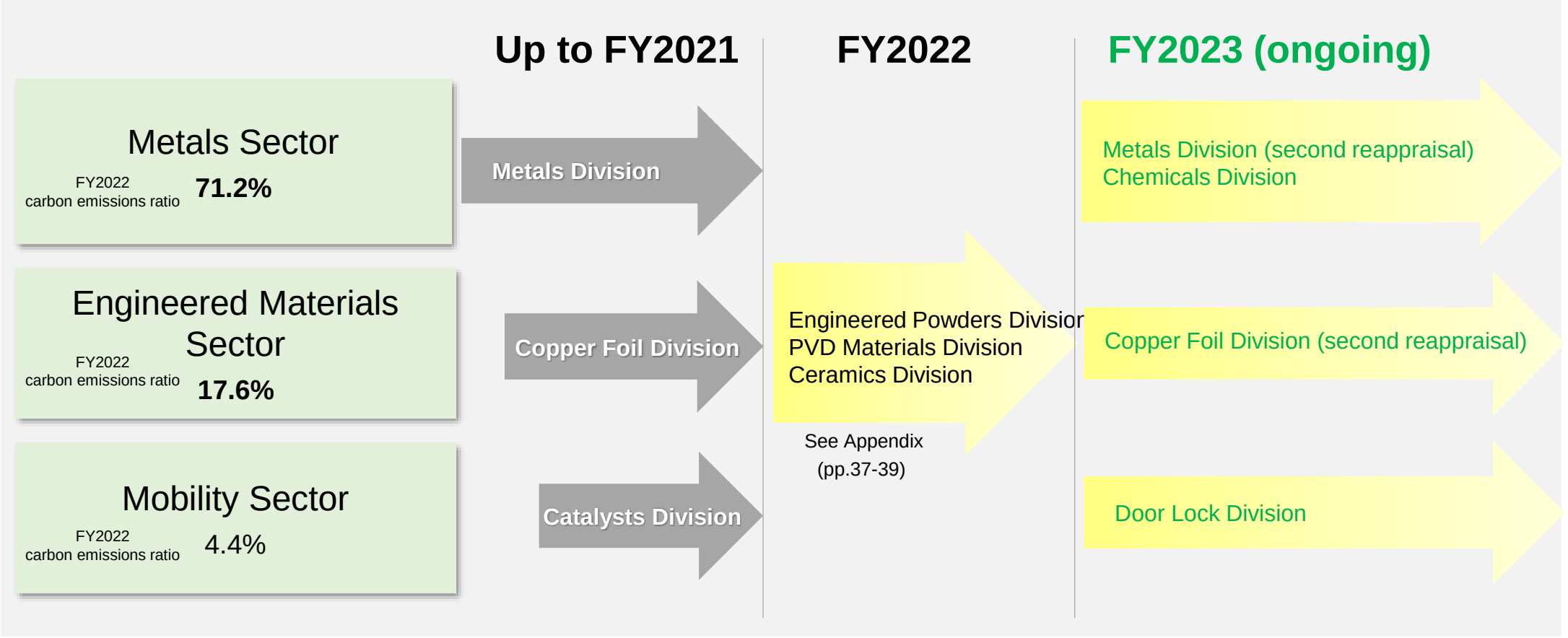
Corporate-wide application of TCFD scenario analysis

We have commenced scenario analyses for each business area, starting from business areas that are particularly susceptible to climate change.
In FY2023, we have started additional reappraisal of the metals and copper foil businesses that are particularly susceptible to climate change.



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Metals Segment—Carbon Neutrality Initiatives

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Aiming to achieve carbon neutrality by 2050, the Metals segment expands activities to address issues such as energy source transition and carbon capture and reuse while continually working on energy saving and higher efficiency, and promotes segment-wide efforts, including Hachinohe's ISP operations.

			Measures for FY2030	Measures for FY2050
Improve processes Technologies established or implementable measures	Energy saving and higher efficiency	Improve efficiency by updating outdated facilities	■ Improve heat exchange efficiency, including for sulfuric acid heat exchangers	Continuous initiatives after FY2030
		Promote utilization of waste heat	■ Capture steam from waste heat and use in existing power generation facilities	
		Improve electricity intensity	■ Promote demand response utilizing digital technology in electrolysis plants (Keidanren's Challenge Zero Innovation Project) ■ Plan and implement energy conservation projects	
Introduce new technologies Measures under development through internal and external collaboration	Energy source transition	Utilize renewable energy	■ **Substitute coal with biomass fuels** ■ New hydroelectric power plant	
		Utilize low emissions factor energy	■ **Reduce coke consumption in ISP smelting by utilizing alternative fuels** (Keidanren's Challenge Zero Innovation Project)	■ Utilize ferro coke Introduce zinc reduction method with iron (Technical guidance and research by Tohoku University)
	Carbon capture and reuse	CCUS utilization, etc. Explore new technologies	Sowing seeds for the future	■ **Develop carbon capture technology** ■ Participate in the Carbon Recycling Fund in Hiroshima Prefecture and the Hachinohe Area New Zero Emission Liaison Council

Facilitate energy saving based on existing technologies and energy source transition

Search for breakthroughs by leveraging corporate-wide technological synergies

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Substitution of Coal with Biomass Fuels

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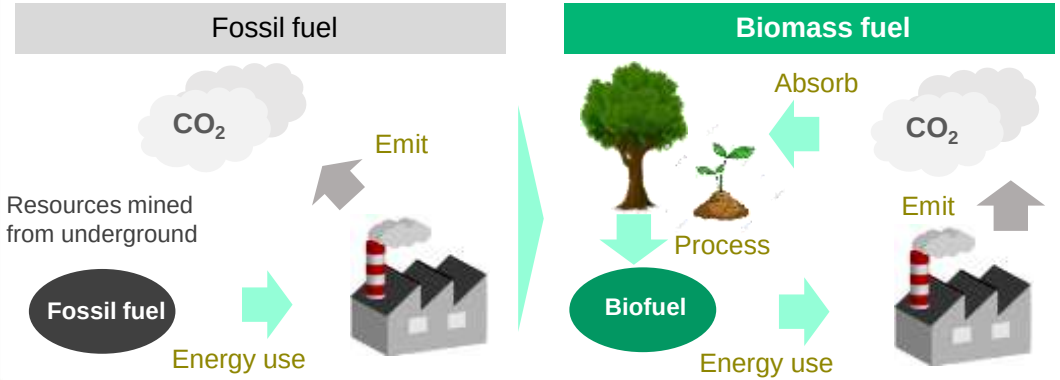
We aim to switch fuels for smelting from coal and coke to biomass-derived fuels. In September 2023, Miike Smelting achieved a biomass fuel rate of 70%, demonstrating the practicability of the alternative fuel. Following Miike, a trial run will be conducted at Hachinohe Smelting and for the lead blast furnace to identify and resolve issues.

Overview of biomass fuel



[Fossil fuel]

Fossil resources are mined from underground deposits to be used as fuel, emitting CO_2 into the atmosphere in the process.
Examples: coal, coke, natural gas, etc.

[Biomass fuel]

Carbon emissions from burning biomass fuel originate from atmospheric carbon absorbed by plants during the process of growing, thus not counted as increased emissions.
Example: forest thinnings, chaff

Goals of initiatives

[Expected carbon emissions reduction due to alternative fuels]

- 80,000+34,000+5,000 ton-CO_2/year
  Miike SmeltingHachinohe's blast furnaceLead blast furnace

[Issues to address]

- Search for new biomass fuel sources; find suppliers inside and outside of Japan
- Determine specific quality requirements for Miike Smelting and other refineries

Implementation schedule

	2023	2024	2025–2029	2030
Implementation plans	Search for new biomass fuel sources; collect information; find suppliers inside and outside of Japan			
	Determine specific physical and chemical quality requirements for each refinery			
	Roll out the practice to other refineries, using results of trial use at Miike Smelting			Move on to real operations

Biomass fuel rate of 70% achieved in September 2023, demonstrating the practicability of the alternative fuel

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Adopting Alternative Fuels to Reduce Coke Consumption at Hachinohe Smelting

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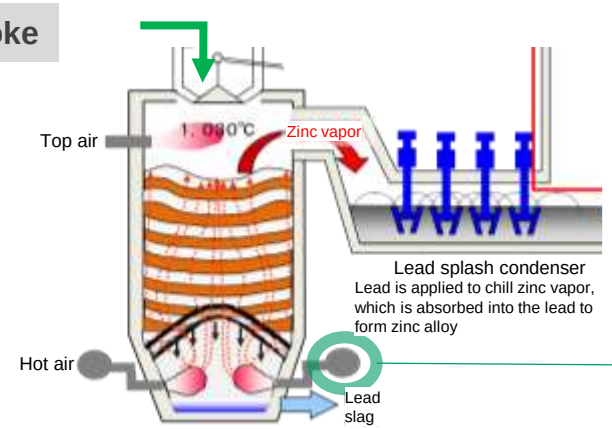
E: Reduce Risks

Hachinohe Smelting aims to make a partial transition from coke to LNG, and has started the trial use of the alternative fuel to identify and resolve issues.

Overview of process using alternative fuel



Keidanren's Challenge Zero Innovation Project (ongoing)

LNG

Inject LNG into the blast furnace along with air through a tuyere located at the base in order to reduce zinc

Goals of initiatives

[Expected carbon emissions reduction due to alternative fuels]

- LNG: 18,000 ton-CO_2/year

[Issues to address]

- Assess the effect of water vapor generated by burning LNG to reoxidize zinc
- Ensure the safety of equipment

Implementation schedule

LNG injection test conducted in August 2023, confirming the safety of the process

	2023	2024	2025–2029	2030
Implementation plans	Alter the tuyere so as to be suitable for injecting LNG	Demonstration test		Move on to real operations
	Lab test (Assessment for zinc reoxidation)	Addressing issues		
	Safety assessment			

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Carbon Capture Technology Development

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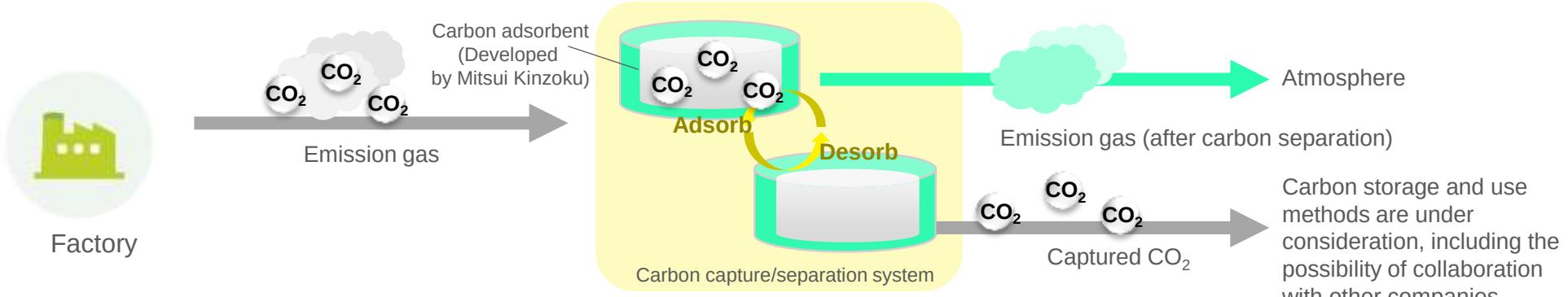
E: Reduce Risks

A project is underway to develop a carbon capture and separation system that uses a module composed of our proprietary carbon adsorbent to adsorb and desorb CO_2 from factory emissions.
Planned field testing will be conducted at Hachinohe Smelting, looking to commercialize the system in or after FY2030.

Overview of carbon capture technology



Development goals

[Carbon capture capacity]

- 190,000 ton-CO_2/year
  In case of emissions from Hachinohe Smelting

[Issues to address]

- Modular design optimization for operation conditions and shape and size
- Plan for dealing with captured carbon (CCS in collaboration with other companies, etc.)

Roadmap for commercialization

	2023	2024	2025–2029	2030
Implementation plans	Lab test • Prototype system creation for lab testing • Test operation	Bench test • Factory implementation and field testing	Pilot plant demonstration • Scale-up	Commercialization • Internal rollout • Sales to external markets
Evaluation / development	Examine conditions for using standard gas	Conduct performance evaluation on real emission		
		Process simulation		
		Durability evaluation		

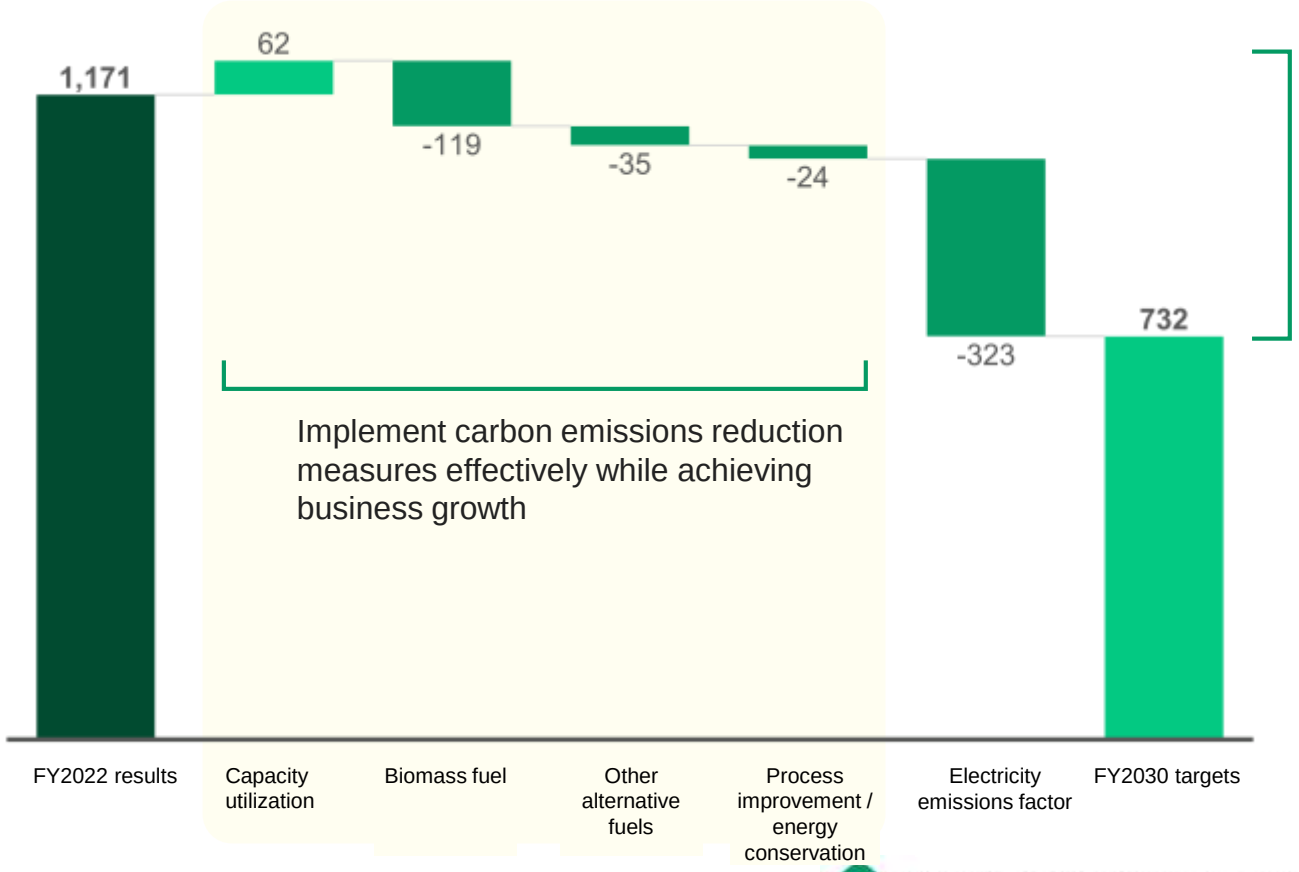
A test module to be installed in Hachinohe to conduct field testing during 2H of this fiscal year

Carbon Emissions Reduction: FY2022 Results and FY2030 Targets

We are carrying out a range of measures to reduce carbon emissions, by promoting process improvement and energy saving as well as studies on transition to alternative fuels.
Aiming to achieve 2030 targets, we will implement additional measures while achieving business growth.

Carbon Emissions from Metals Segment

(1,000 ton-CO_2/year)



Other measures

- Carbon capture from emissions, storage and use
- Introduction of new technologies through industry-academia-government collaboration
  - Ferro coke utilization (technical guidance given and research led by Tohoku University)
  - Research led by Kobe Gakuin University for carbon capture from emissions from Takehara's lead blast furnace (funded by the Carbon Recycling Fund in Hiroshima Prefecture)

Continue to promote ongoing initiatives, while introducing new technologies through industry-academia-government collaboration

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Contents

1. Massage from the President	NOU Takeshi	President and Representative Director
2. E: Opportunities and Risks Relative to Environmental Issues	KAWAHARA Makoto	Executive Officer in charge of ESG
3. S: Diversity Initiatives	**TASHIRO Misato**	**General Manager of Diversity, Equity and Inclusion Office, Human Resource Department**
4. G: Governance	KIBE Hisakazu	Representative Director and Senior Managing Director

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Human Capital / HR Strategy

We promote the well-being of the world through a spirit of exploration and diverse technologies.

We are implementing various organizational talent deployment strategies while at the same time taking steps for respecting each individual **(blue descriptions below).**

Engaged workplace | Innovative workplace | Achieving business strategies

Workplace diversity

Initiatives to leverage all types of diversity

Remuneration of directors and officers linked to KPIs on women's empowerment

Today's subjects

Career development support
Help each employee achieve professional growth and career vision
One on one career advice sessions; enhanced training systems

Improvement of Employee Engagement
Provide a positive work environment that supports productivity of diverse talents
Conduct employee engagement surveys and execute improvement measures

[Respect for Individuals] Recognize, enhance, and utilize diversity

Corporate-wide strategic talent allocation

Enhancing human resources business partner functions
Full-scale operation of specialized departments

Personnel information utilization
Comprehensive, de-personalized, centralized management
System installation

Human resources strategy development
Identify issues with foresight and resolve them quickly
Dialogue with management and business divisions

[Utilization as an organization]
Create a competitive advantage in terms of human resources

Performance-based talent management (transition to job-based personnel system in FY2022)

Respect for human rights

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Progress of Diversity Initiatives

1. Building diversity promotion systems; starting regular discussions at Board of Directors meetings

2. Initiatives for improvement of employee engagement

3. Building a culture of respecting diversity

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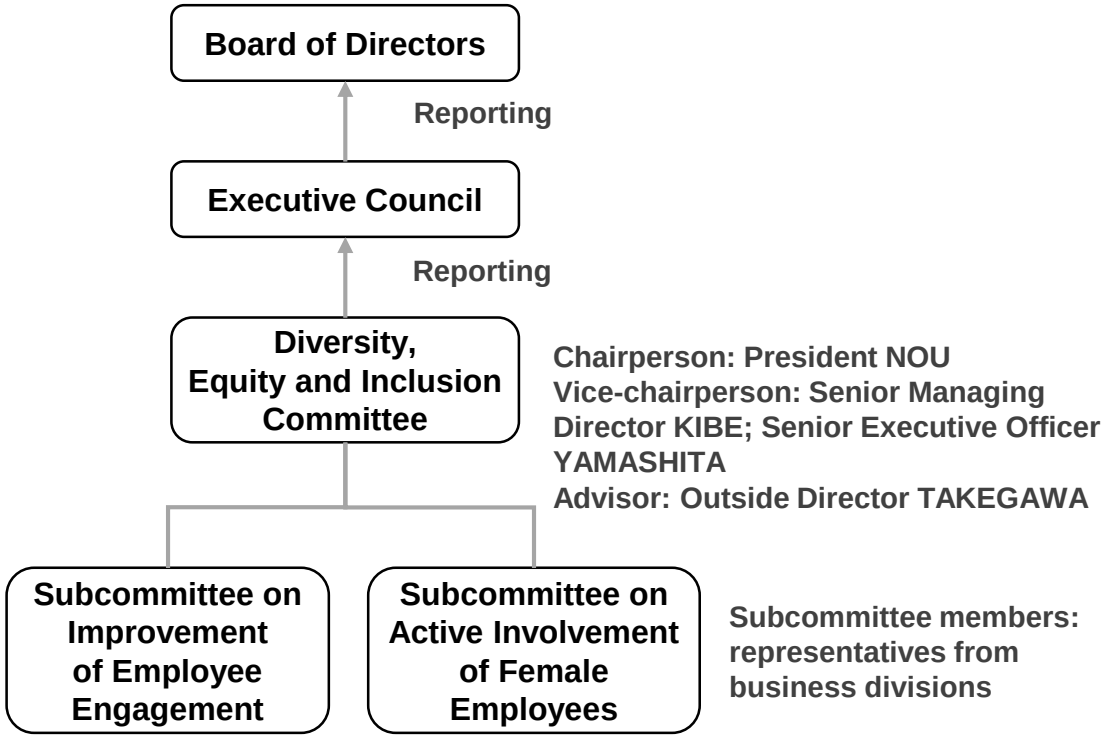
Building Diversity Promotion System

Senior management is committed to implementing the roadmap and receives reports on the progress and discusses issues at Board of Directors meetings.

Diversity promotion system



Results from initiatives

- ***Eruboshi*** **certification**
- **Systematic development of female managers**
- **A larger number of organizational leaders committed to increasing the ratio of women to achieve self-set targets**
- **Internal and external exchanges increased****

** Male Leaders Coaltion for Enpowerment of Women

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Initiatives for Improvement of Employee Engagement

Initiatives are underway for visualizing organizational engagement and according to established procedures

Procedures

[Preparation]
Building systems at each organization

[Assess the situation]
Survey of each organization

[Discuss measures]
Workshop for managers

[Review]
Interim; pre-survey; post-survey

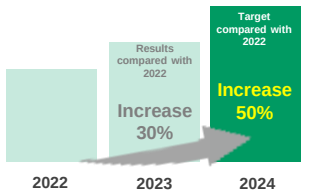
Counseling workshop for divisional managers and seminars for divisional promotors held
to create an environment supportive to managers

Results from initiatives

Increased number of successful cases of efforts for improving engagement (13 cases)

Increased rate of managers feeling the benefit

Actual and target rate of managers feeling the benefit



Enhanced relationships between organizations*

- **Employee engagement improvement workshop; case sharing sessions; articles on top management dialogues posted in the internal newsletter**

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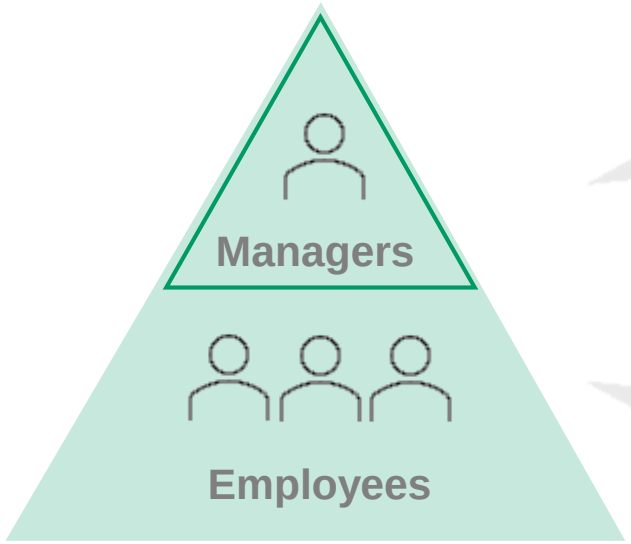
Building a Culture of Respecting Diversity

Unconscious Bias Training is offered as a mandatory program and behavior change assessment is conducted.



Diversity Management Training: for managers

Participants explore management approaches to harness the diversity of their workplace and work out specific plans
→ 57% of the participants have taken action within one month after the training

Unconscious Bias Training: for all employees

Participants learn about unconscious bias and assess their own attitude in terms of this issue
→ 87% of the participants have reported clearly recognizing that they have unconscious bias

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Mitsui Kinzoku's Corporate Governance

[History of our corporate governance reform]

: Male : Female : Chairperson of the Board of Directors

FY		Composition of directors
–2014	• Established the Nomination Review Committee and the Compensation Committee (2005) • Stipulated that an outside director shall serve as the chairperson of the Nomination Review Committee (2008)	(2014) Inside: 8 Outside: 2
2015	• Began evaluating the effectiveness of the Board of Directors	Inside: 7 Outside: 2
2016	• Stipulated that an outside director shall serve as the chairperson of the Internal Audit Committee	Inside: 4 Outside: 2
2018	• Stipulated that an outside director shall serve as the chairperson of the Compensation Committee	
2019	• Changed the term of directors from two years to one year	
2020	• Stipulated that an outside auditor shall be a member of the Nomination Review Committee and the Compensation Committee	Inside: 5 Outside: 3
2021	• Stipulated that the Board of Directors shall be chaired by a director who is not serving as President and Representative Director • Adopted a restricted stock compensation plan for directors and executive officers • Turned our listed subsidiary, Mesco, Inc., into a wholly-owned subsidiary	Inside: 5 (Non-president) Outside: 3
2022	• Stipulated that the Board of Directors shall be chaired by an outside director	Inside: 5 Outside: 3
2023	• Adopted an ESG index-linked restricted stock compensation plan	Inside: 6 Outside: 3

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Executive Compensation

In FY2023, Mitsui Kinzoku launched an ESG index-linked stock compensation plan for directors (excluding outside directors).

■ History related to executive compensation

FY	
2005	• Established the Compensation Committee
2018	• Stipulated that an outside director shall serve as the chairperson of the Compensation Committee
2021	• Adopted a restricted stock compensation plan for directors and executive officers
2023	• **Adopted an ESG index-linked restricted stock compensation plan**

- Specific ESG indicators are related to the following
  - GHG emissions reduction
  - Job satisfaction, diversity promotion
  - Compliance

Composition of compensation by type based on consolidated ordinary income of 40 billion yen; percentage of ESG index-linked stock compensation

Base compensation	53%
Performance-linked compensation	32%
Stock compensation	15%

Target	Mode of compensation	Percentage of stock compensation (continuous service type and ESG index-linked type) to total compensation set to be linked with performance against the ESG index, as specified below		
		Targets fully achieved	Targets partially achieved	All targets missed
Director	Stock compensation	15%	10% (Same level as FY2022) ～12.5%	7.5% (Continuous service type only, total stock compensation will decrease compared to FY2022)

Note: The above figures are for the case that ESG index targets are fully achieved.

We will continue to review and revise the executive compensation system, including the composition of compensation and specific indicators, as necessary.

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Effectiveness Assessment of the Board of Directors

Effectiveness assessment of the Board of Directors is conducted every year. We will continue with the annual program, setting higher standards to improve the effectiveness.

FY2021

Effectiveness of the Board is assured as a whole.

- Implementation method
  Assessment of directors and corporate auditors is conducted using a questionnaire survey and holding individual interviews.
- Assessment results
  - Progress made to a certain extent for taking action in accordance with the Corporate Governance Code, and in-depth discussions were held at several Board meetings on issues with promoting diversity and setting carbon emissions reduction targets.
  - Engagement in overall business management increased compared with before as the Board met several times to formulate the Medium-term Business Plan, and implemented corporate-wide organizational restructuring plans based on discussions on the business portfolio.

FY2022

Effectiveness of the Board is assured as a whole.

- Implementation method
  - Board members respond to a self-assessment survey, the third-party agency compiles the survey results, and the chairperson of the Board exchanges opinions with outside directors and outside auditors based on the compiled report.
- Assessment results
  - Good or generally good in terms of understanding shared about roles of the Board, and composition and operation of the Board.
  - Better compared with before for holding discussions on sustainability issues, such as basic policies, improvement activities, and information disclosure.
- Issues to address
  - The Board needs to have deeper discussions to address issues such as the allocation of management resources to invest in human capital and intellectual property, and the execution of strategies related to the business portfolio.

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Action to Implement Management That is Conscious of Cost of Capital and Stock Price

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In response to the TSE's request for the above-captioned matter, Mitsui Kinzoku is promoting the following measures aimed at increasing its corporate value.

1. Implement measures to improve financial value

- Implement measures effectively to improve financial value, as described in the 2022-2024 Plan, seeking to increase sales and earnings per share (EPS) as well as looking at multiple expansion.

Improve financial value

Define product/market scope

Ambidexterity

Exploitation

- Dynamic portfolio management
- Exploring synergies

M&A Strategic Investments

Exploration

- Proactive allocation of management resources to business creation sector

* For details, see page 36 in Appendix.

2. Enhance ROIC-oriented management

2019-2021 Plan (2019-21)

- Announce commitment to management that is conscious of capital efficiency
- Enhance the monitoring of business performance by adopting ROIC as a KPI for each segment

2022-2024 Plan (2022-24)

- Adopt ROIC as an indicator of business value in order to create an evaluation matrix that encourages management with higher capital efficiency, as a measure for " Dynamic portfolio management*"
- Set ROIC targets for each business aiming to achieve the targets of raising the corporate-wide ROIC figure

- Based on the above, we are considering the following issues:
  - Create corporate-wide ROIC valuation models conducive to increased corporate value
  - Establish profitability evaluation method based on ROIC spread (ROIC-WACC)

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Appendix

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Business Management Centered around Our Purpose

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through a spirit of exploration
and diverse technologies.

To adapt to the era of VUCA, we have defined its Purpose (social reason for existence), which serves as the change-tolerant foundation for management decisions and moral support for all employees.

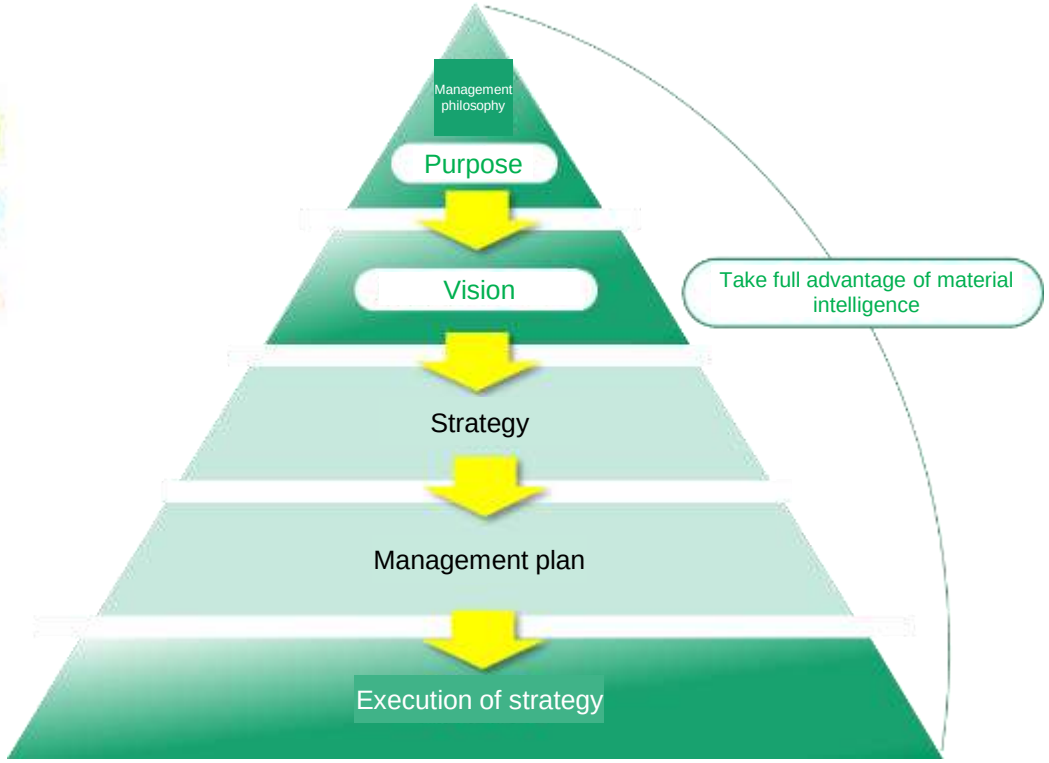
Purpose

We promote the well-being of the world
through a spirit of exploration
and diverse technologies.

Vision

Building new businesses—and the future—with our material intelligence

We will transform into an organization that can contribute to society by addressing its needs.



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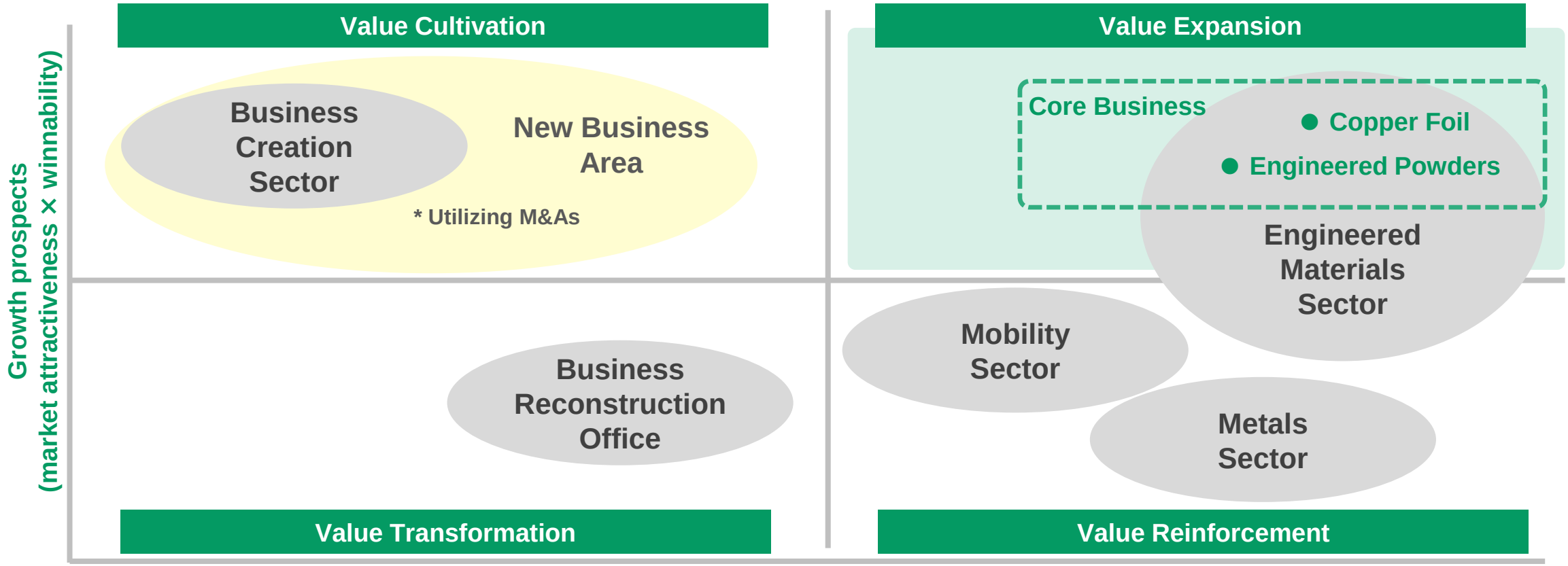
Dynamic Portfolio Management

No major changes have been made to the business portfolio looking ahead to FY2030, based on the results of the FY2022 review of the portfolio matrix for dynamic portfolio management.
We will review the matrix on a regular basis, looking to invest management resources in businesses with stronger growth prospects (upper quadrants) while searching for the best owners both internally and externally for businesses for Value Transformation (left lower quadrant).



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MITSUI KINZOKU GROUP

Progress of TCFD Scenario Analysis (Summary): Engineered Powders Division

E: Reduce Risks

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4℃ scenario: We will be able to meet demand by taking appropriate cost reduction steps while taking note of changes in needs resulting from global temperature rises
2℃ scenario: We need to pursue low-carbon and low-cost operations simultaneously while facing energy and material costs increasing as an outcome of climate change

Impact Estimation items	Risks	Opportunities	Financial impact on MMS Group		Countermeasures
			4˚C scenario	2˚C scenario	
Turnover	• Decreased demand for engine-related products due to the shift to Evs	• Increased demand for electronic components in response to growing demand for EVs • Increased demand for recycled abrasives	–	PROFIT ▲	• Win trust of customers and increase orders for products that can support their production operations with lower GHG emissions, by presenting our strength in this area • Improve production capacity and production efficiency in order to reduce carbon emissions while maintaining sales volumes at the same time
Loss on sales and costs for recovery related to abnormal weather	• Increased risks of factory operations halted due to heavy rainfalls and typhoons increasing in size and frequency	-	LOSS	LOSS	• Build embankments; increase drainage capacity • Prepare backup equipment
Carbon tax; changes in energy cost	• Costs increased significantly due to introduction of carbon tax • Increased operational costs due to rising energy prices	-	LOSS ▼	LOSS ▼▼	• Set long-term targets for the reduction of energy consumption • Reduce electricity intensity and raise production efficiency by improving the yield from the perspective of LCA and introducing energy-saving equipment • Implement measures for heat dissipation of furnaces and driers • Introduce renewable energy such as solar power and promote waste heat recovery for electricity supply • Utilize carbon credits (forestation, emissions trading)
Changes in raw material prices	• Costs increased due to rising metal prices as well as increasing prices of chemicals and materials as a result of escalating energy prices	-	LOSS ▼▼	LOSS ▼▼	• Reflect changes in material prices in selling prices • Apply recycled materials sourced from inside and outside of the company; increase the rate of recycled materials • Build recycling networks involving other business divisions and customers • Promote in-house manufacturing of materials; consider recycling of used chemicals • Consider reduction of material input for production • Rebuild our supplier list in view of GHG emissions

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Progress of TCFD Scenario Analysis (Summary): PVD Materials Division

E: Reduce Risks

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4℃: Quality and cost competition will continue.
2℃: Quality and cost competition as well as environmental factors will drive business selection process in target manufacturing industries

Impact Estimation items	Risks	Opportunities	Financial impact on MMS Group		Countermeasures
			4˚C scenario	2˚C scenario	
Turnover	• Heavier weight placed on low cost than environmental contribution	• Accelerating trends for adopting materials that consume less electricity • Higher added value placed on products made entirely of recycled materials • Customer trust gained in recognition of expanded marketing efforts for green products and carbon neutrality activities	LOSS ▼▼	No Change (2℃ scenario is reflected in the medium-term plan)	• Promote development and sales expansion of or collaboration for materials that consume less electricity • Expand sales to users inside and outside of Japan • Set higher prices for products made entirely of recycled materials • Promote the green product certification program • Promote PR activities for our carbon neutrality activities, as a differentiation strategy targeting markets excluding China • Concentrate investments in Mitsui Electric Materials in order to boost its competitiveness. Reduce inventory to improve financial standing
Loss on sales and costs for recovery related to abnormal weather	• Increased risks of factory operations halted due to heavy rainfalls and typhoons increasing in size and frequency	-	LOSS	LOSS	• Reinforce coastal levees; build flood control basins and reservoirs; increase drainage capacity • Win customers for BCP-related capabilities by giving effective sales presentations on the capabilities
Carbon tax; changes in energy cost	• Costs increased significantly due to introduction of carbon tax • Increased operational costs due to rising energy prices	-	LOSS ▼	LOSS ▼	• Promote implementation of energy-conserving technologies • Consider introduction of renewable energy such as solar power • Introduce carbon capture technology (including technology development) • Shift from fossil fuel-powered equipment to electric-powered
Changes in raw material prices	• Costs increased due to increasing prices of chemicals and materials as a result of escalating energy prices	-	LOSS	LOSS	• Consider plans for reducing material input

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Progress of TCFD Scenario Analysis (Summary): Ceramics Division

4℃: Demand for the Metallo series will grow steadily while we will need to address cost increase due to introduction of renewable energy and rising energy prices
2℃: We will need to respond to changes in customer needs for providing products, and deal with cost increase due to factors related to energy and materials as well as environmental issues

Impact Estimation items	Risks	Opportunities	Financial impact on MMS Group		Countermeasures
			4˚C scenario	2˚C scenario	
Turnover	-	• Increased demand for ceramic tools for electronic components due to growing demand for EVs • Growing aluminum can market driven by increasing awareness of recycling	PROFIT ▲	PROFIT ▲	• Promote activities to produce recycled and reused products • Develop thinner and lighter-weight ceramic tools, as a carbon emissions reduction measure
Loss on sales and costs for recovery related to abnormal weather	• Increased risks of factory operations halted due to heavy rainfalls and typhoons increasing in size and frequency. Disrupted supply chains	-	LOSS	LOSS	• Conduct water disaster risk assessments of major suppliers • Change the way of using water for equipment cleaning so as to reduce the amount of water used
Carbon tax; changes in energy cost	• Costs increased significantly due to introduction of carbon tax • Increased operational costs due to rising energy prices	-	LOSS	LOSS ▼	• Enhance energy conservation activities (consider oxygen-enriched combustion and fuel conversion) • Consider introduction of solar power (for first-time locations) • Expand areas for installing solar panels
Changes in raw material prices	• Costs increased due to increasing prices of chemicals and materials as a result of escalating energy prices	-	LOSS ▼	LOSS ▼	• Promote multi-sourcing of materials • Raise selling prices • Establish recycling techniques

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Creation of Renewable Energy

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E: Reduce Risks

We will contribute to the achievement of carbon neutrality by introducing renewable power generation facilities that make maximum use of features of the company's assets, such as technologies, land and buildings.

Hydraulic power generation

Kamioka Mining and Smelting Co., Ltd.

Japan and overseas:
11 locations
277 GWh*

Geothermal power generation

Okuaizu Geothermal Co., Ltd.

The company sells steam → Power is generated by Tohoku Electric Power Co., Ltd.

107 GWh*

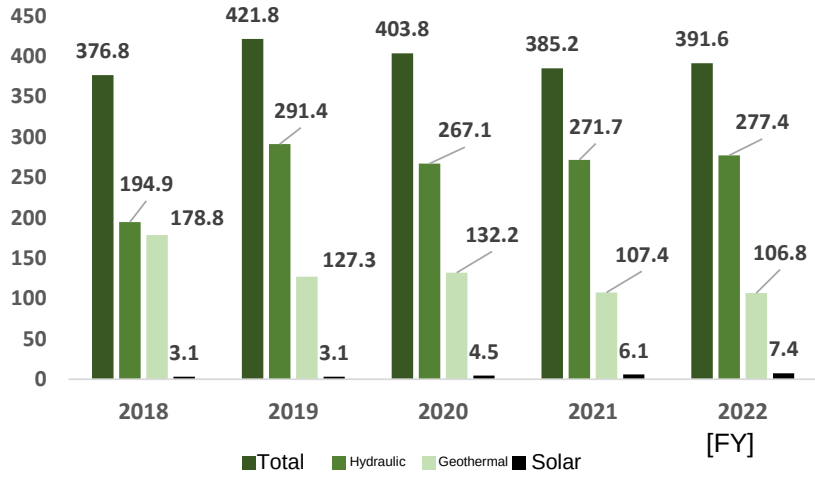
Solar power generation

Group sites in Japan and overseas

Japan and overseas:
Six locations
7 GWh*

* FY2022 results

Electricity generated from renewable energy sources (GWh)



Generate enough carbon-free power to supply electricity to 97 thousand households

Calculated based on 4,047 kwh/year per household
Source: The Ministry of the EnvironmentHP
https://www.env.go.jp/earth/ondanka/kateico2tokei/index.html

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MITSUI KINZOKU GROUP

Supply Chain Management

We promote the well-being of the world through a spirit of exploration and diverse technologies.

We are aiming to achieve mutual, continuous development and growth by fulfilling our social responsibility based on mutual understanding and relationships of trust with suppliers in our procurement activities.

◆ **Thorough communication of the Basic Procurement Policy and the Procurement Guidelines**
(Target: all suppliers)

◆ **Implementation of due diligence (DD)**
(Target: important suppliers*5)

	End of March 2022	End of March 2023
Thorough communication	13,646 companies	14,208 companies
Implementation of DD	890 companies	1,026 companies

Engagement activities conducted at a combined total of nine companies out of the above.

*1. RBA: The Responsible Business Alliance
*2. RMI: Responsible Minerals Initiative
*3 LBMA: The London Bullion Market Association
*4 LME: The London Metal Exchange
*5. Important suppliers: Suppliers that the company considers important for continuing its corporate activities

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Strategic Talent Allocation

In addition to the talent allocation system established, we have developed an environment that enables a more efficient talent matching process to facilitate allocation of human resources to business divisions with stronger growth prospects.

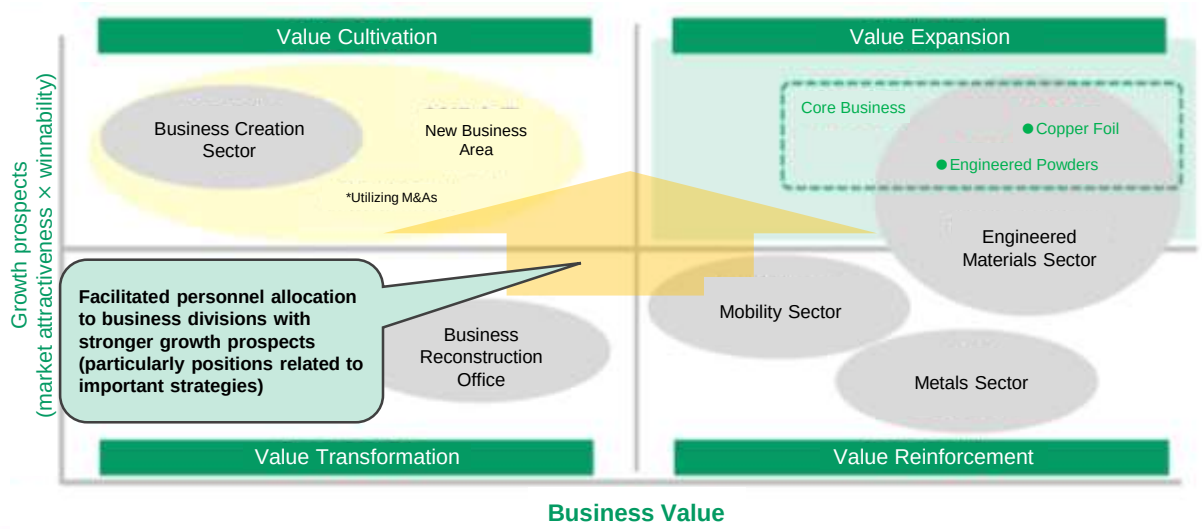
Initiatives implemented by the HR Business Partner* Office

- **Design and implement appropriate internal talent allocation discussion procedures**
- **Roll out BP functions across the company**
- **Launch integrated management processes that range from system application to personnel recruitment, development and allocation**
- **Promote appropriate organizational accessibility to employee information by implementing necessary personnel management systems**

* Human resources business partner (HRBP)

Achievements made by the HR Business Partner Office

- **Established talent allocation discussion procedures**
- **Progress made in visualizing the personnel allocation situation of each division**
- **Expedited coordination processes for personnel relocation between Sectors**



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Digital Transformation

Enhance competitiveness by promoting the three DX strategies of R&D, Manufacturing, and Business reform through reinforcement of the digital infrastructure

	Main items	Vision for 2030	Major strategies for 2022-2024 Plan	Specific results
Digital Technology Utilization	**Research & Development**	Industry's shortest R&D cycle time	• Finalize model for reducing R&D cycle time to 1/3 • Build data infrastructure and operational infrastructure	• Started building model • Finished building data infrastructure
	Manufacturing	World-class manufacturing	• Digitize model refineries to stabilize their operations	• Digitization in progress centered on • equipment asset management system
	Backoffice reform	Resources used efficiently and effectively	• Visualize themes for streamlining backoffice operations • Roll out SAP S/4HANA	• Built visualization infrastructure and created reports • Rolled out SAP S/4HANA
Digital Infrastructure	**Infrastructure, security, governance**	Digital tech used confidently and safely	• Build network for cloud computing • Strengthen global security • Expand system controls	• Started introduction of new network • Started security assessments • Expanded system controls
	Talent management	Corporate-wide digital talent team	• Provide digital content training	• Increased the number of students progressively

- All strategies in progress as planned

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