ESG Briefing Session

November 18, 2024
Mitsui Mining & Smelting Co., Ltd.

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

MITSUI KINZOKU

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Message from the President

We commenced 2022-2024 Medium Term Business Plan (22-24 MTP) in conjunction with establishing Purpose (Our social reason for existence).
Under the 2025-2027 Medium Term Business Plan (25-27 MTP) as well, we will accelerate sustainable growth and enhancement of corporate value over the medium to long term based on “ambidexterity” and “integrated thinking-based management.”

Purpose

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

- **Ambidexterity**
  - Exploration
    (Experiment and act on new business)
  - Exploitation
    (Business efficiency improvement and ceaseless kaizen efforts)

- **Integrated thinking-based management**
  - Social value improvement
  - Financial value improvement

Accelerate sustainable growth and enhancement of corporate value over the medium to long term

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Message from the President

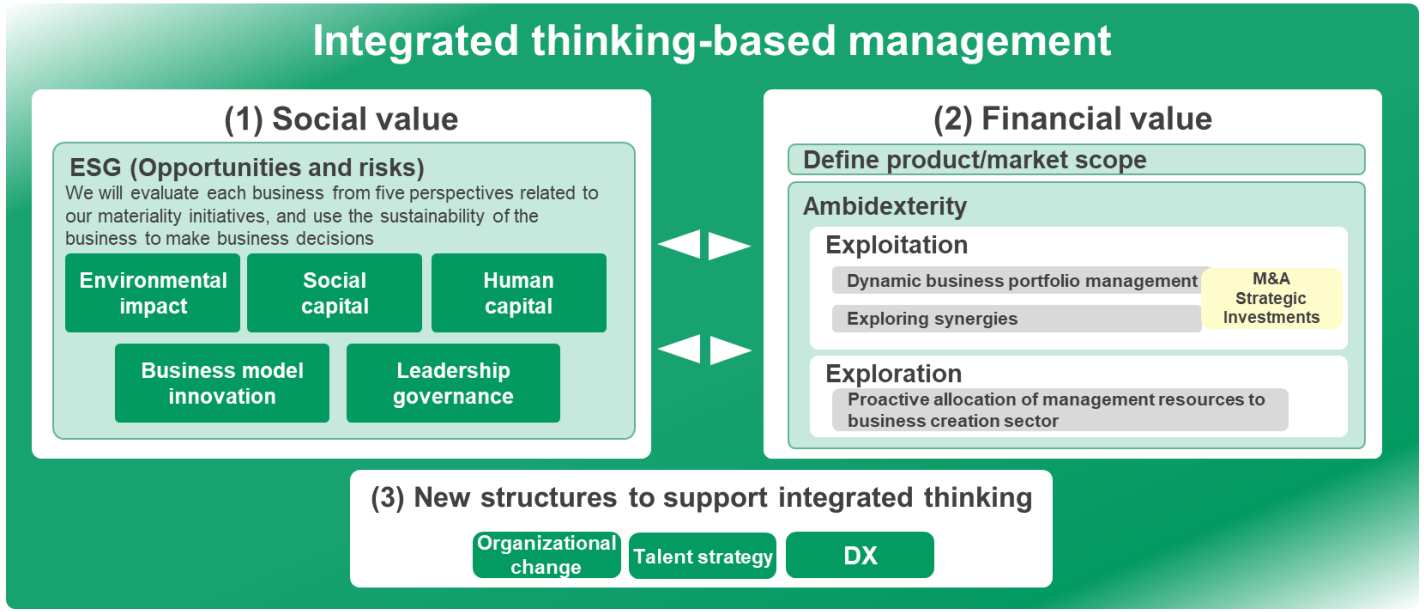
We are well into the final year of the 2022-2024 Medium Term Business Plan, and our Vision for 2030 remains unchanged; we have not lowered our performance goals for FY2030.
Toward realizing the Vision and goals, we will continue to pursue integrated thinking-based management in order to generate social 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 improvement

  Ordinary income forecast as of November 8: ¥**55** billion*
  Due to the significant impact of the weaker yen, the Engineered Materials segment has failed to reach its 22-24 MTP performance goal.

  * Performance goals for FY2024 under the 22-24 MTP
    Net sales: ¥725 billion; ordinary income: ¥**60** billion

- Social value improvement

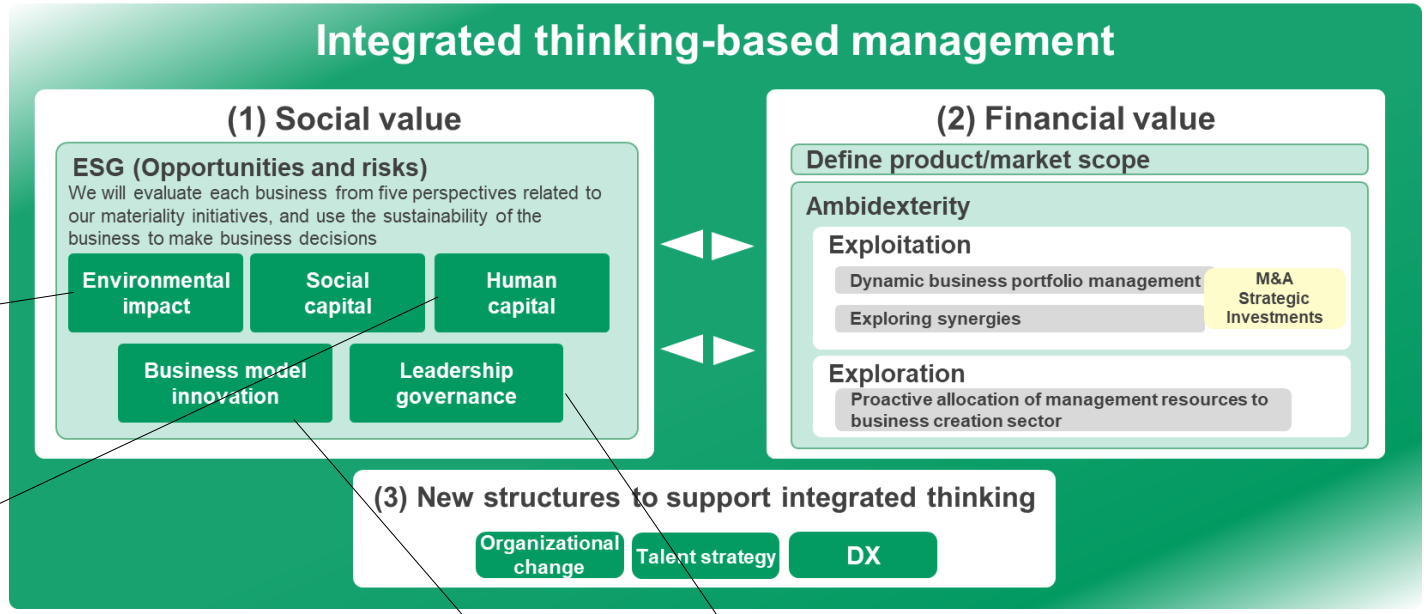
  Progressing **as planned** for each of the “E,” “S,” and “G” initiatives

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

Message from the President

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; revision underway for the catalysts business
- **Monitoring of Scope 3 emissions**
  GHG emissions are being monitored for all categories at domestic locations.
  Activities have commenced to monitor Scope 3 emissions at overseas locations as well.



- **Performance-based human resources system**
  Transition to a job-based system, completely abolish recruitment categories, and instill the purpose
- **Promote DE&I***
  Ratio of female managers: approximately 4%, male childcare leave ratio: 42%
- **Promotion of job satisfaction reforms**
  Establishment of a Promotion Office, engagement score improvement: 49
- **Enhancement of health management**
  Recognized as the 2024 Outstanding Organization of KENKO Investment for Health

- **Transition to a Company with an Audit and Supervisory Committee**
  Expedite decision making, and strengthen management and supervisory functions
- **Revision of executive compensation**
  Decided to raise the percentage of stock compensation and to introduce ROIC as an indicator for performance-linked compensation

- **Progress in intellectual property management**
  Financial impact analysis, etc.

* DE&I: Diversity, Equity, Inclusion

Message from the President

Effective October 1, 2025, our trade name will change (TSE timely disclosure on September 13, 2024).

Trade name change

Current trade name: Mitsui Mining & Smelting Company, Limited

New trade name: Mitsui Kinzoku Company, Limited

Background to the trade name change

- In September 2024, the Company celebrated 150 years since its founding.
- With the change in trade name to one that more clearly reflects our current business operations, our Group companies will be more closely united to sustainably enhance corporate value by implementing “integrated thinking-based management” and “ambidexterity.”

* Our corporate logo will not change.

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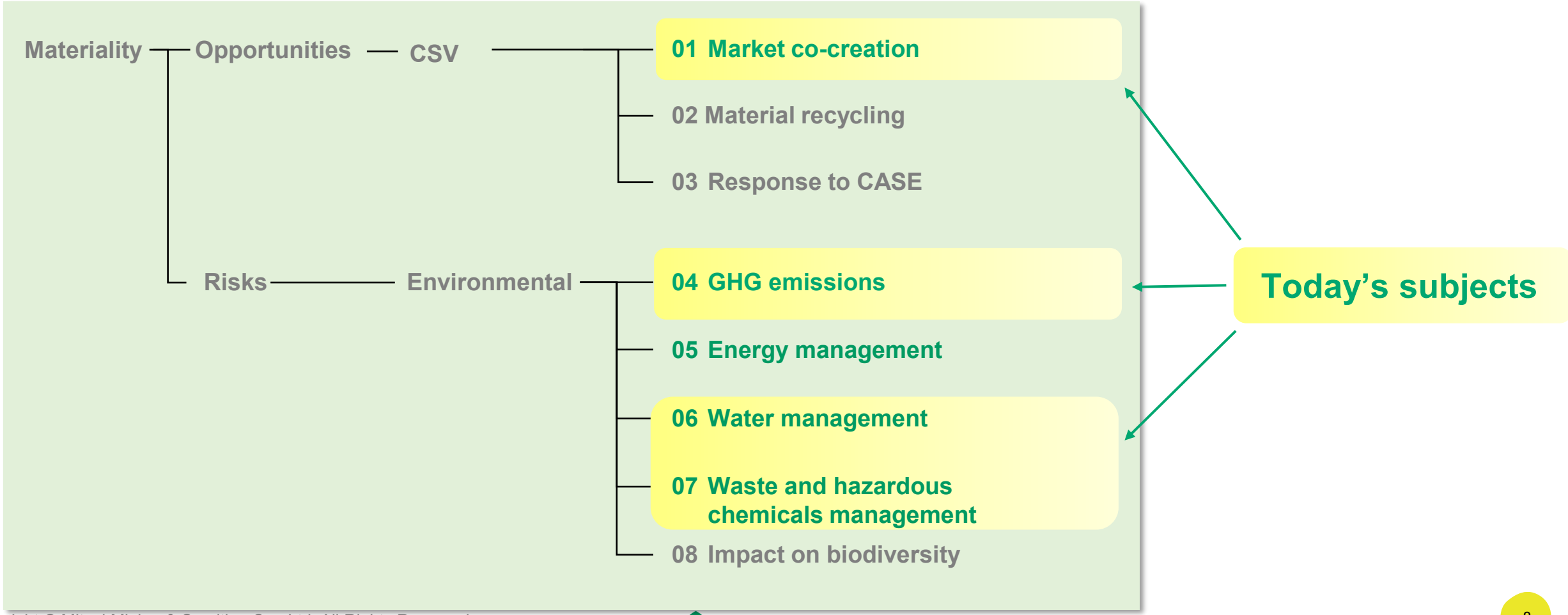
Opportunities and Risks Associated with Environmental Action

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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Initiatives of the Business Creation Sector

Proactively invest management resources with the goal of achieving contribution income*1 of 10 billion yen or more in 2030 under the theme of commercialization in order to create a business that promotes the well-being of the world.

Key measures of Business Creation Sector

Measures

(1) Strengthen R&D
- Increase R&D Personnel
- Promote DX utilization
- Promote external collaboration

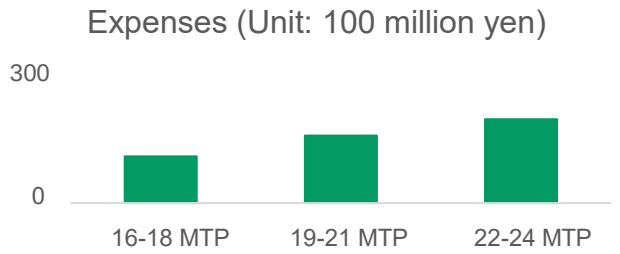
(2) Strengthen commercialization promotion
- Increase in human resources to promote commercialization
- Execute strategic investments

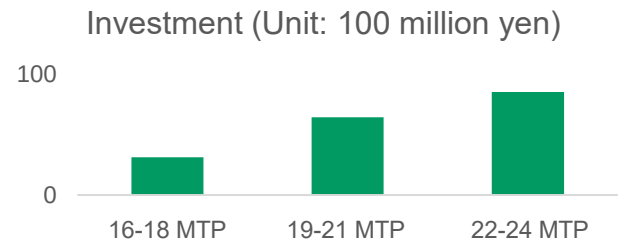
(3) Enhance strategic support functions
- Enhance strategic support functions including mass-production process technology, IP, and QC

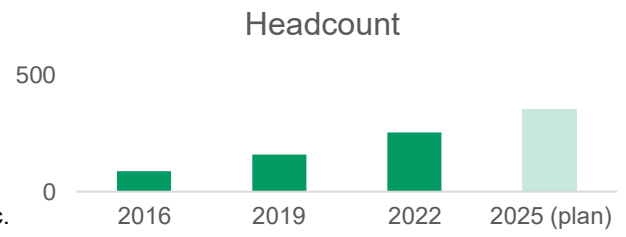
(4) Strengthen competitiveness of corporate units
- Promote MVV*2 spread
- Enhance human capital
  - Improve employee engagement
  - Develop personnel working globally, etc.

*2 Mission, Vision, Value

Management resources

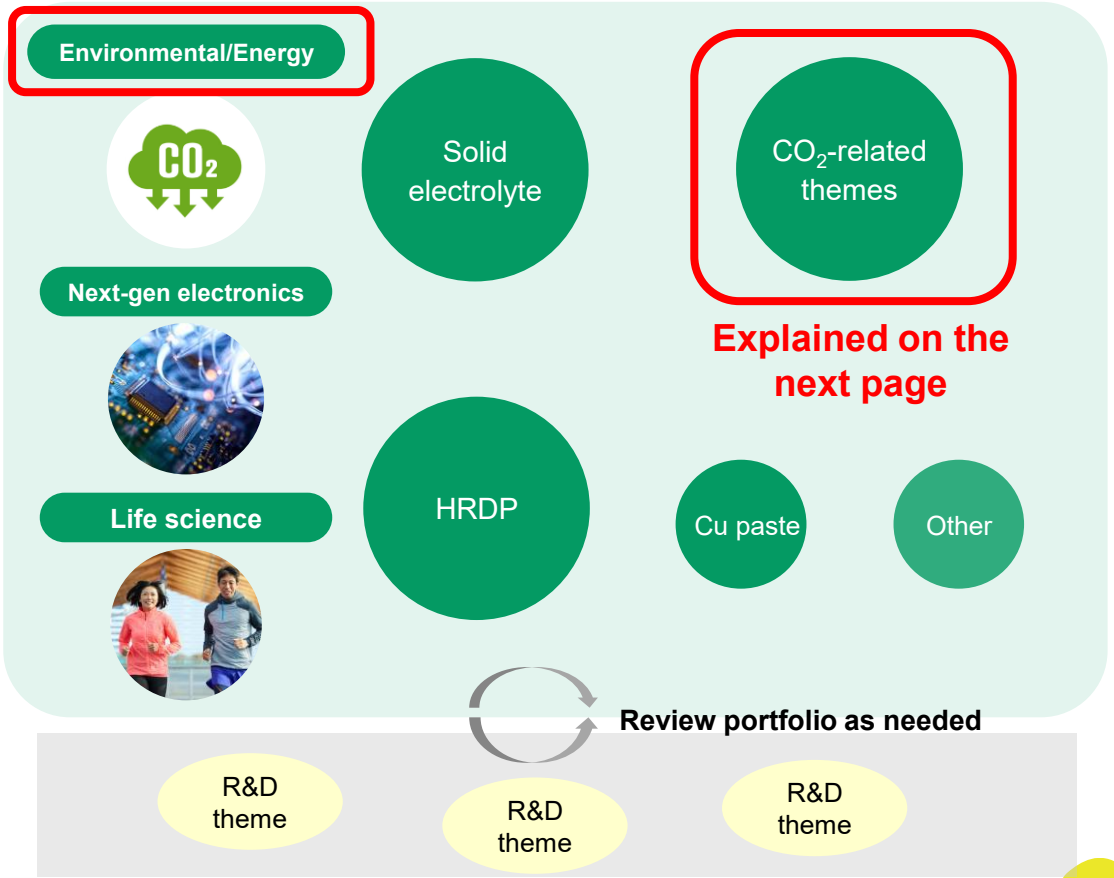






2030 target

Contribution income*1 > 10 billion yen



*1 PL of the Business Creation Sector = Contribution income as stated above − R&D expenses

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Market Co-creation Case Studies in the Environmental/Energy Field

In the environmental/energy field, we are promoting numerous themes related to the “carbon neutral society,” “circular economy,” and “harmonious coexistence of nature and humans.”

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

Commercialized

Solid electrolyte A-SOLiD®

In collaboration

eSep

Green methanol production from CO_2

Downsizing and energy conservation for chemical processing

Contribute to circular economy

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

Under development

Cu sinter paste for power semiconductors

Commercialized

Specialty carrier for the next-generation semiconductor packaging HRDP®

CVC activities (in collaboration with SBI)

- From 2017 [No. 1 Fund] The Fund has invested in 13 companies to date.
- From 2025 [No. 2 Fund] Plans are being developed.

Contribute to harmonious coexistence of nature and humans

- Technologies that support the bioeconomy

In collaboration

CHITOSE

Industrial structural transformation driven by photosynthesis-based technology that uses algae

In collaboration

Helical Fusion

Commercialization of nuclear fusion technology

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Environmentally Friendly Products

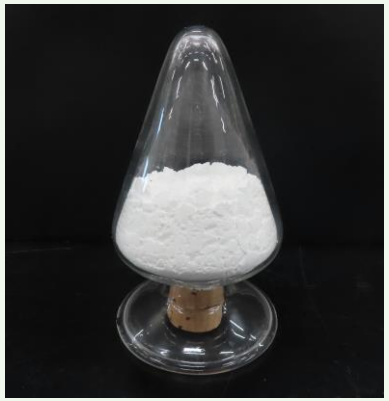
The following four products were designated as environmentally friendly products in FY2024.

Recycled calcium fluoride (CaF2) powder

CaF2 dry powder

- Waste generated from manufacturing processes is recycled and sold as recycled calcium fluoride.
- The environmental impacts are significantly lower than those of conventional waste disposal.
- We aim to increase sales toward 2030.

Gd2O3 (gadolinium oxide) powder for GOS



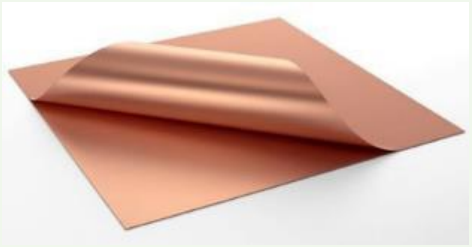
Gd2O3 (gadolinium oxide power)

- We collect GOS* ceramic waste materials generated at customers and use them as recycled raw materials.
- The environmental impacts are significantly lower than those of conventional raw materials extracted from mines.
- We aim to increase sales toward 2030.

* GOS: Gadolinium oxysulphide

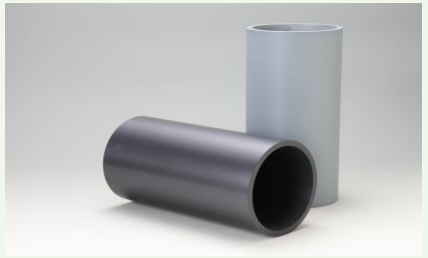
Use of electro-deposited copper foil and ITO target as recycled raw materials

- Recycled copper raw materials: 100%



Mitsui Kinzoku's share of MicroThin™: 98%.

- Percentage of recycled raw materials: 80%



Mitsui Kinzoku's share of ITO target: 24%

- There are six environmentally friendly products in total (four in FY2024 and two in FY2023).

Reference: Environmentally friendly products designated in FY2023

- MicroThin™ carrier foil 12 μm products
- SnO2-X sputtering targets (for low-E glass)

* Production of the recycled abrasives we presented last year has been discontinued.

We will accelerate initiatives to increase the percentage of environmental contribution products toward the Vision for 2030.

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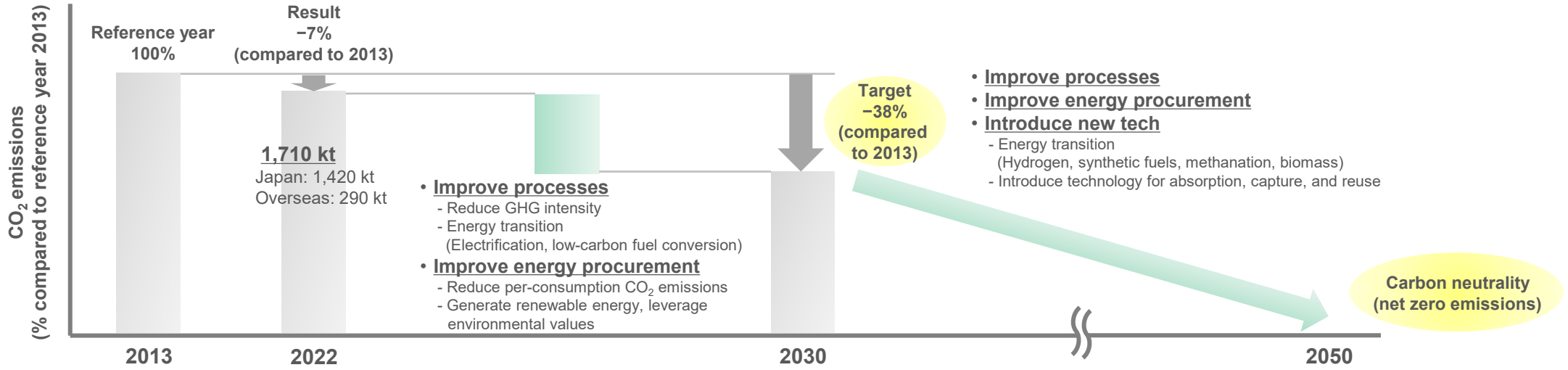
Medium- to Long-term CO_2 Emission Reduction Targets and Initiatives

- Reduce CO_2 emissions by 38% globally by FY2030 (Scope 1, 2 compared to FY2013)
- Aim to achieve carbon neutrality (zero net emissions) by FY2050



Create projects for reducing CO_2 emissions

Follow Carbon Neutral Roadmap
- Continuous scrutiny of environmental investments (technology assessment, cost reduction)
- ICP simulation (target, investment amount)

Scope 3 Monitor CO_2 emissions
- Completed identifying CO_2 emissions of domestic locations in FY2023
- Started monitoring emissions at overseas locations and studying reduction targets in FY2024

Use LCA*1 to identify improvement points
- Company-wide LCA introduction (Scheduled to finish by FY2024)
- Quantify CO_2 emissions by each product and process

Use TCFD scenario analysis to formulate strategy
- Company-wide TCFD scenario analysis in progress
- Formulate strategies and tactics for reducing CO_2 emissions

Explained in detail from the next page.

Implement projects for reducing CO_2 emissions

Use ICP*2 for environmental investment promotion scheme
- Promote environmental investment by applying ICP to evaluate CO_2 reduction effects in terms of investment profitability (FY2023: 19 cases, FY2024: 52 cases)

Participate in GX League

Comply with new regulations and technologies
- Establish a system for emissions trading
- Gather information and materialize new technologies through collaboration with partner companies

*1 LCA: Life Cycle Assessment
*2 ICP: Internal Carbon Pricing

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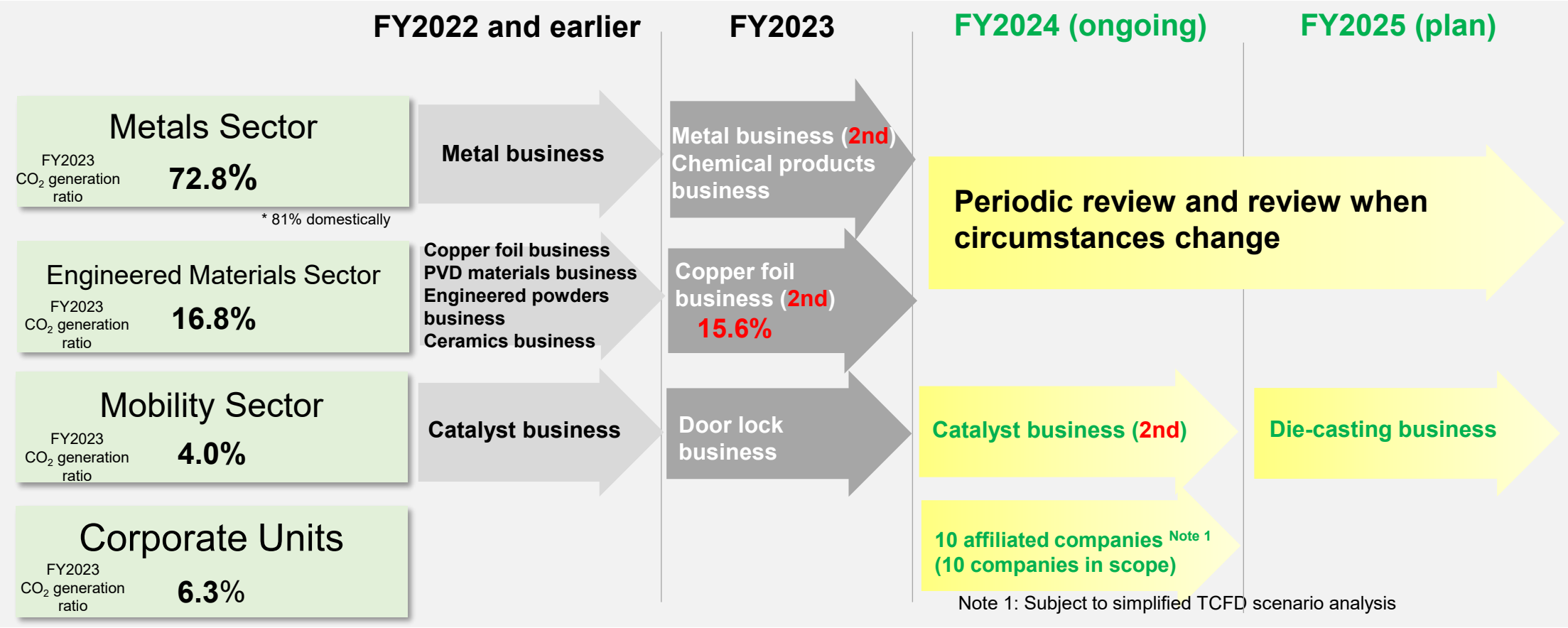
Medium- to Long-term CO_2 Emission Reduction Targets and Initiatives

Company-wide TCFD scenario analysis introduction

Company-wide TCFD scenario analysis in progress by business from businesses highly likely to be affected by climate change.

In FY2023, we started reviews at newly established business units as well as those businesses that are highly likely to be affected by climate change. Further development and review of the Catalysts Division are in progress in FY2024.



Note 1: Subject to simplified TCFD scenario analysis

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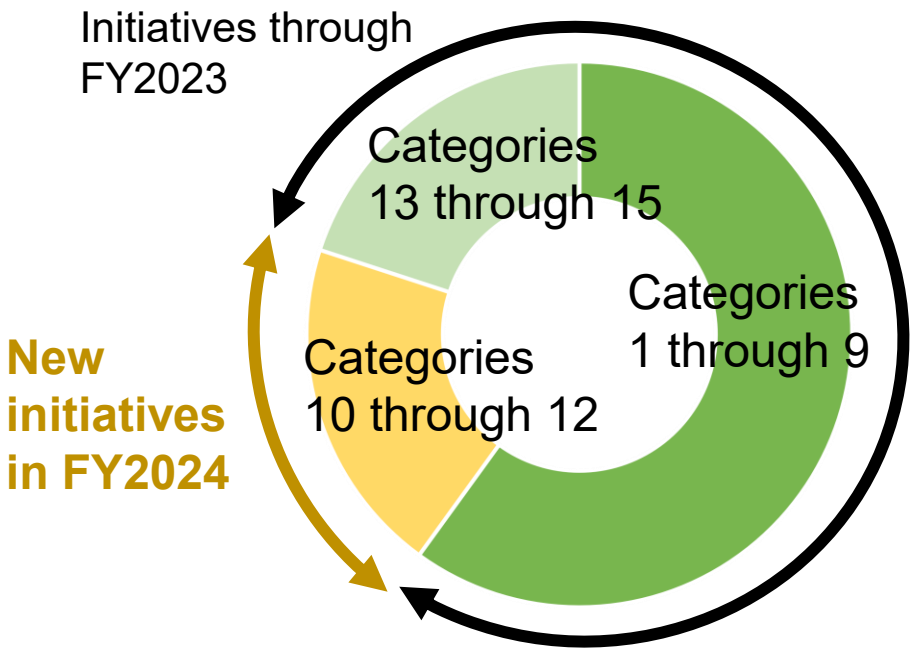
Medium- to Long-term CO_2 Emission Reduction Targets and Initiatives

Calculation status of Scope 3 emissions

We have calculated categories 1 through 9 and categories 13 through 15 emissions from domestic group locations for FY2021 and FY2022.
From FY2024 onwards, we will calculate Scope 3 emissions for the entire Mitsui Kinzoku Group, including categories 10 through 12, to establish reduction targets.



	Initiatives through FY2023 **Monitoring of actual emissions in FY2021 and FY2022**	Initiatives in FY2024 **Monitoring of actual emissions in FY2023**
Domestic locations	Monitoring is complete (excluding corporate units and certain affiliated companies) Categories 1 through 9 Categories 13 through 15	**Monitoring is underway for all sectors and all categories, including categories 10 through 12.**
Overseas locations	Not monitored	**Preparations for monitoring have begun. (All overseas locations) Categories 1 through 15**
		Setting of reduction targets

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Metals Segment—Carbon Neutrality Initiatives

Progress in implementing CO_2 emission reduction measures using existing and new technologies is proceeding as planned. In addition to the emission reduction measures implemented through FY2023, we have added new measures, namely CO_2 emission reduction by modifying the product mix (stopping production of calcium sulfate) and utilization of environmental value, in order to increase the probability of achieving the 2030 targets.

CO_2 emission reduction measures				Evaluation	Progress
Utilize existing technologies (Technologies established or implementable measures)	Energy saving and higher efficiency	Improve efficiency by updating outdatedfacilities	Improve heat exchange efficiency, including for sulfuric acid heat exchangers	Positive	• In March 2023, we reduced heavy oil consumption by 3,300 t-CO_2/year by upgrading sulfuric acid heat exchangers at Hachinohe.
		Improve electricity intensity	Plan and implement energy conservation projects	Positive	• At the end of November 2023, we introduced inverters for sulfuric acid gas blowers at Hikoshima. • We are upgrading to high-efficiency motors when replacing aged equipment at each location.
			Implement demand response using a power usage monitoring system at electrolytic plants	Positive	• We concluded a demand response agreement at Hibi, Hikoshima, and Kamioka. • There were 20 responses in total at the three locations (as of September 30, 2024).
	Promote utilization of waste heat		Collect steam from heat waste in the sulfuric acid process and slag cooling process, and use it for power generation	Negative	• This has not been implemented because investment profitability is still an issue. We are exploring a new option by expanding the scope of heat waste to low temperatures.
	CO_2 emission reduction by modifying the product mix		**Stop the production of calcium sulfate**	Positive	• **Stopping the production of calcium sulfate is planned for FY2025 at Kamioka and for FY2026 to FY2028 at Hibi to produce a CO_2 emission reduction effect of 81,000 t-CO_2/year.**
Introduce new technologies (Measures under development through internal and external collaboration)	**Energy source transition**	**Utilize renewable energy**	**Substitute coal with biomass fuels**	Positive	• Substitution tests were conducted at Kamioka and Hibi, in addition to Miike. **Together with the 10% substitution at Hibi (2,800 t-CO_2/year), we are on track to achieve the target.**
			New hydroelectric power plant	Positive	• Feasibility studies are being conducted at Kamioka and the Mozumidani No. 2 Power Plant.
		Utilize low emissions factor energy	Convert from heavy oil to LNG Reduce coke consumption in ISP smelting by utilizing alternative fuels (Step 1: LNG, Step 2: Use of hydrogen)	Positive	• Feasibility studies are being conducted at Takehara and Hibi for conversion from heavy oil to LNG. • The safety of LNG substitution tests using actual machines has been confirmed. • The possibility of reducing reoxidation of zinc by increasing the speed of cooling has been confirmed.
	Carbon capture	Develop new technologies	CO_2 absorption to amine-supported silica and separation under diminished pressure (Hachinohe)	Positive	• A CO_2 absorption rate of 90% was confirmed by a CO_2 absorption and recovery test conducted in April using actual exhaust gas. • The second CO_2 absorption and recovery test using actual exhaust gas was conducted with an improved version during the period from October 29 to November 8. Improvement in CO_2 absorption performance per unit of raw materials was confirmed (3.5 times the last time according to preliminary figures).
Utilize environmental value	Utilization of J-Credit		Creation of credits through forest management	Positive	• CO_2 emission reduction effect of utilizing the company-owned forest at Kamioka: 1,000 t-CO_2/year
	Procurement of carbon-free electricity and non-fossil certificates			Positive	• **We purchased non-fossil certificates on a trial basis in August 2024.**

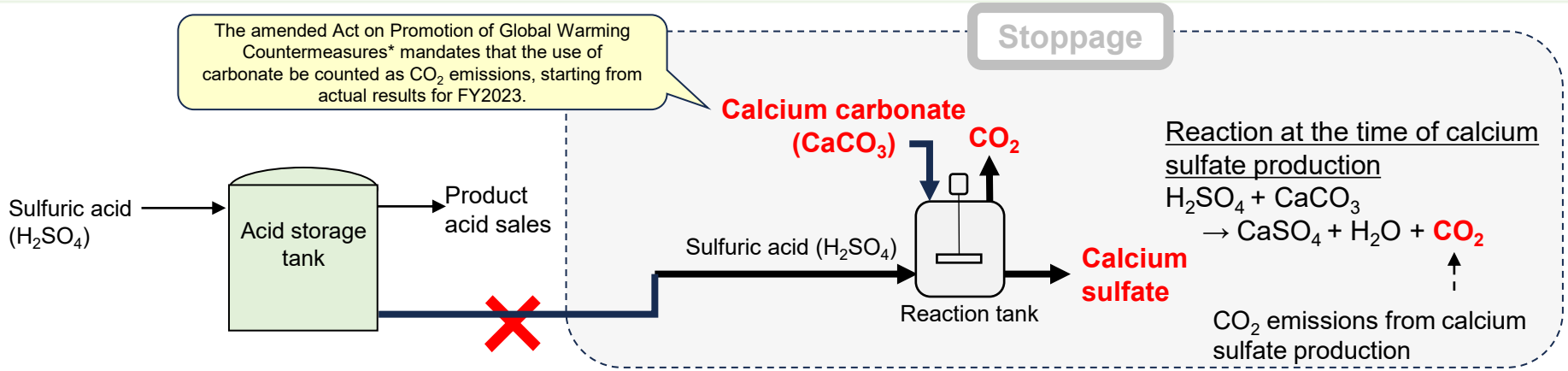
- Realized CO_2 emission reduction as planed in the 22-24 MTP roadmap.
- **We are also working on CO_2 emission reduction by stopping production of calcium sulfate** as a new reduction measure.

- **Started considering substitution with biomass fuel at Hibi, in addition to Miike and Kamioka.**
- Technology development for replacing coke at ISPs is being continued at laboratory scale.
- We will increase the probability of realizing CO_2 absorption and recovery by conducting tests using actual exhaust gas.

Metals Segment—CO_2 Emission Reduction due to Stopping the Production of Calcium Sulfate

In response to the amendment of the Act on Promotion of Global Warming Countermeasures, which mandates that the use of carbonate be counted as CO_2 emissions, Kamioka is scheduled to stop production of calcium sulfate in FY2025, while Hibi is scheduled to reduce such production by 50% from FY2026 and to stop such production in FY2028. Through this response, we can eliminate consumption of calcium carbonate ($CaCO_3$), which will lead to CO_2 emission reduction of 81,000 tons per year.

Implementation plans



Expected benefits

Expected carbon emissions reduction due to stopping production

- 67,000 + 14,000 ton-CO_2/year = **81,000 ton-CO_2/year**
  - 67,000: Hibi
  - 14,000: Kamioka

Implementation schedule

	2024	2025–2029	2030
Implementation plans	Change to Hibi facilities • Installation of an additional acid storage tank	Move to actual operations at Hibi • Reduction by 50% in FY2026, production stoppage in FY2028	
	Changes to Kamioka facilities • Expanded sulfuric acid shipment facilities (tanks and pipes) • Facilities to prevent freezing (warming) by changing the concentration (from 95% to 98%)	Move to actual operations at Kamioka	

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Metals Segment—Reducing Coke Consumption by Utilizing Biomass Fuel

Following Miike last year, we implemented 20% biomass fuel substation operation for lead smelting at Kamioka in March 2024 in order to identify issues and solutions. In addition, a test for around 10% substitution (equivalent to 3,000 t-CO_2) was conducted for joint smelting at Hibi from May 2024 to confirm that such substitution has no negative impacts on operation.

Goals of initiatives

[Expected carbon emissions reduction due to alternative fuels]

- 80,000 + 34,000 + 5,000 + 27,000 ton-CO_2/year
  - Miike Smelting
  - Hachinohe's blast furnace
  - Lead blast furnace
  - Hibi's flash 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

Progress and action 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 Kamioka and **Hibi** based on the 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

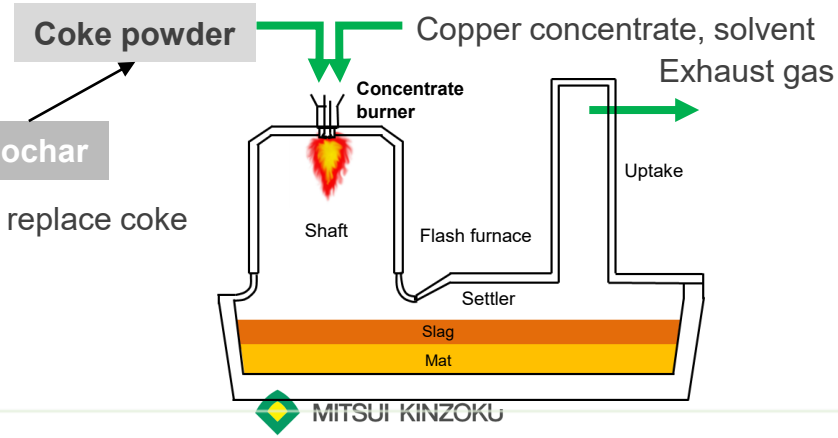
20% biomass fuel substation operation was implemented at Kamioka in March 2024 to identify issues and consider solutions.

A test for around 10% substitution (equivalent to 3,000 t-CO_2) was conducted for the flash furnace at Hibi in May and September 2024 to confirm that such substitution has no negative impacts on operation.

Expansion of processes that utilize alternative fuel

The flash furnace uses coke powder as heat compensation

Use of biochar to replace coke



Metals Segment—Carbon Emissions Reduction: FY2023 Results and FY2030 Targets

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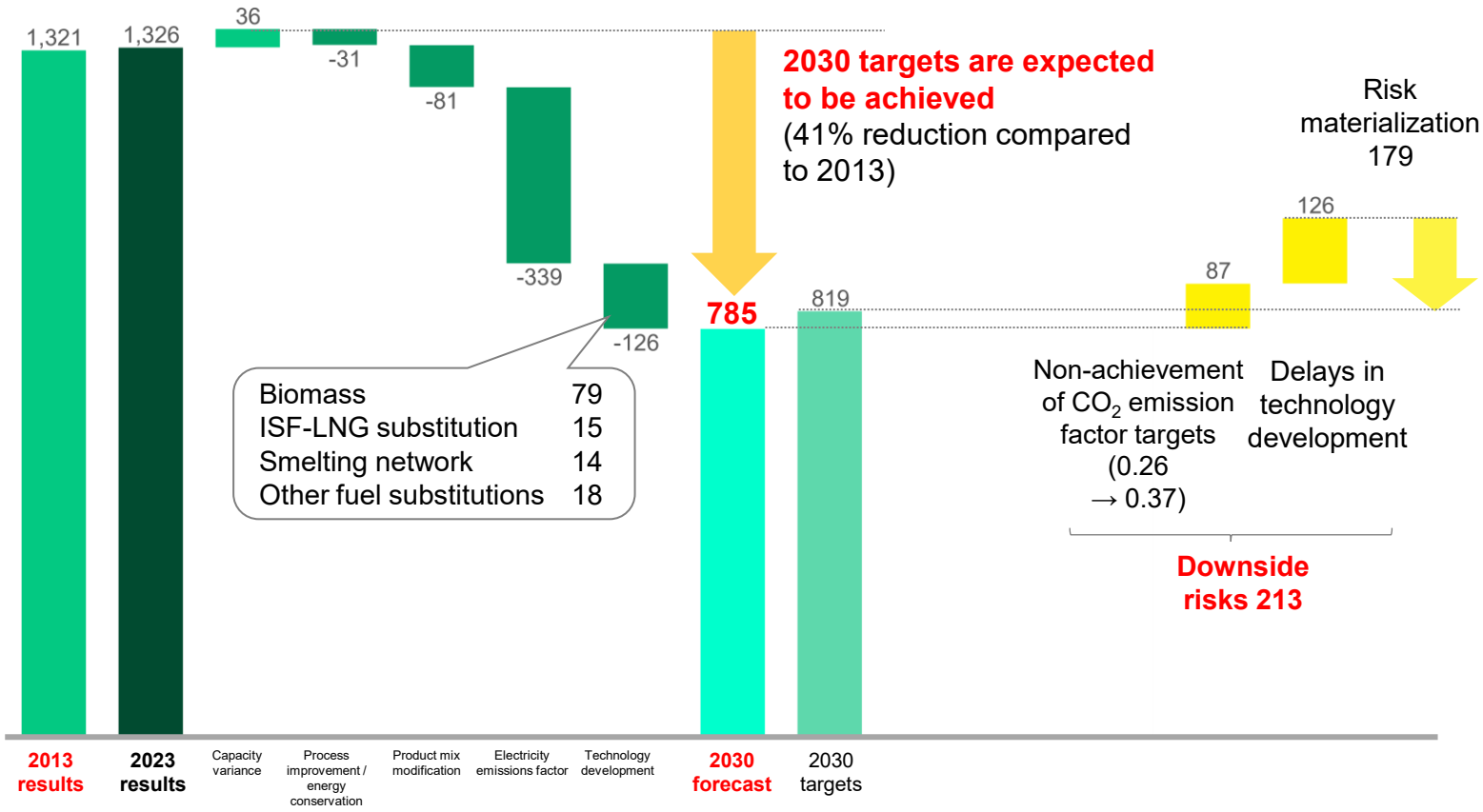
Our carbon neutrality responses are expected to achieve our 2030 targets by reducing the CO_2 emission factor and implementing the planned response measures. If the risk of non-achievement of the CO_2 emission factor targets or delays in technology development materialize, we will achieve the targets by, for example, procurement of carbon-free electricity.

CO_2 emission reduction forecast toward the 2030 targets

(Unit: 1,000 ton-CO_2/year)



To respond to the risk of non-achievement of the CO_2 emission factor targets or delays in technology development, we will consider utilizing environmental value, such as **the procurement of carbon-free electricity** and **the acquisition of non-fossil certificates**.

We will also accelerate responses to the rising costs of CO_2 emission reduction, such as **obtaining third-party certification**, so that we can pass on cost increases through product pricing.

* 2030 target: 38% reduction compared to 2013

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Initiatives for Environmental Issues

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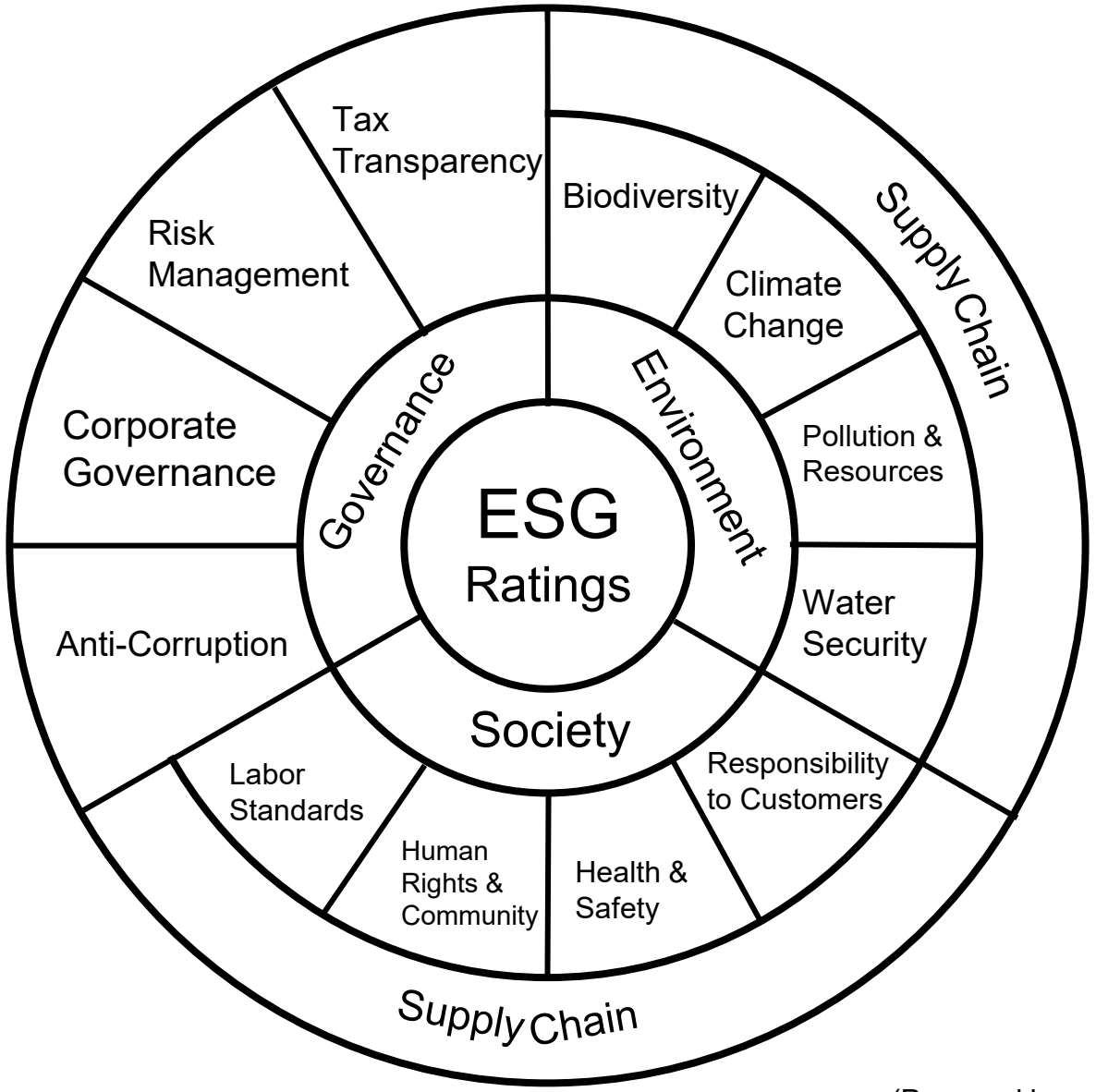
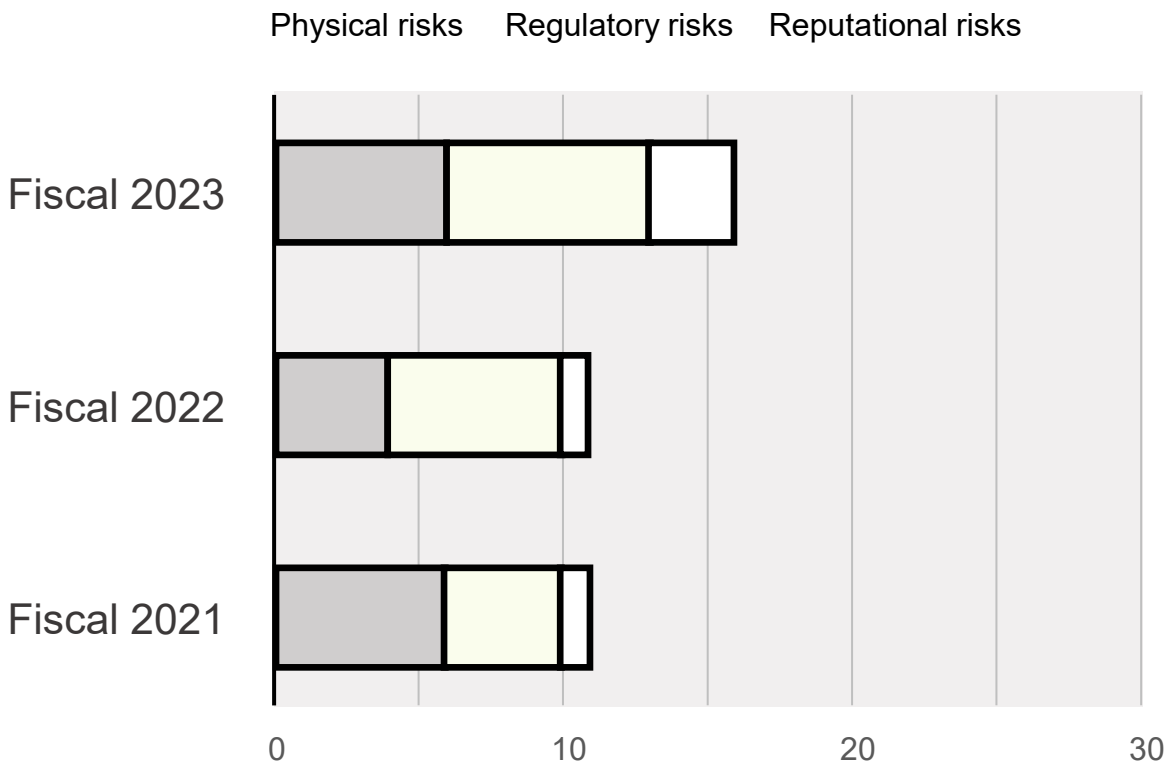


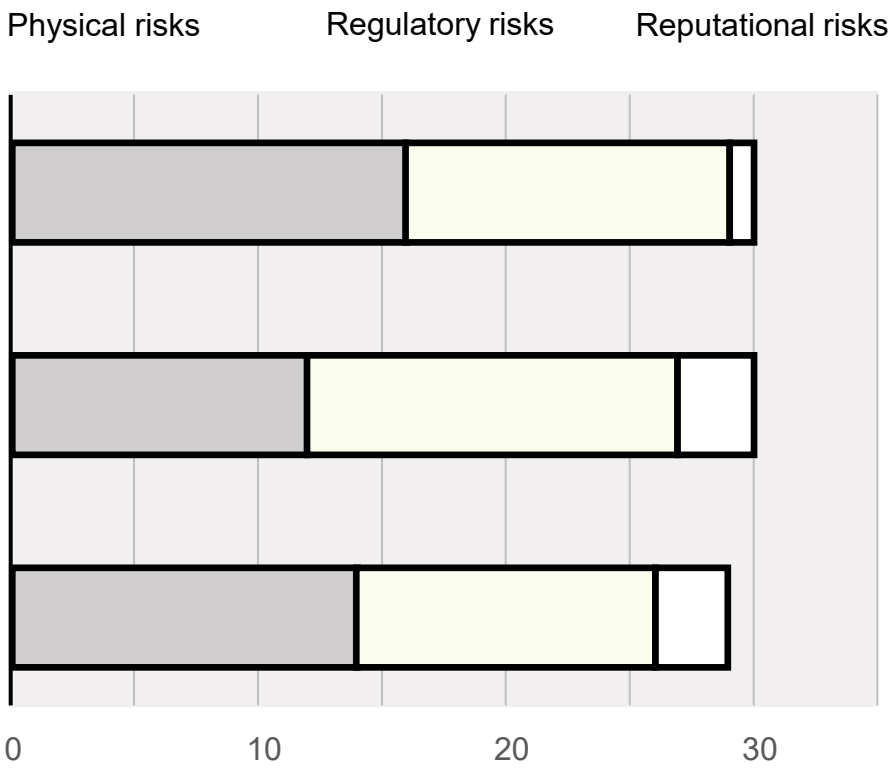
(Prepared based on FTSE disclosure information)

Responsible Water Management

Water-related risks experienced in the past three years

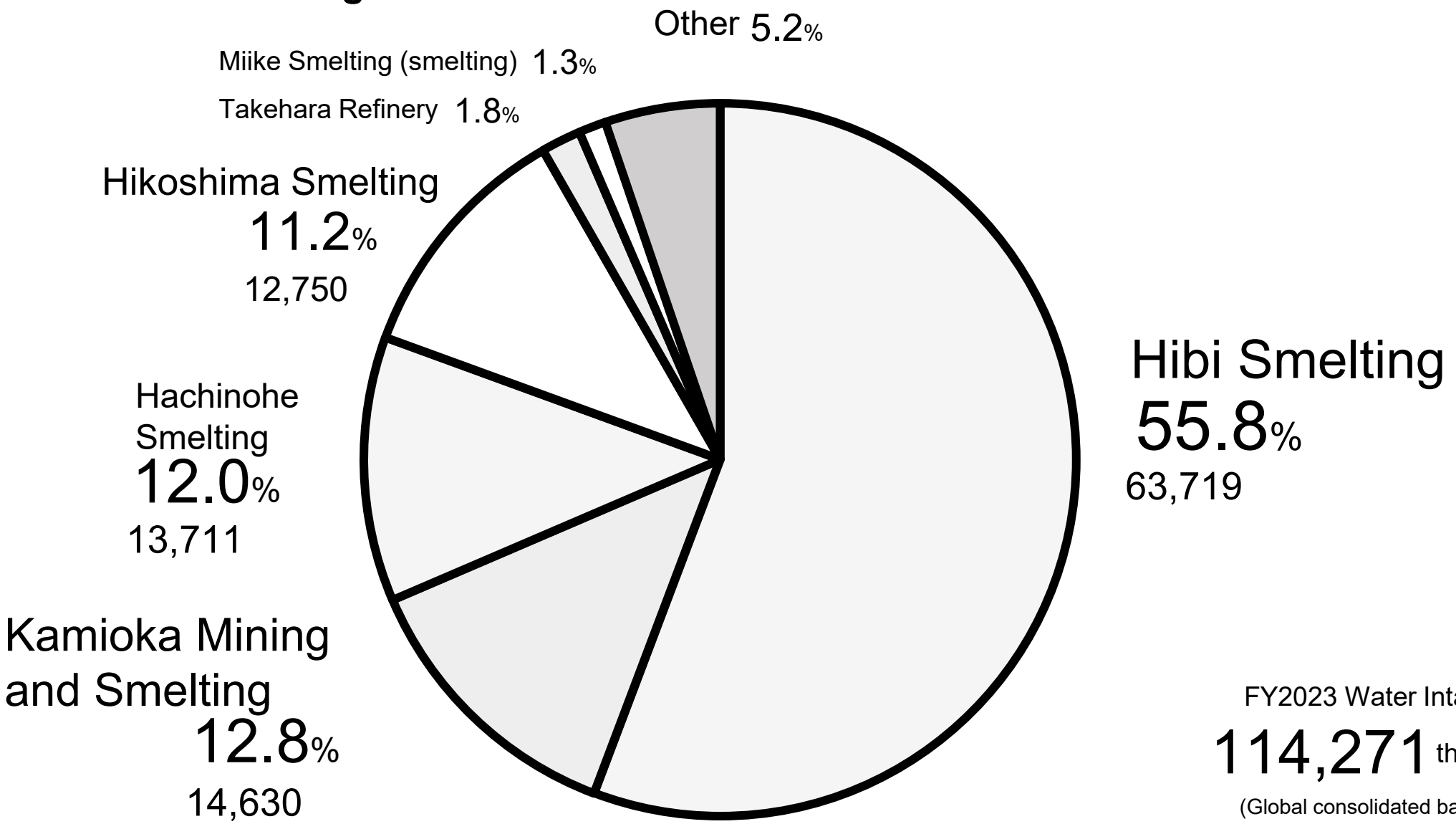


Anticipated water-related risks



(The number of locations that indicated there is a risk during the annual environmental management status survey of domestic and overseas locations.)

Responsible Water Management



FY2023 Water Intake

114,271 thousand m^3

(Global consolidated basis)

Tengunouchiwa Power Plant in the Kamioka Mine

We have constructed and own multiple hydraulic power stations in the Kamioka Mine as well as the Huanzala Mine and the Pallca Mine in Peru by making the most of their geographic conditions. Tengunouchiwa Power Plant, which has been in operation since June 2014, is an underground hydraulic power station that utilizes abundant spring water and a waterfall, which is rare anywhere in the world.

Reservoir in the Miike area

We have multiple manufacturing sites in the Miike area (Omuta City, Fukuoka Prefecture), and we store the water used and treated by each location as well as rainwater in a reservoir for reuse.

Hibi Smelting

Hibi Smelting (Tamano City, Okayama Prefecture) is our site for copper smelting. Seawater accounts for 97% of its water intake (FY2023 result), and this seawater is taken from the Seto Inland Sea, which the smelting plant faces.

Hibi Smelting

The seawater taken is used as cooling water in the sulfuric acid process. The photo shows the discharge outlet for that process.

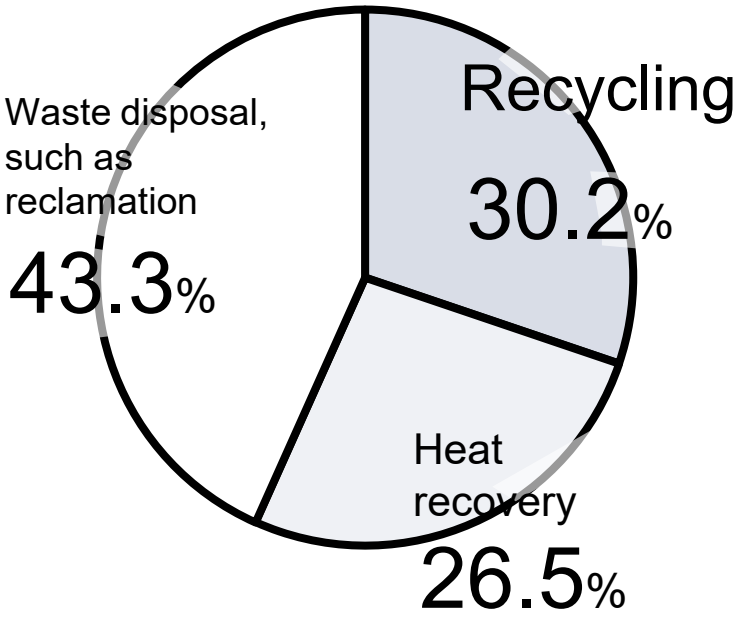
Waste separation yard in the Miike area

Each manufacturing site is working to reduce the amount of waste generated from its processes by minimizing resource usage and streamlining operations. Our manufacturing sites are also working to improve the recovery rate of valuable resources, to promote the 3Rs for packaging materials, and to reduce the final disposal volume.

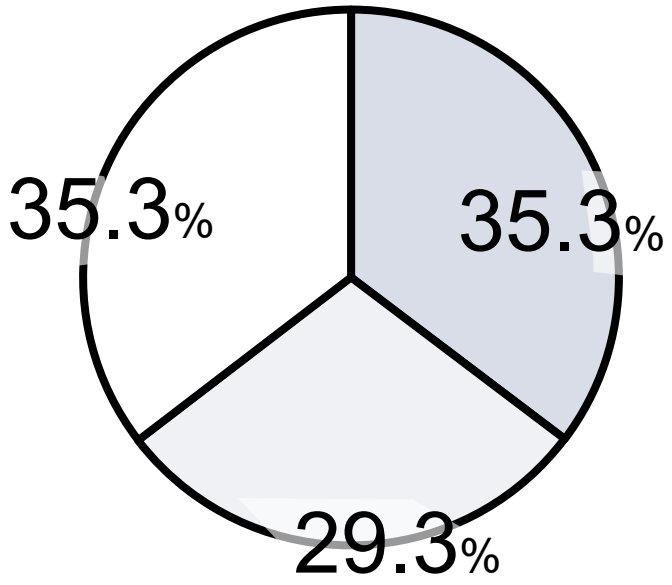
Waste Reduction Initiative

Plastic Recycling

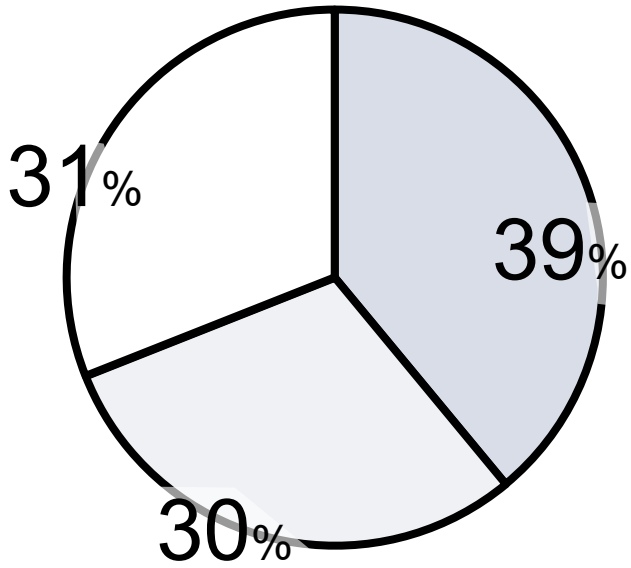
Mitsui Kinzoku Group is committed to the proper disposal of plastic waste and resource recycling. In FY2022, we set targets to reduce plastic waste emissions and to increase the recycling rate at our domestic group locations, which account for approximately 95% of the Group's total plastic waste emissions.



Fiscal 2022



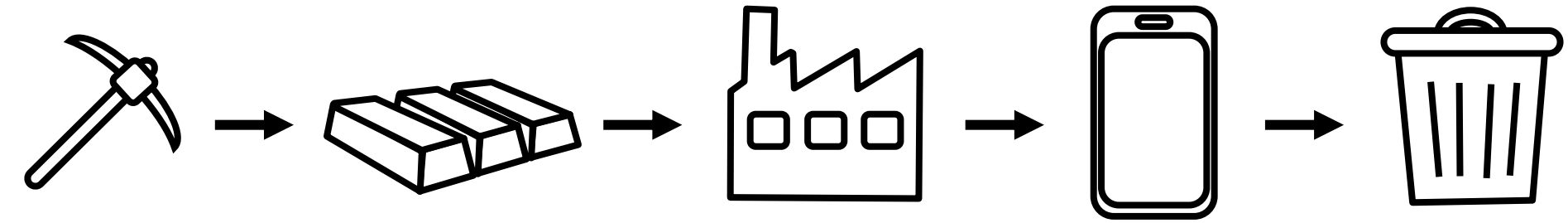
Fiscal 2023



Fiscal 2024
(Plan)

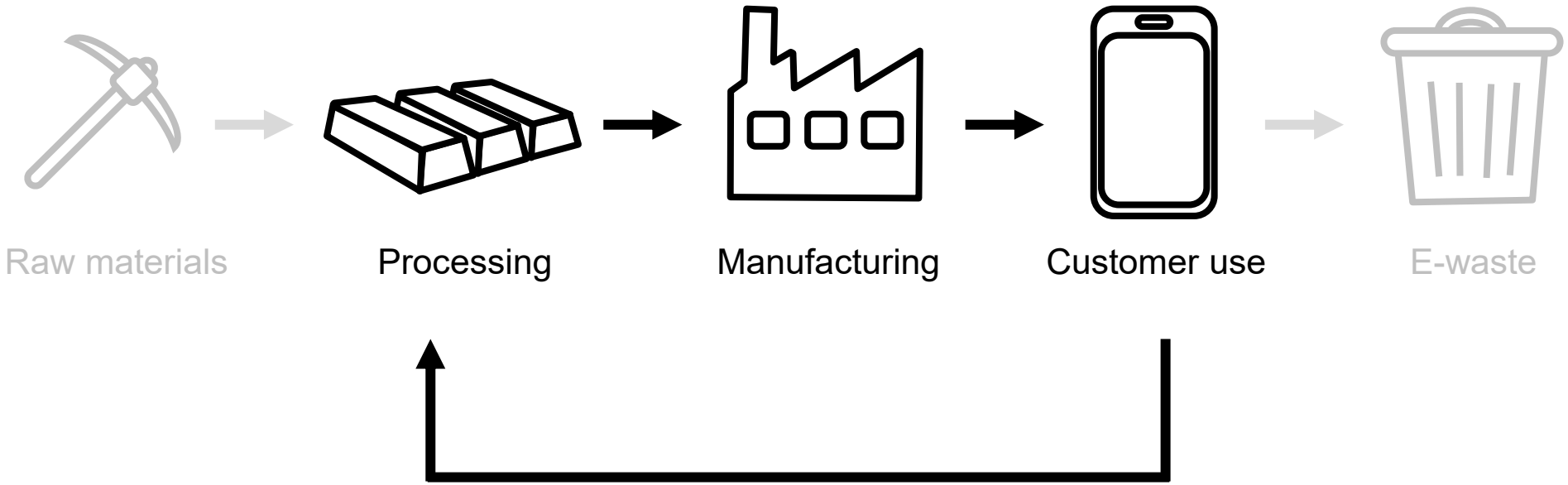
* The scope is Mitsui Kinzoku and its domestic consolidated subsidiaries.

Closing the Loop in Our Supply Chain



(Prepared based on Apple’s disclosure information)

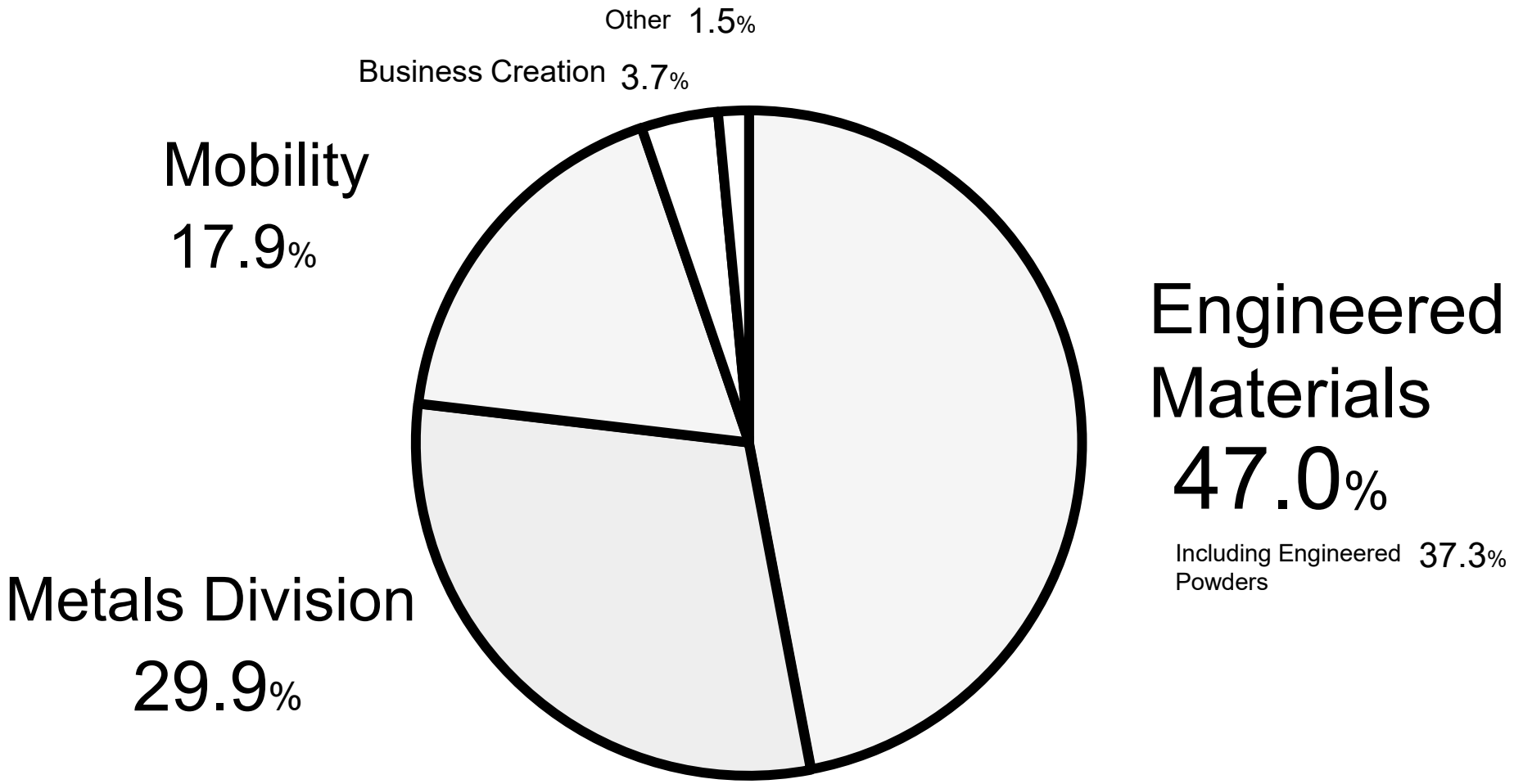
Closing the Loop in Our Supply Chain



(Prepared based on Apple’s disclosure information)

Requests from Our Corporate Customers Concerning CSR and ESG

Over the past four years, 72% of requests from our corporate customers concerned answering a questionnaire (e.g., SAQ), 13% concerned obtaining a rating from a CSR rating agency, and 2% concerned conducting business site audits.



Fiscal 2020–2023

Initiatives for Environmental Issues

MITSUI KINZOKU

CSR office

e-mail csr@mitsui-kinzoku.com

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

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5. Governance	SHIKI Kazuya	Director, Audit and Supervisory Committee Member

Mitsui Kinzoku's Human Capital Management —Linking to the Management Strategy and Its Characteristics

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

Characteristics

- Strong commitment by the management
- PDCA
- Backcasting

A Purpose that envisions the world in 2050
Mitsui Kinzoku's raison d'être

Backcasting

Backcasting

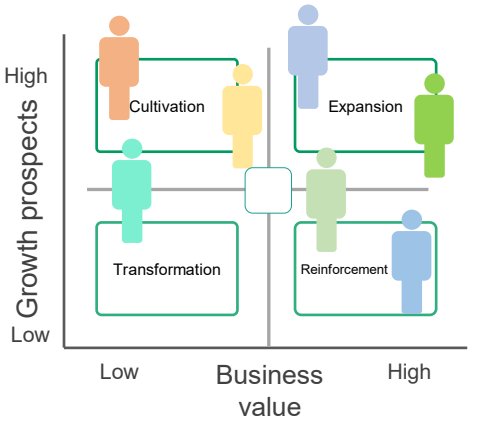
Shift to integrated thinking-based management
Realization of the Group's Vision

Promotion from the human aspects

Utilize human resources as an organization while respecting individuals

Strengthening human resources and realizing a good work environment for diverse talents

Job satisfaction	Challenges Self growth Autonomous career development Diversity	Breaking away from the seniority system Systematic training Career advice sessions Workplace diversity
Company chosen to work for	Pride in working for Mitsui Kinzoku Value sharing	Instillation of the Purpose A workplace employees can be proud of in front of their family and friends
Comfortable workplaces	Improvement of the work environment and systems An environment that enables all employees to perform well	Harassment eradication Childcare leave for male employees, one-on-one interviews Health maintenance and promotion for employees and their family members



Our visions for ourselves

Personnel development
Talent allocation
Succession plan

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

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

Performance-based human resource system **Enhancement of health management**

Respect for human rights

Rewarding and Engaging Work Promoting Office

—What We Must Achieve and What We Want to Achieve

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

By accelerating job satisfaction improvement through measures tailored to diverse businesses, we will enable individuals and organizations to improve their capabilities.

Mitsui Kinzoku operates diverse businesses.

We must develop measures tailored to each business.

By establishing a dedicated organization, we will realize job satisfaction, which drives our human resources, to strengthen their ability to act.

Engagement score (percentage of *iki-iki* active engagement) 49 ⇒ 70 (2030)

■ What does job satisfaction mean for individuals and organizations?

Individual power

- Can work with peace of mind due to mutual respect
- Feels pride, joy, and happiness
- Works autonomously and perceives one's own growth

Organizational power

- Demonstrates one's capabilities to the maximum extent by making the most of one's individuality
- Takes on challenges by making the most of the organization's diversity
- Achieves cooperation across sectors

■ Measures to realize this (excerpt)

Corporate

- Establishment of the Rewarding and Engaging Work Promoting Office
- Management training (360-degree feedback) One-on-one interviews, career advice, harassment prevention
- Award system

By business

- Sector head training
- Inter-sector exchange meetings
- Vision communication, building of a promotion system
- Workshop (divisional managers/managers/divisional promotors)

2024 2025 2026 2027 2030

Social value

A positive work environment for diverse talents

Financial value

-Improving productivity

-Innovative workplace

Mitsui Kinzoku's Human Capital Management —What We Can Gain

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

Aim to drastically enhance corporate value through Mitsui Kinzoku's unique human capital management

- Realization of the Purpose/Group's Vision
- Innovative workplace
- Realize business strategies

All of these can only be achieved through the actions of people.

As job satisfaction improves, individuals and organizations grow in strength.

In other words: Realization of
- Improved ability to act
- The value of diversity
- One's potential to the maximum extent

☞ Create a sustainable environment in which every employee believes in Mitsui Kinzoku's future and strategy, and works willingly while feeling job satisfaction.

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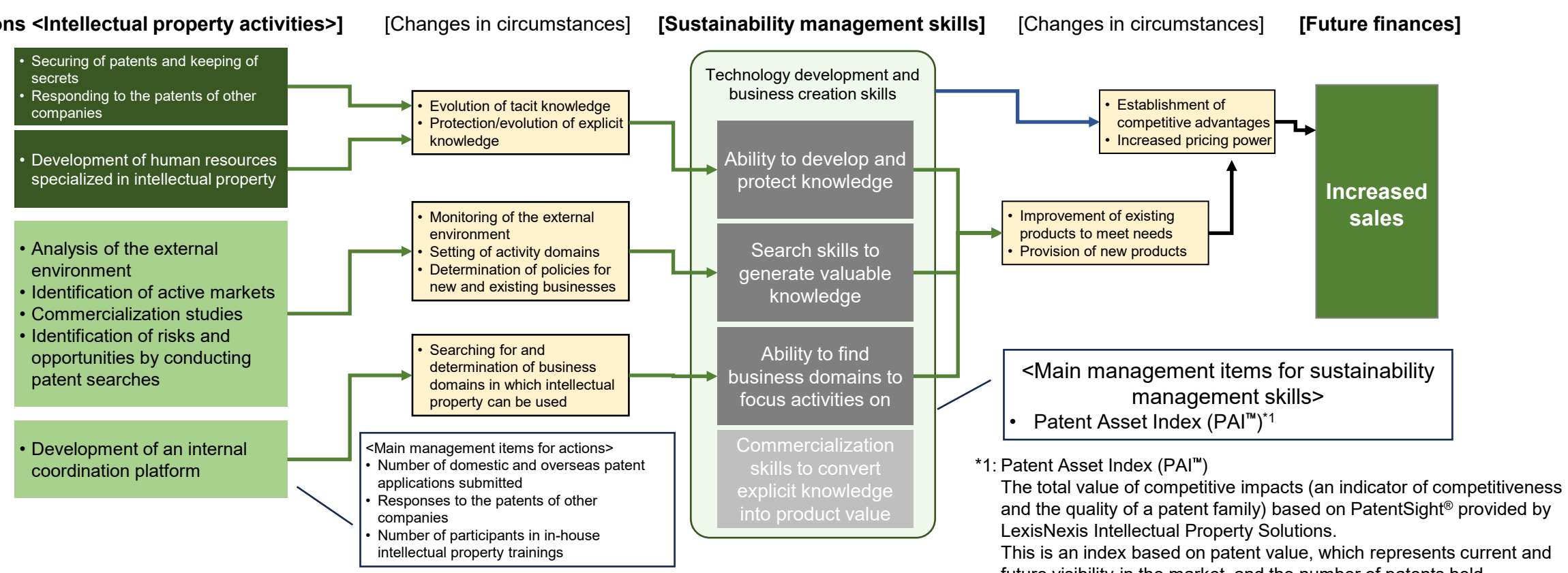
We promote the well-being of the world through a spirit of exploration and diverse technologies.

Linkage to the Future Finances of Intellectual Property Activities

We analyzed the impacts of intellectual property activities on our future finances and have established and implemented actions and management items for sustainability management skills.

Logic that shows the linkage to the future finances of intellectual property activities



*1: Patent Asset Index (PAI™)
The total value of competitive impacts (an indicator of competitiveness and the quality of a patent family) based on PatentSight® provided by LexisNexis Intellectual Property Solutions.
This is an index based on patent value, which represents current and future visibility in the market, and the number of patents held.

We are analyzing the impacts on future finances of not only intellectual property activities but also of other activities to enhance social value.

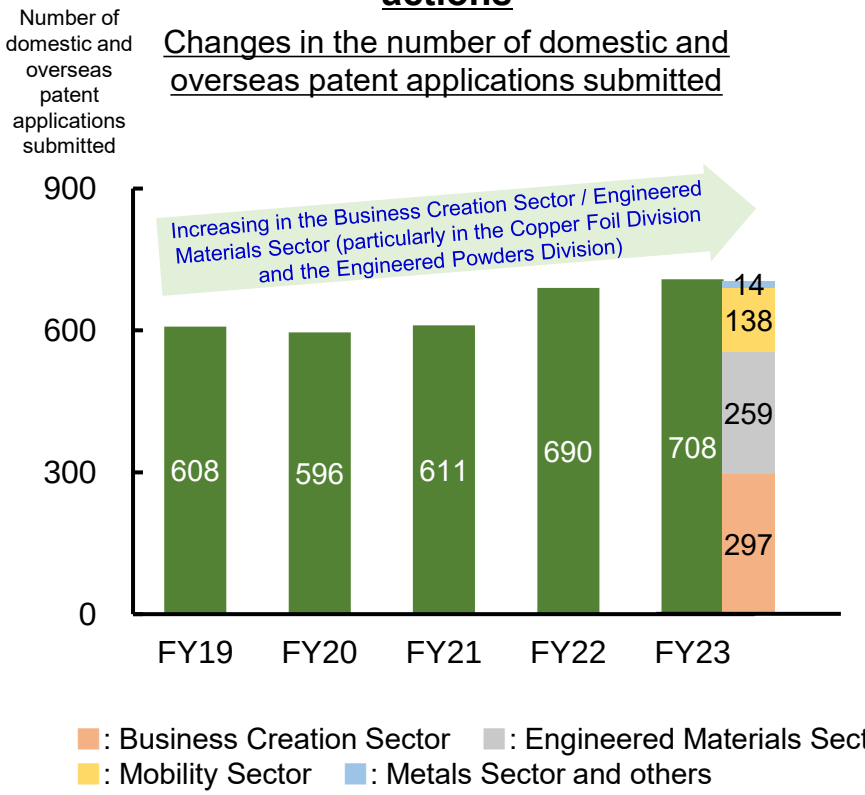
Changes in the Values of Management Items for Actions and Sustainability Management Skills

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

The number of domestic and overseas patent applications submitted, which is one of the management items for actions, is increasing based on, among other factors, efforts to reduce risks toward protecting existing businesses and creating new businesses.
The PAI has grown at 2% CAGR [CY2019 through 2023]. Progress has recently been made in the Business Creation Sector and the Engineered Materials Sector in developing intellectual property and intangible assets to drive medium- to long-term growth.

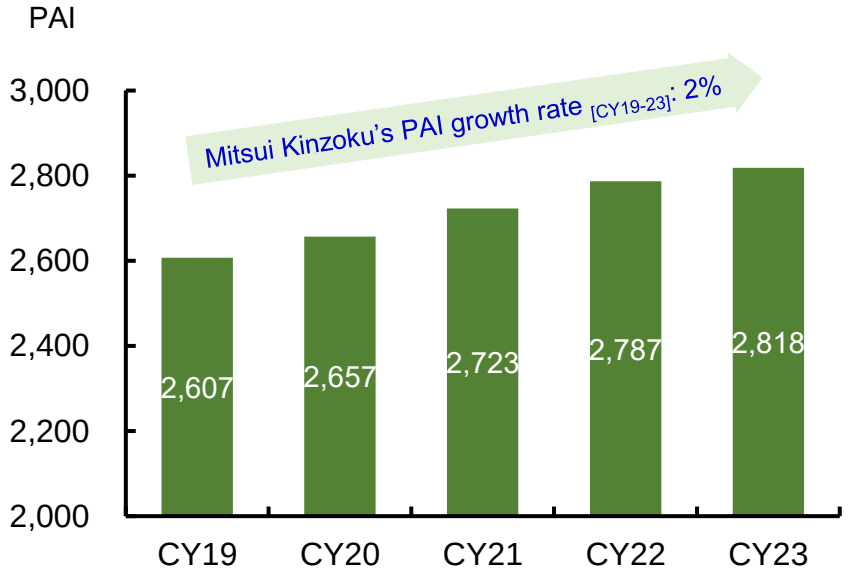
Changes in main management items for actions

Changes in the number of domestic and overseas patent applications submitted

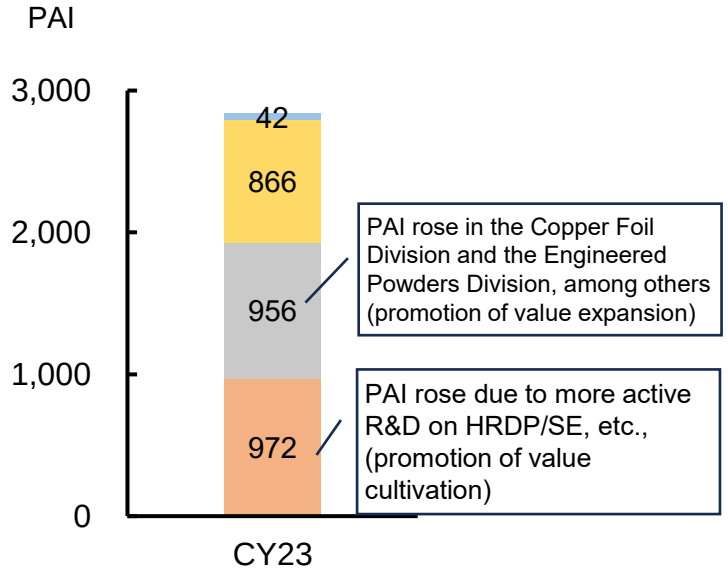


Changes in management items (PAI) for sustainability management skills and PAI by Sector in CY2023

Changes in PAI



PAI by sector in CY2023



* Due to the existence of patent applications that were jointly submitted by multiple Sectors, the sum of PAIs for individual Sectors differs from the PAI for Mitsui Kinzoku as a whole.

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Mitsui Kinzoku's Corporate Governance

[History of our corporate governance reform]

: Male : Female : Chairman of the Board Auditor Members of Audit and Supervisory Committee

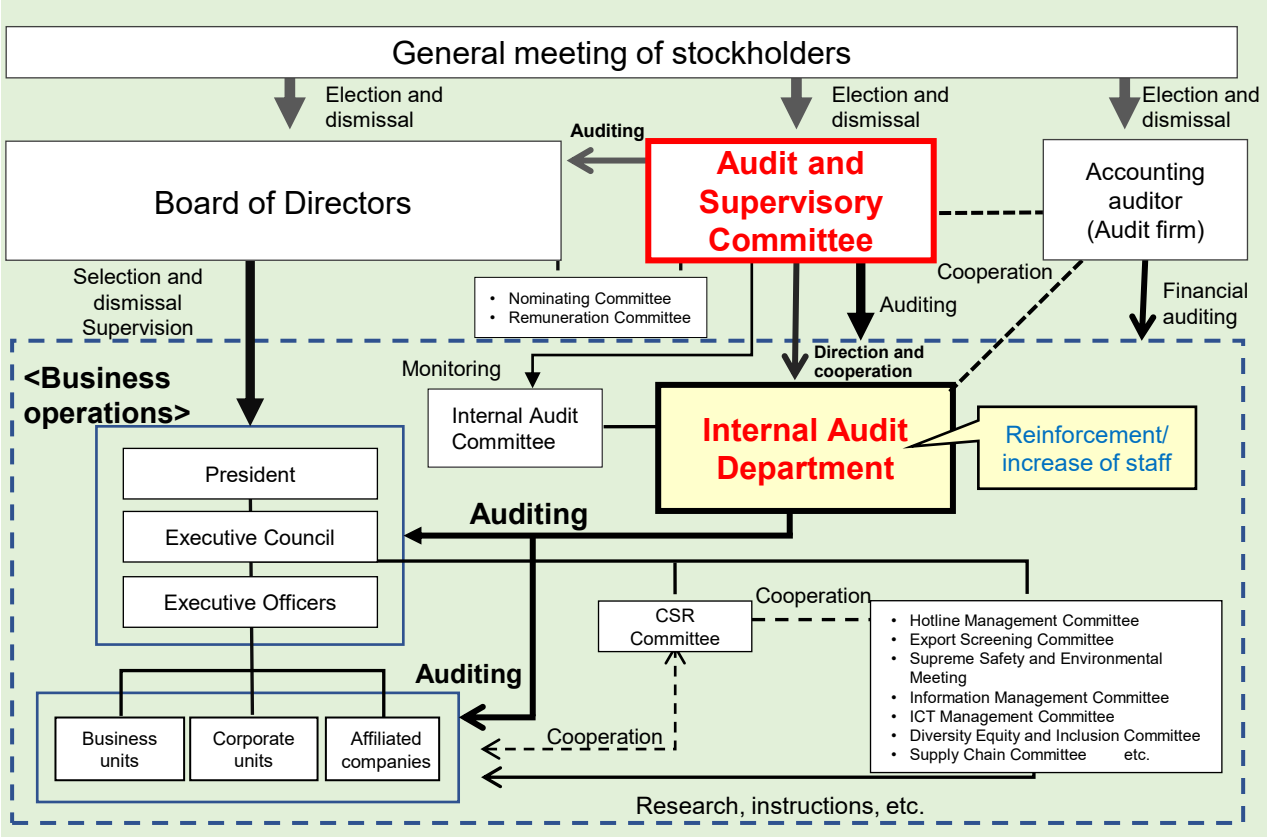
FY	Specific actions	Composition of Directors
–2014	• Established the Nomination Review Committee and the Compensation Committee (2005) • Stipulated that an outside director shall serve as the chairperson of the Nomination Review Committee (2008)	(2014) Internal: President (–2020) Outside:
2015	• Began evaluating the effectiveness of the Board of Directors	Internal: Outside:
2016	• Stipulated that an outside director shall serve as the chairperson of the Internal Audit Committee	Internal: Outside:
2018	• Stipulated that an outside director shall serve as the chairperson of the Compensation Committee	(The same as above)
2019	• Changed the term of directors from two years to one year	(The same as above)
2020	• (Stipulated that an outside auditor shall be a member of the Nomination Review Committee and the Compensation Committee)	Internal: Outside:
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	Internal: Non-president Outside:
2022	• Stipulated that the Board of Directors shall be chaired by an outside director	Internal: Outside:
2023	• Adopted an ESG index-linked restricted stock compensation plan	Internal: Outside:
2024	• Transitioned from a company with a Board of Company Auditors to a company with an Audit and Supervisory Committee	Internal: Auditor Outside: Auditor Auditor Auditor

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

Transition to a Company with an Audit and Supervisory Committee

Strengthen governance through transition to a company with an Audit and Supervisory Committee, increased ratio of outside directors to half, increased ratio of female executives, appointment of external financial accounting skilled personnel, appointment of Outside Director as Chairman of the Board of Directors, thereby orienting to the Board of Directors as “Small-sized general meeting of stockholders”

Corporate governance system chart



Transition objectives

- Significantly transfer power to Executive Officers and strengthen monitoring functions over management
  → Transition to a monitoring model approach
- Concentrate on discussions to enhance corporate value, such as company-wide strategies, at the Board of Directors meetings
  → Support for company-wide strategies from a governance perspective

Benefits of transitioning

- As half of our directors are now outside directors, discussions at Board of Directors meetings have become more intense and vigorous.
- Information sharing between the executive side and outside officer/the Internal Audit Department has become more extensive, enabling more substantive discussions.

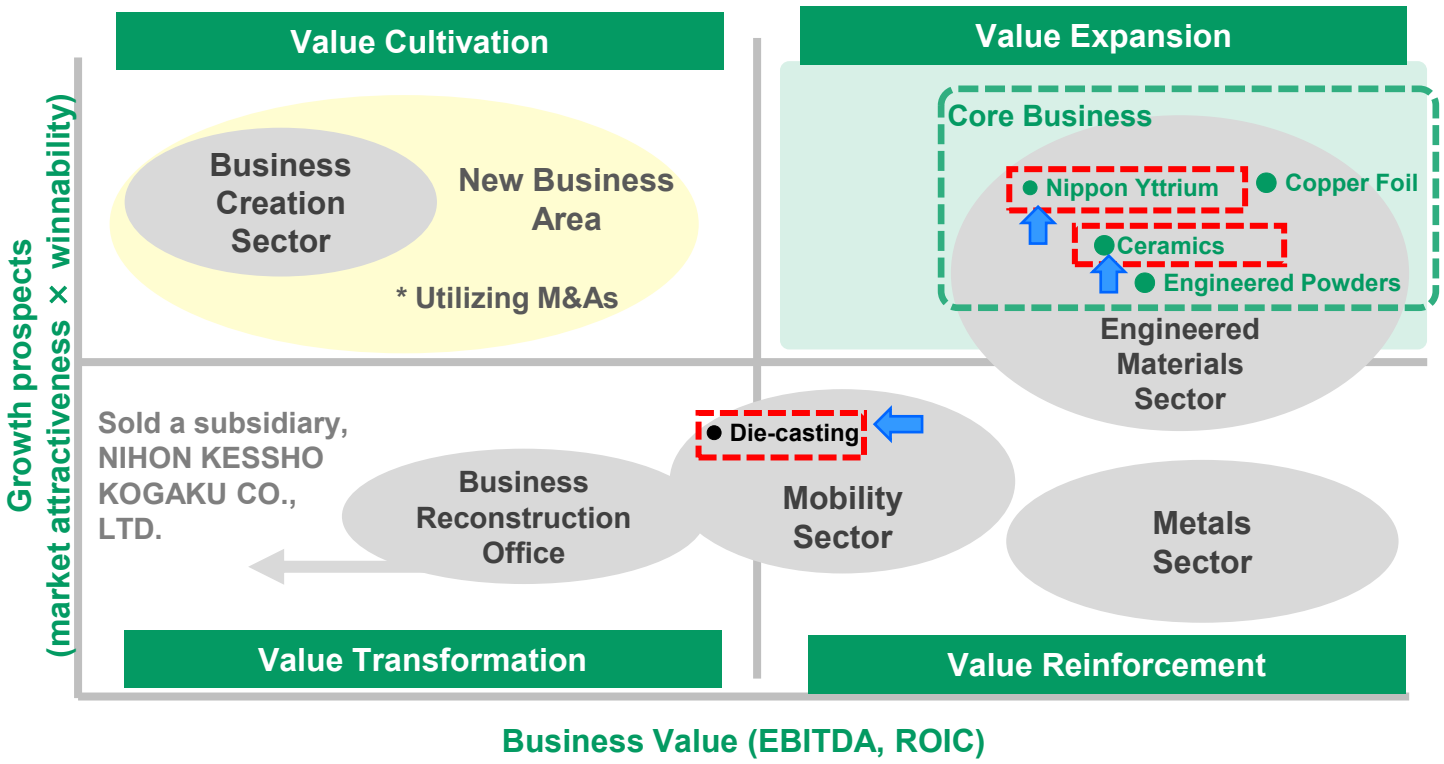
We promote the well-being of the world through a spirit of exploration and diverse technologies.

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

We are accelerating initiatives to enhance corporate value by implementing measures to improve financial value, such as dynamic management of our business portfolio, and by advancing ROIC-oriented management.

■ Business Valuation Matrix

Change through FY2023 review of the matrix



Enhance ROIC-oriented management

- We have made the following decision to practice management that is more conscious of capital efficiency.
  - To introduce ROIC as an indicator of efficiency as part of the performance indicators for executive directors and senior executive officers.
- We are seriously considering implementation of the following measures.
  - Calculate the WACC (Weighted Average Cost of Capital) per business and set ROIC targets (ROIC spreads) per business at appropriate levels that are above the levels of the WACC per business.
  - Introduce measures to motivate employees to work to enhance corporate value and to ensure internalization of ROIC.
  - Setting of and working according to indicators necessary for improving ROIC (e.g., ROIC trees) at each location and group company.

Operation is scheduled to start in FY2025 at which the next MTP will be started.

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

Executive Compensation

The percentage of stock compensation out of the total compensation of directors (excluding directors serving as an Audit & Supervisory Committee member and outside directors) was raised for the current fiscal year (from 15% to 20%).
We have established shareholding guidelines for executive officers and higher officers and have decided to introduce ROIC as an additional indicator for performance-linked compensation from FY2025.

■ Recent history related to executive compensation

FY	Specific actions
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
2024	• **Established shareholding guidelines for executive officers and higher officers.**
2025	• **Introduce ROIC as an additional indicator for determining the percentage of performance-linked compensation (plan).**

■ Composition of compensation by type based on consolidated ordinary income of 40 billion yen

(Before)

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

From FY2024

Base compensation	50%
Performance-linked compensation	30%
Stock compensation	**20%**

* As performance-linked compensation changes according to the Company's financial results, the composition of compensation referred to above will also fluctuate.

■ Aim of the FY2024 revision of the executive compensation system

- To encourage directors and other top management executives to be highly conscious of sharing value with shareholders and enhancing corporate value.
- To accelerate ROIC-oriented management by introducing ROIC as an additional indicator for performance-linked compensation.

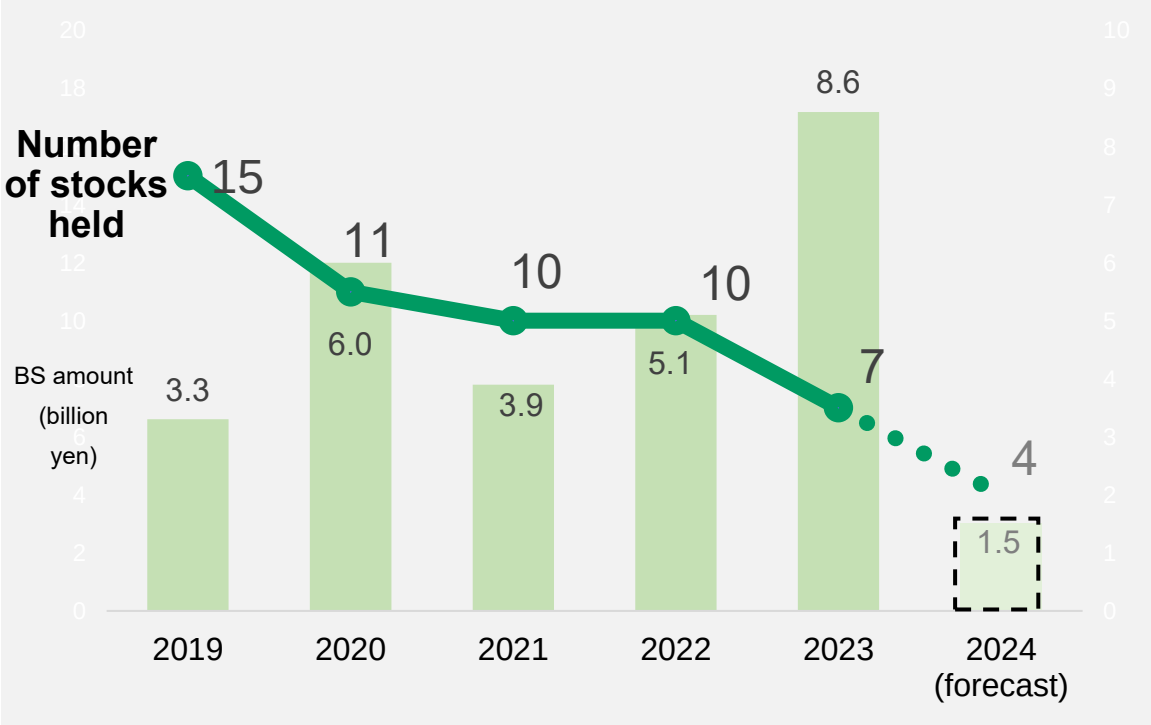
We will continue to review and revise our executive compensation system, including the compensation composition and indicators.

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

Status of Cross-shareholdings

To ensure transparency in governance and to improve capital efficiency, we are in the process of reducing cross-shareholdings.

Change in the status of cross-shareholdings



- TSE timely disclosure on August 8, 2024
  As notified in the Notice of Recognition of a Gain on Sale of Investment Securities, we sold shares of one listed company previously held as a cross-shareholding and recognized extraordinary income of 9.2 billion yen.

As a result of the aforementioned sale, the book value of our cross-shareholdings is expected to become extremely small as of March 31, 2025.

- We will continue to examine whether to hold shares as cross-shareholdings, and if we determine that there is no rational reason for doing so, we will sell such shares.

* The BS amount will change as a result of fair-value valuation at the end of the current period.

Appendix

Opportunities:
Market co-creation

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

A-SOLiD® Solid Electrolyte for All-Solid-State Batteries

Vision for 2030	Establish a position as a leading company in solid electrolyte by contributing to realizing a decarbonized society through All-Solid State Battery (ASSB)

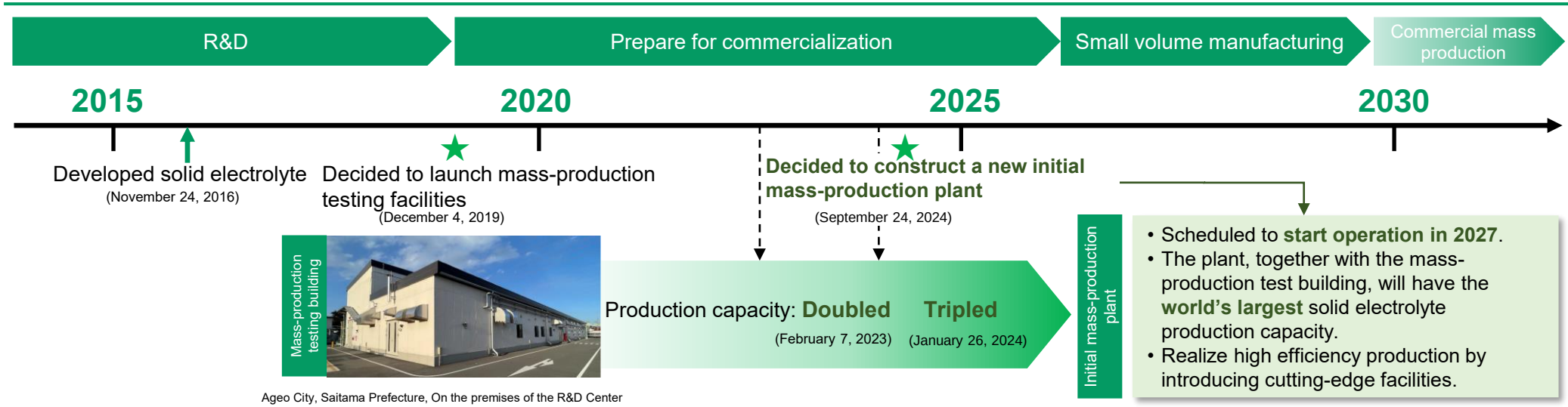
Progress to date

- Since the introduction of a mass-production test building in 2019, we have vigorously supported our customers' development of all-solid-state batteries by increasing our production capacity twice.
- Our solid electrolyte A-SOLiD® has been adopted by multiple customers both in Japan and overseas as standard materials for development.

Progress in FY2024

- The likelihood of adoption of our A-SOLiD® in an EV that uses all-solid-state batteries, which is scheduled to be launched around 2027, has increased.
- In view of this development, we have decided to build an initial mass-production plant (scheduled to start operation in 2027). We expect the plant to contribute to the social implementation of all-solid-state batteries.

Roadmap



Ageo City, Saitama Prefecture, On the premises of the R&D Center

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

HRDP®: Specialty Carrier for Next Generation Semiconductor Packaging

Vision for 2030	Achieve a de-facto standard for packaging platforms for next-gen chip PKG devices

Roadmap

R&D → Prepare for commercialization → SVM*1 → HVM*2

2018

Developed HRDP®, and **mass production technology** with GEOMATEC Co., Ltd.
(Capacity: **40** thousand m²/year)

2020

Commenced mass production
(Domestic composite chip module manufacturer)

Commenced mass production
(Overseas IC chip mounting device manufacturer)

Commence operation of DOE*5 equipment

2025

1st production line automation
(**110** thousand m²/year)

Expand production adoption

2030

Aim to capture the advanced packaging market, whose size is expected to be about 9.4 trillion yen in 2030*3.

HRDP® dedicated automatic peeling device (part of DOE equipment)

In the process of launching a cutting-edge 2nd production line (**170** thousand m²/year)
DOE facility expansion completed

*1 Small Volume Manufacturing
*2 High Volume Manufacturing

Progress to date

- Strengthen marketing activities to end-manufacturers using DOE
- Expand product lineup to meet customer demand
- Launch a 2nd production line to improve quality and enhance production capacity

Progress in FY2024

- Inquiries are increasing for next-generation chip panel-level packages for AI, 5G/6G, and HPC*4
- Preparations for mass production are ongoing at a leading semiconductor supply chain company
- DOE facility expansion completed
- 2nd production line will start production in 2025 as planned

*3 Source: Advanced Packaging 2023, Yole

*4 High-Performance Computing

*5 Design of Experiments (DOE): Initiatives in which we collaborate with customers to verify customer processes and to propose value for customers

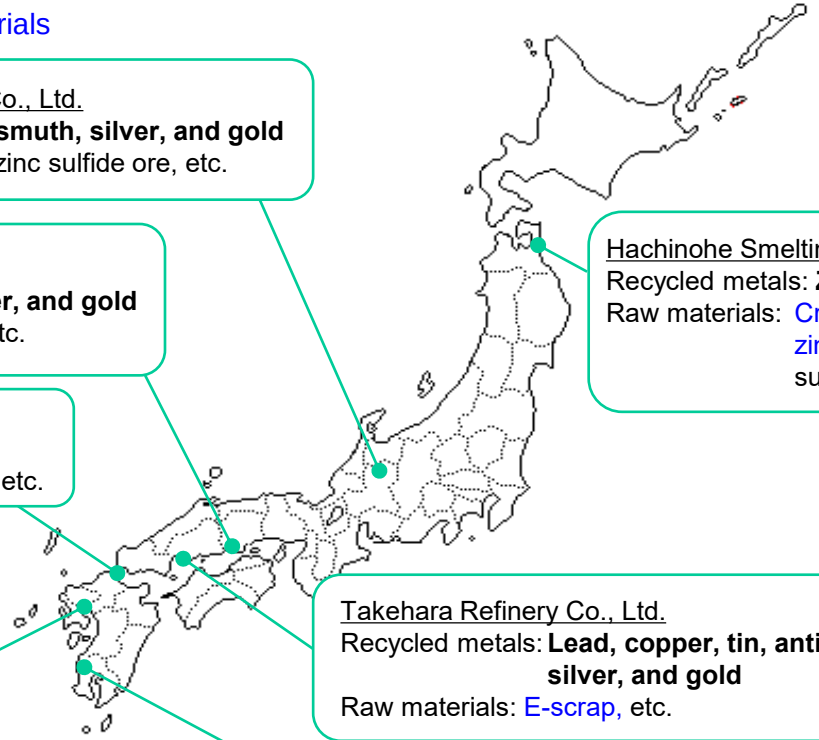
Outline of the Metals Business

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

The Metals Business has six smelting plants in Japan (three zinc smelting sites, two lead smelting sites, and one copper smelting site) to produce zinc, lead, and copper as well as various metal by-products. In addition to high recycling rates of raw materials (in particular, 51% for zinc is world-class performance), our Metals Business boasts of the highest total production of zinc, lead, and copper in Japan.

Domestic locations

In blue: Recycled raw materials



Kamioka Mining and Smelting Co., Ltd.
Recycled metals: **Zinc, lead, bismuth, silver, and gold**
Raw materials: Used batteries, zinc sulfide ore, etc.

Hibi Kyodo Smelting Co., Ltd.
Recycled metals: **Copper, silver, and gold**
Raw materials: Copper scrap, etc.

Hikoshima Smelting Co., Ltd.
Recycled metals: **Zinc**
Raw materials: Zinc sulfide ore, etc.

Hachinohe Smelting Co., Ltd.
Recycled metals: **Zinc and lead**
Raw materials: Crude zinc oxide, zinc slag, zinc sulfide, lead ore, etc.

Takehara Refinery Co., Ltd.
Recycled metals: **Lead, copper, tin, antimony, silver, and gold**
Raw materials: E-scrap, etc.

Miike Smelting Co., Ltd.
Recycled metals: **Crude zinc oxide (intermediate product)**
Raw materials: EAF flue dust, blast furnace flue dust, etc.

Mitsui Kushikino Mining Co., Ltd.
Recycled metals: **Silver, gold, and other precious metals**
Raw materials: E-scrap, etc.

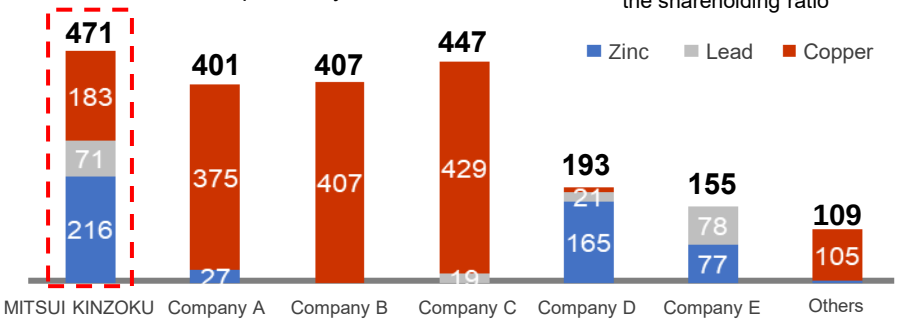
Production volume and raw material composition of our products

	Production volume	Recycling rate	Average domestic recycling rate*	Main uses
Zinc	216,000 tons	51%	21%	Plated steel sheets
Lead	71,000 tons	69%	59%	Storage batteries
Copper	282,000 tons	27%	19%	Electric wires and cables, brass bars
Tin	400 tons	100%	100%	Solder
Antimony	300 tons	—	—	Flame retardant
Bismuth	300 tons	—	—	Alloys, metallurgy additives
Silver	100 tons	—	—	Electronics components, jewelry
Gold	5 tons	—	—	Jewelry

* Average domestic recycling rate = Production volume of recycling-derived products / Total domestic production volume
(Source: JOGMEC material “Mineral Resources Material Flow 2022”)

FY2023 production volume* of domestic nonferrous metal companies by metal

* Production volume after considering the shareholding ratio



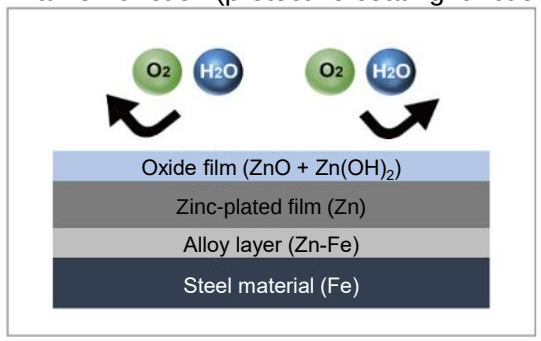
Provision of Metal Materials Essential for the Realization of Carbon Neutrality

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

Our zinc and copper products contribute to CO_2 emission reduction, the former through their use in rust prevention for steel sheets, and the latter through their use in electric vehicles, etc. We will continue to provide metal materials essential for the realization of carbon neutrality, in addition to recycling.

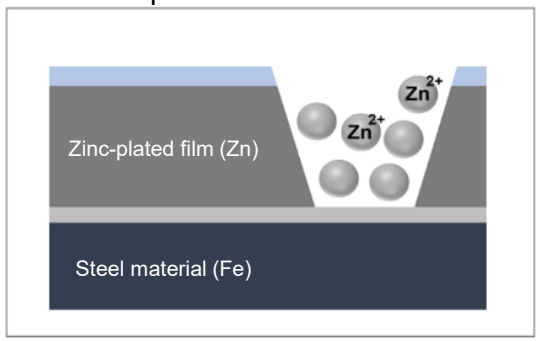
Zn CO_2 emission reduction through rust prevention for steel sheets

Barrier function (protective coating function)



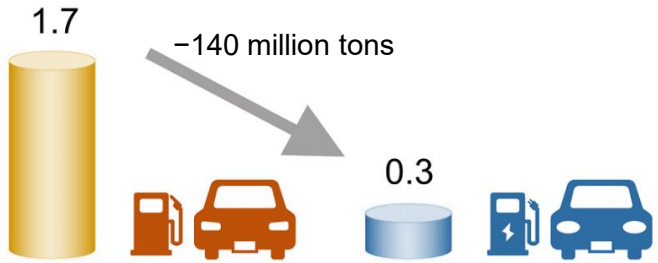
Protect steel materials by the alloy layer and oxide film.

Sacrificial protection function



As zinc dissolves before steel does, zinc protects steel electrochemically.

Cu CO_2 emission reduction through electric vehicles



CO_2 emission reduction effects of Mitsui Kinzoku's zinc plating

Zinc's contribution to CO_2 emission reduction is expected to amount to 27,000,000 t-CO_2/year, including the reduction contribution of Mitsui Kinzoku's zinc bullion of **12,000,000** t-CO_2/year.

Molten zinc-plated steel sheets

- Service life of 10 years (2.5 times that of regular steel sheets)
- CO_2 emissions from production: 2.32 t-CO_2 t/t (regular steel sheets: 2.03)
- Production volume: 10,000,000 tons/year
- Domestic production volume of zinc: 500,000 tons/year
- Mitsui Kinzoku's production volume of zinc: 220,000 tons/year

As a result of the service life extension of steel sheets

10,000,000 tons/year × (2.03 t/t × life 2.5 times − 2.32 t/t) × (220,000 tons / 500,000 tons) = 12,120,000 t-CO_2/year

CO_2 emission reduction contribution volume simulation for Mitsui Kinzoku' refined copper

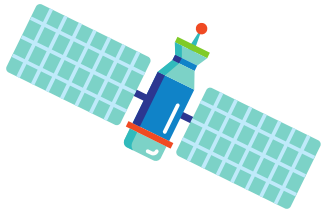
If all automobiles in Japan are replaced by electric vehicles by 2030, CO_2 emissions are expected to be reduced by 16,470,000 tons/year (140,000,000 tons on a cumulative basis), including the reduction contribution of Mitsui Kinzoku's refined copper of **270,000 t**-CO_2/year.

Electric vehicles

- CO_2 emission reduction effect: 16,470,000 tons/year
- Weight percentage of refined copper in EVs: 8.5%
- Domestic production volume of refined copper: 1,350,000 tons/year
- Mitsui Kinzoku's production volume of refined copper: 295,000 tons/year

As a result of popularization of electric vehicles

16,470,000 tons/year × 8.5% × (295,000 tons / 1,350,000 tons) = 270,000 t-CO_2/year



MITSUI KINZOKU