

**FY2024-2026**

# **Third Medium-Term Management Plan**

Securities Code: 1515

May 13, 2024

# Third Medium-Term Management Plan Contents

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## Review of Second Medium-Term Management Plan

- Earnings were strong for all business segments. With a weakening yen and rising copper prices also contributing substantially, ROA (operating profit) and the equity ratio both achieved the targets
- For large-scale investments (third vertical shaft at Torigatayama Quarry Complex, new mining area at Hachinohe Mine, development at the Arqueros Mine), progress is steady despite some delays

## Third Medium-Term Management Plan

- For our financial situation, borrowings are to increase sharply due to funding for the development of the Arqueros Mine
- For our business results, profits are to be weighed down by depreciation costs arising from the start of operations for the third vertical shaft of the Torigatayama Quarry Complex
- In FY2026, the final year of the Medium-Term Management Plan, operations are to start at the Arqueros Mine, providing a full-fledged contribution to earnings improvement from the period of the Fourth Medium-Term Management Plan and beyond

## Initiatives for Management Conscious of Cost of Capital and Share Price

- We have introduced ROIC as a management indicator and aim for its uptake and instilment not just by individual business segments but also at the level of individual business sites, so as to achieve a better business portfolio
- As part of initiatives for management conscious of cost of capital and share price, we are striving for P/B ratio of 1.0x by lowering cost of equity and enhancing IR activities
- For shareholder returns, we implement dividend payments targeting a consolidated payout ratio of 40%

If the P/B ratio is under 1.0x as of the end of the fiscal year, the lower limit dividend value will be 3% of market price-based DOE, and if the P/B ratio is 1.0x or higher as of the end of the fiscal year, the lower limit dividend value will be 3% of DOE

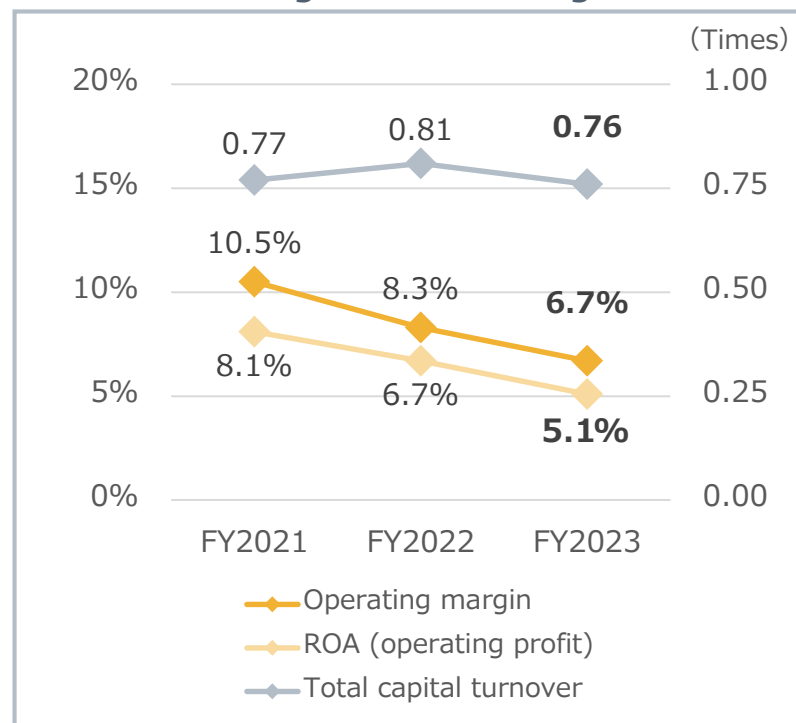
## Steadily implement large-scale investments, aim to acquire resources for sustainable growth

<b>Targets</b>	<b>1</b>	<b>Aim for full-scale operations of the third vertical shaft at Torigatayama Quarry Complex (limestone) in FY2023</b>	Full-scale operations are scheduled to commence from June 2024, one year later than originally planned, due to delayed civil engineering work and typhoon recovery construction
	<b>2</b>	<b>Proceed with the ongoing development of the new area of Hachinohe Mine, aiming for full-scale operations in the next medium-term management plan period</b>	Commenced some production in July 2021 Stripping and other work are progressing smoothly, and river rerouting is underway Full-scale extraction is scheduled to commence from FY2026
	<b>3</b>	<b>Proceed with the development at the Arqueros Mine, which is in its preparation stage, aiming for full-scale operation in the next medium-term management plan period (FY2024-FY2026)</b>	Despite impacts such as the COVID-19 pandemic and delayed environmental approval, the decision to start development was finalized in April 2023, and we aim for operations to begin in FY2026

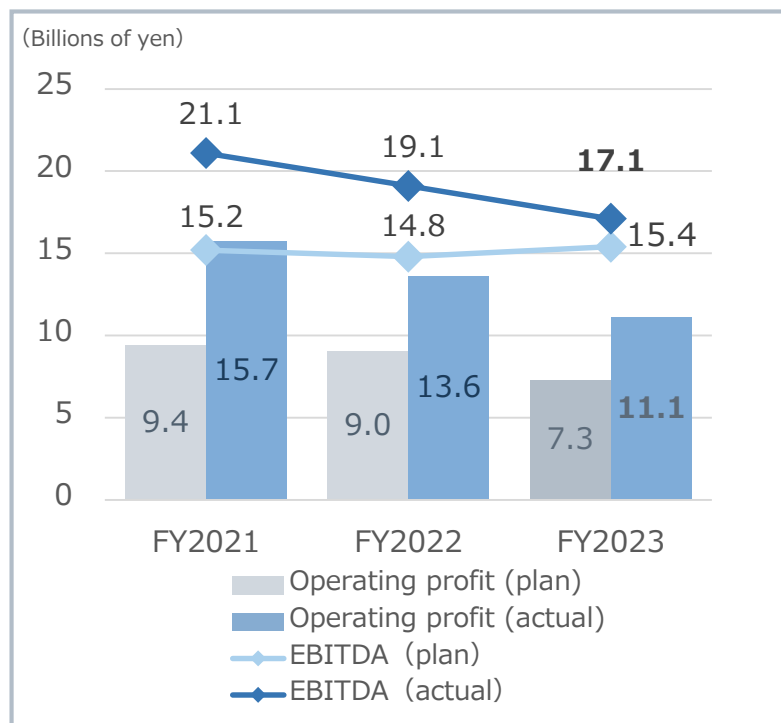
## Allocate management resources in response to demand trends in Japan and overseas

<b>Targets</b>	<b>1</b>	<b>Improve value of mineral resources (incl. price increase)</b>	Negotiated with customers about production costs and stable supply With inflation also progressing, yielded some benefits
	<b>2</b>	<b>Maintain the stability of domestic supply and expand exports overseas</b>	No protracted operating stoppages or other troubles Secured share in export markets and acquired new customers
	<b>3</b>	<b>Identify growth fields and develop demand</b>	Despite progress with some projects and launches of new projects, these failed to contribute to earnings during the period of the Second Medium-term Management Plan
	<b>4</b>	<b>Balance SDGs initiatives with business activities</b>	Announced endorsement of TCFD recommendations in June 2022 Installing renewable energy power generation facilities for own consumption Using FIT Non-Fossil Certificates with tracking for our FIT solar power plants to effectively shift to renewable energy for some purchased electricity for the Torigatayama Quarry Complex

### Progress with Medium-Term Management Plan Targets



### Operating Profit and EBITDA



	FY2023 Target	FY2023 Actual
<b>Operating margin</b>	6% or more	<b>6.7%</b>
<b>Total capital turnover</b>	0.7 or more	<b>0.76</b>
<b>ROA (operating profit)</b>	4% or more	<b>5.1%</b>
<b>Equity ratio</b>	57.5% or more	<b>61.3%</b>

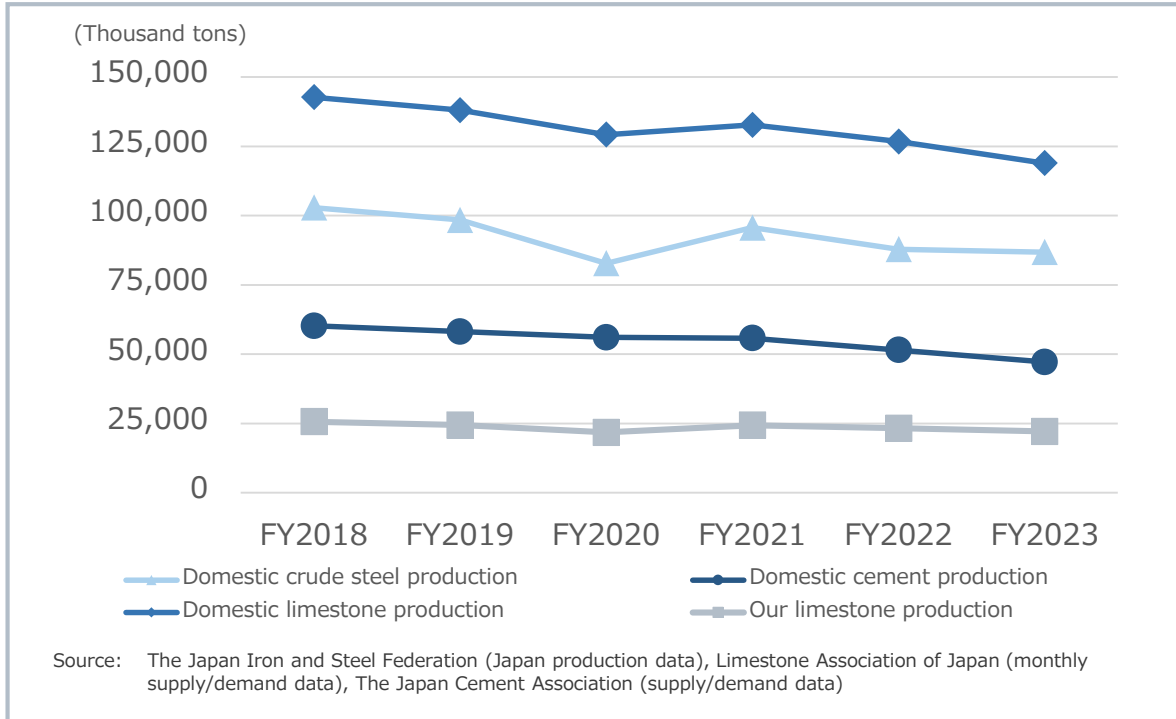
In FY2021, overall operating profit was 6.3 billion yen (or 67%) higher than planned. The Metallic Minerals Division of the Mineral Resources Segment topped the plan by a strong 4.6 billion yen, despite the COVID-19 pandemic, due to rising copper prices, which had previously stalled, backed by the recovery trend in the global economy. Additionally, better-than-planned profit in the Nonmetallic Minerals Division and lower study and other costs contributed.

In FY2022, overall operating profit was 4.6 billion yen (or 51%) higher than planned, with the Metallic Minerals Division exceeding the plan by 4.5 billion yen amid a weakening yen.

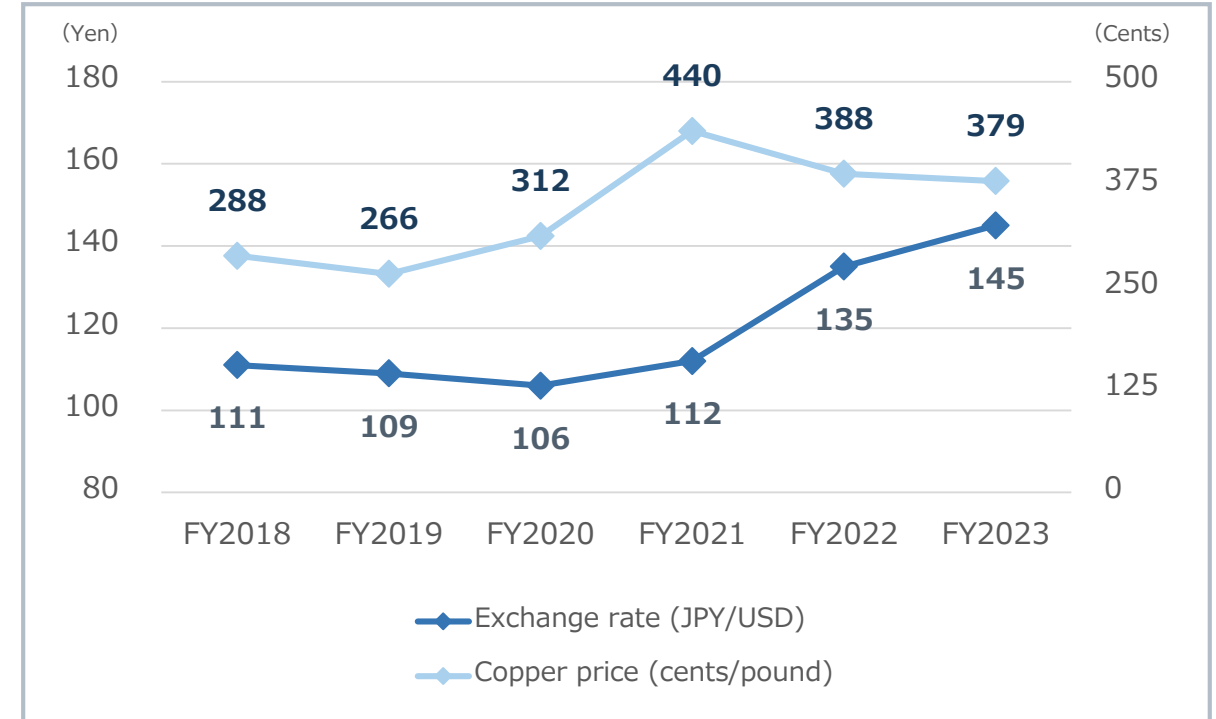
In FY2023, overall operating profit was 3.8 billion yen (or 52%) higher than planned, aided by the deferred recording of depreciation costs due to construction delays for the third vertical shaft at the Torigatayama Quarry Complex in the Nonmetallic Minerals Division, yen weakening, and other factors.

Regarding ROA (operating profit) of 4% or more, which is our target for return on capital, due to earnings exceeding plans along with sales of shareholdings progressing in line with our policy on reducing cross-shareholdings (announced in Nov. 2022) and our revised policy on expanding shareholder returns (announced in Aug. 2023), both operating margin and total capital turnover, which comprise ROA, topped plans, and as such, ROA (operating profit) also hit its target, coming in at 5.1%

## Production Volume



## Changes in Exchange Rates and Copper Prices



### FY2021

#### External factors

- + Economic activities normalizing from COVID-19
- Lifted the banking of blast furnace
- Rising copper prices, weakening yen

#### Internal factors

- + Lower management and study costs amid the pandemic

### FY2022

- + Weakening yen, rising copper prices
- Rising manufacturing costs due to surging energy and material prices

- + Boost from higher value of mineral resources (incl. price increase)
- Sales of cross-shareholdings

### FY2023

- + Weakening yen
- Suspension of blast furnace operations due to structural reforms by blast furnace steel makers
- + Boost from higher value of mineral resources (incl. price increase)
- Lower sales volume due to falling limestone demand

Higher costs for the Atacama Kozan  
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## Long-term Vision (Vision FY2033)

Contributing to society through the development and stable supply of mineral resources and harnessing the collective strength of the Group as an **integrated mineral resources company** to achieve sustainable growth.

Long-Term Management  
Goal for FY2033

**ROIC (return on invested capital) 7 % or more**

## Basic Policies (For period of Third Medium-Term Management Plan)

- In adopting and using ROIC as a management indicator, we aim for its uptake and entrenchment down from the company to individual business segments and from individual business segments to individual business sites, as well as for improved capital efficiency
- Steady progress with Arqueros Mine development and achieve start of operations
- Initiatives to optimize limestone supply, centered on Torigatayama Quarry Complex
- Continue initiatives to develop new markets (limestone, Polytetsu)
- Secure and develop new resources, regardless of interest (major/minor) or approach (greenfield/brownfield)

## Management Targets

(Billions of yen)	FY2023	FY2024	FY2025	FY2026
	Actual	Third Medium-Term Management Plan Period		
<b>Net sales</b>	166.8	181.4	172.8	184.8
<b>Operating profit</b>	11.1	7.4	9.0	12.8
<b>Profit attributable to owners of parent</b>	6.6	6.7	7.2	9.2
<b>Operating margin</b>	6.7%	4.1%	5.2%	6.9%
<b>EBITDA</b> <small>(Operating profit before tax + depreciation)</small>	17.1	16.3	16.9	24.5
<b>Interest-bearing liabilities</b>	22.1	37.2	62.4	63.3
<b>Equity capital</b>	140.7	144.5	147.7	151.7
<b>ROIC</b>	4.9%	3.0%	3.2%	4.2%
<b>WACC</b>	5.5%	5.8%	5.8%	5.8%
<b>ROE</b>	4.8%	4.7%	4.9%	6.1%

## Assumptions

<b>Exchange rate (JPY/USD)</b>	145	140		
<b>Copper price (¢ /lb)</b>	379	400		

## Sensitivity

<b>Depreciated by 5JPY/USD</b>	-	Net sales	Operating profit	Net sales	Operating profit	Net sales	Operating profit
		+2.7	+0.1	+2.6	+0.1	+3.0	+0.2
<b>Appreciated by 10 ¢ /lb</b>	-	Net sales	Operating profit	Net sales	Operating profit	Net sales	Operating profit
		+2.0	+0.4	+2.0	+0.4	+2.2	+0.7

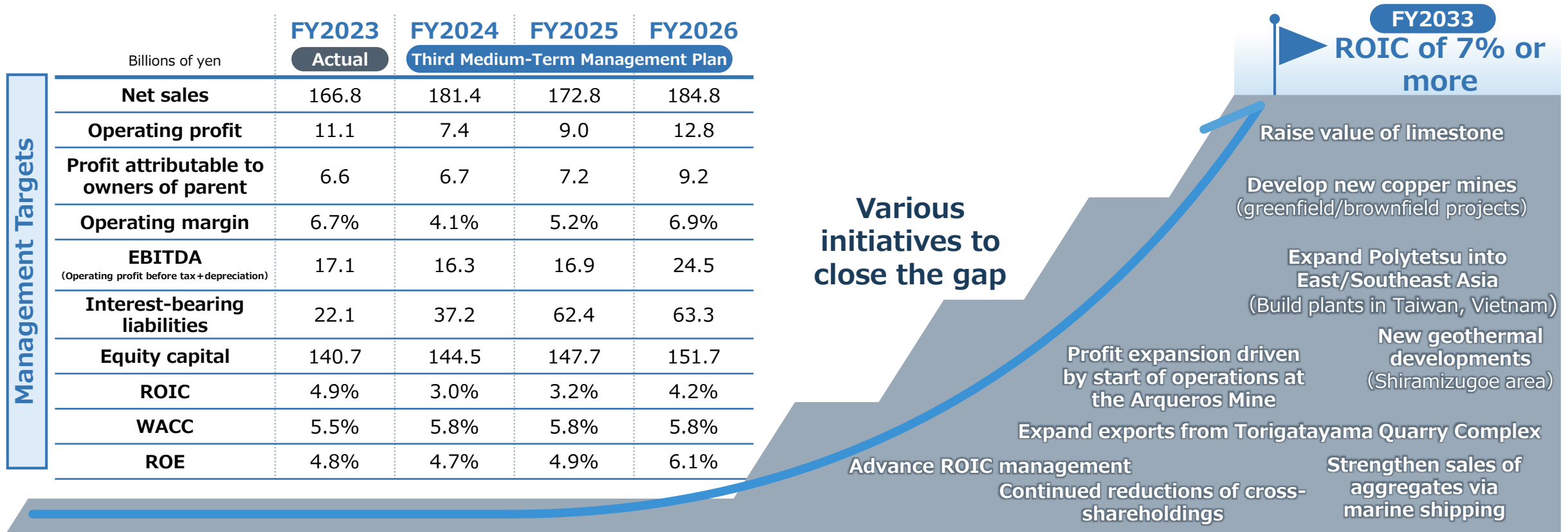
**FY2033**

**ROIC**  
**7% or more**

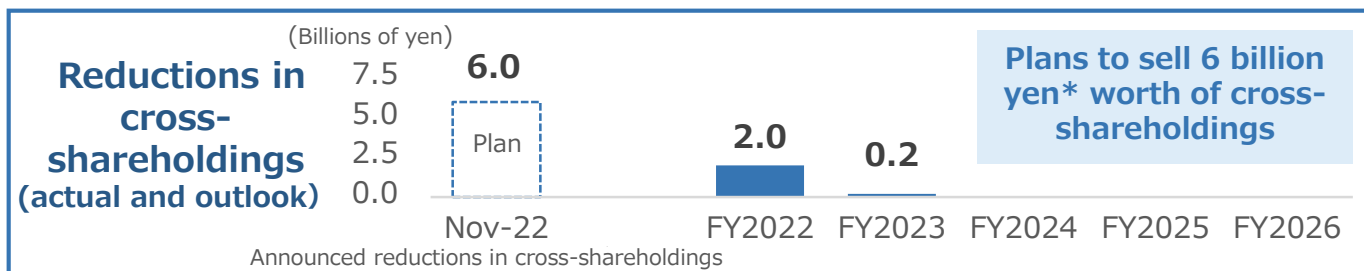
$\frac{\text{NOPAT 14 billion yen}}{\text{Invested capital 200 billion yen}}$

\*Operating profit before tax, 20 billion yen





Over the Third Medium-Term Management Plan period, ROIC is expected to temporarily remain low due to a decrease in operating profit reflecting the start of depreciation for large-scale investments (Torigatayama Quarry Complex) and an increase in interest-bearing liabilities as a result of funds borrowed to develop the Arqueros Mine. However, we aim to achieve ROIC of 7% or more by implementing various initiatives above to close the gap and by shrinking interest-bearing liabilities



\* Value of cross-shareholdings planned for sale during the Third Medium-term Management Plan period is based on market value as of end-March 2024  
 ( Plan for 6 billion yen-reduction, announced in Nov. 2022, based on market value as of end-Mar. 2022 )

## Specific initiatives in the Second Medium-Term Management Plan and their progress

<b>Targets</b>	<b>1</b>	<b>Raise value of mineral resources (incl. price increase)</b>	Negotiated with customers about production costs and stable supply With inflation also progressing, yielded certain results
	<b>2</b>	<b>Expand exports to Asia/Oceania region</b>	Secured share in export markets and acquired new users
	<b>3</b>	<b>Rebuild stable supply network</b>	Learning from fire at the Torigatayama Quarry Complex in January 2021, we re-evaluated operational risks as well as our backup systems at our four coastal quarry complexes (Shiriya, Hachinohe, Torigatayama, Tsukumi) plus the Sodegaura Distribution Center
	<b>4</b>	<b>Improve production efficiency and economic potential by adopting AI and IT</b>	Detecting foreign objects in limestone on conveyor belts to ensure stable plant operations and product quality Ran trial using AI visual recognition for changed configurations on conveyor belt surfaces
	<b>5</b>	<b>Develop nonmetallic minerals, including limestone, in Japan and abroad</b>	In addition to studying mineral occurrence, quality, development prospects, etc. using desktop surveys and exploration, we are also selecting study areas

## Business environment and our initiatives

**External Environment**

- For steelmaking, domestic crude steel demand is expected to trend flat. Due to structural reforms and carbon neutral initiatives by blast furnace steelmakers, domestic blast furnaces are being consolidated. Over the long term, we expect lower consumption volumes of limestone as a steel auxiliary material due to higher ratios of scrap to iron source and the use of hydrogen reduction steelmaking
- For cement and aggregates, there is a certain level of demand for redevelopment and infrastructure rebuilding but the impact from delayed construction due to worker shortages is considerable, and given decarbonization moves by companies and consolidation of production facilities, we expect limestone demand to decline



- **We aim to establish optimal production network by production/sales collaboration so as to respond to demand trends among various users of steel, cement and aggregates.**
- **Capacity arising from lower sales to domestic customers to be allocated to exports and developing other applications to secure earnings. In particular, we are leveraging the strengths of the Torigatayama Quarry Complex, which produces high-quality limestone, and are focusing on developing new applications overseas (= new demand).**

## Long-Term Vision

Establish stable supply and sales network, secure and develop new mining areas

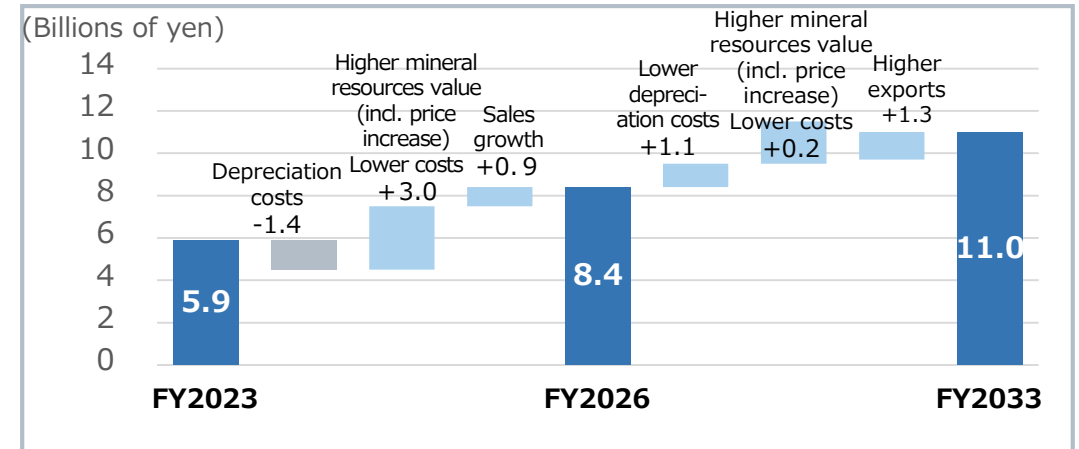
### Long-term strategy with 10-year horizon

- Optimize earnings from each mine
  - Optimize business efficiency by maintaining the Torigatayama Quarry Complex's annual production/sales volume at 13.5-14 million tons
- Lift production capacity by introducing cutting-edge technology, including AI and IT
- Secure and develop new mining areas

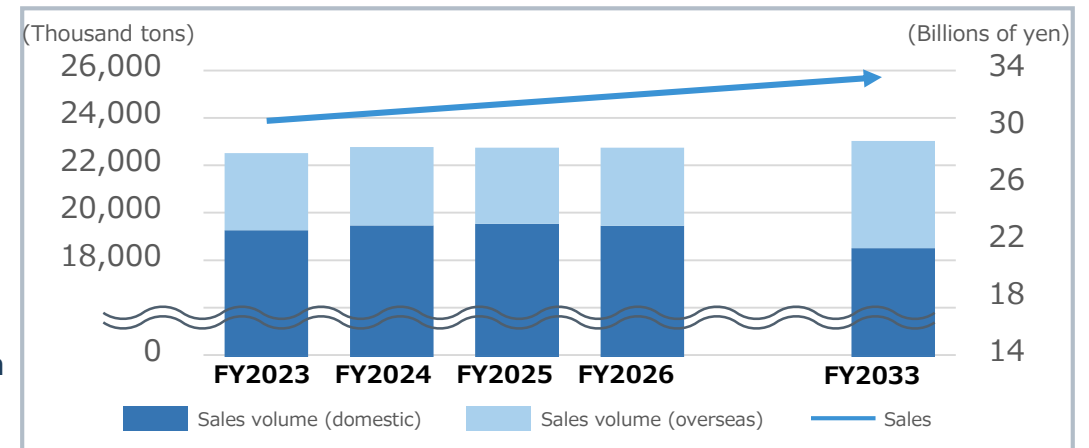
### Specific initiatives in Third Medium-Term Management Plan

- Secure production/sales volume of 13.5 million tons/year at the Torigatayama Quarry Complex
- Raise value of mineral resources (incl. price increase)
- Capture new users by exploring new application of high-grade limestone
- Respond to aggregates demand in the Tokyo metropolitan area, centering on Sodegaura Distribution Center
- Enhance BCP by standardizing products and establishing the solid network of our four coastal quarry complexes + distribution center
- Strengthen export capabilities by expanding ore storage facilities housing finished products for export
- Maximize utilization of shipping facilities of the Torigatayama Quarry Complex, including its dock (can berth ships up to 60,000-ton class), pier berth (can berth ships up to 20,000-ton class) and three ship loaders
- Improve mine production efficiency by adopting heavy equipment tracking systems

### Segment Profit Outlook



### Outlook for Sales Volume and Value



## Specific initiatives in the Second Medium-Term Management Plan and their progress

Targets	<b>1</b>	<b>Expand ore reserves for the Atacama Kozan in Chile</b>	Began mining in the Sol Naciente area (handed over to Atacama Kozan in 2016), after receiving approval. We are focusing on securing resource volume through continued exploration in surrounding mining areas Identifying exploration projects in Atacama Region, including around the Atacama Kozan, and focusing on joining projects owned by third parties in addition to our own mine area projects
	<b>2</b>	<b>Promote development of Arqueros Mine in Chile</b>	Completed development preparatory work in FY2022, one year behind the original plan, and commenced development work in April 2023
	<b>3</b>	<b>Study candidate copper mines for post-Arqueros Mine development</b>	Joined the Los Chapitos copper exploration project in Peru in June 2023 Also studying development projects in Australia, Canada, Saudi Arabia, and Latin America, etc. while taking into account the status of infrastructure and laws
	<b>4</b>	<b>Earnings improvement with smelting cost reductions as a top priority</b>	Despite rising costs, including electricity rates and fuel costs, as well as smelting costs remaining high, earnings improved due to significant yen weakness

## Business environment and our initiatives

### External Environment

Copper demand is likely to expand over the medium to long term amid electrification and the shift to renewable energy to achieve carbon neutrality

- ▶ **For the Atacama Kozan, we are focusing on mining from the Sol Naciente area and are also exploring surrounding mining areas, securing mineral resources volume and continuing with stable operations**
- ▶ **For the Arqueros Mine, development work is underway, and we aim for operations to commence in FY2026 (investment in mine development approx. 55 billion yen, 396 million US dollars)**

## Long-Term Vision

Develop new mineral sources and efficiently balance between the smelting and mining sides of the business to create synergies

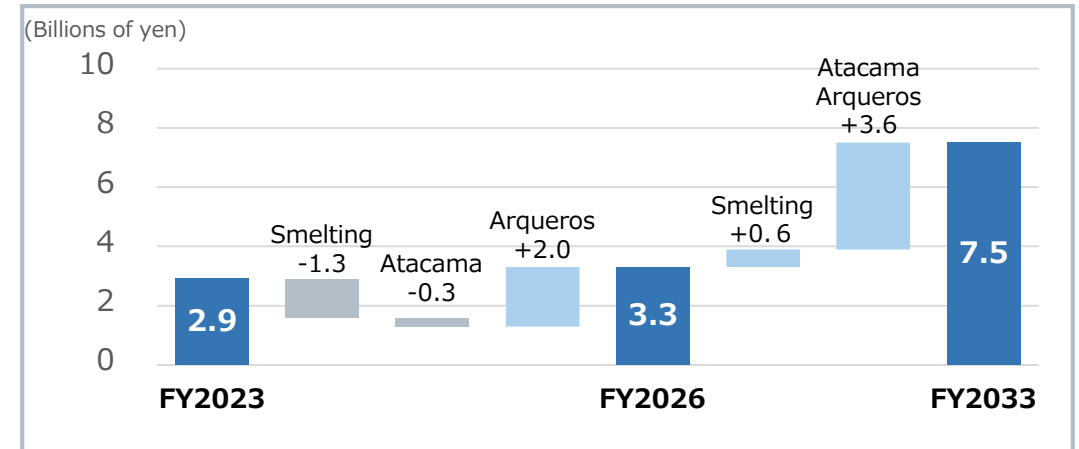
### Long-term strategy with 10-year horizon

- Aim to produce at least 50,000 tons of copper equivalent per year
- Achieve stable profits in our smelting business

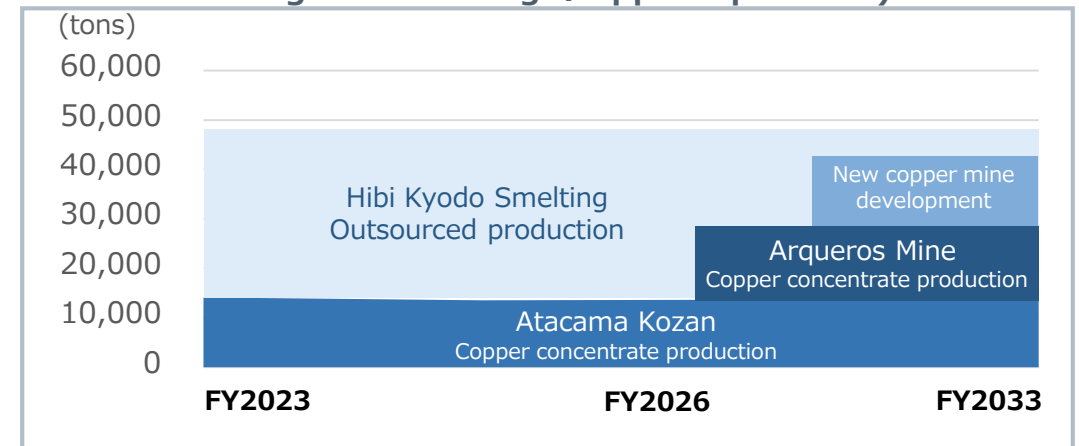
### Specific initiatives in Third Medium-Term Management Plan

- Obtain new reserves and increase profits at the Atacama Kozan
- Steady development work at the Arqueros Mine
- Continue exploration of our own new copper mines
- Join interests
- Join interests in mines beyond copper
- Improve earnings, with reducing smelting costs the top-priority issue
- Obtain the “The Copper Mark” in collaboration with Anglo American

### Segment Profit Outlook



### Production Volume Outlooks for Mining and Smelting (copper equivalent)



FY 2011 \ 2012 \ 2013 \ 2014 \ 2015 \ 2016 \ 2017 \ 2018 \ 2019 \ 2020 \ 2021 \ 2022 \ 2023 \ 2024 \ 2025 \ 2026 \

Optional Exploration/Evaluation Stage

Development Preparation Stage

Development

Activities on site

Reconnaissance exploration



Infill drilling



Tunnel surveying, detailed exploration, environmental impact study



Temporary closure and monitoring



Mine construction



Administrative work and permits

Geological surveys

Scoping study

Pre F/S

Outsourced F/S and Consideration of internal improvement points

Complementary Engineering

EIA

Detailed engineering

EIA application review

● 2011.7  
Joined project

● 2014.1  
Established Arqueros Mine development office

● 2017.8  
Acquired additional shares (acquired 100% voting rights)

● 2017.10  
Executed Options (acquired 80% interest) and moved on to the development preparation stage

● 2017.12  
Established local office

● 2019.4  
Exploratory tunnel excavation, struck ore body

● 2023.4  
Decision to start development

● 2023.12  
Mine closure plan approved







● 2024.1  
Start of major civil engineering works on site

● 2022.12  
EIA approval for construction

● 2024.5  
Scheduled start of plant construction

● 2022.12  
Detailed engineering completion

- With Atacama Kozan as a stepping stone, we decided to enter the Arqueros Project to expand our own operations. In 2011, we initiated exploration works and made a decision after 12 years of careful consideration.
- Once in operation, Arqueros will produce copper concentrate along with Atacama Kozan, reaching a joint estimated produced volume of 28,000 tons of copper per year, thus contributing to the success of the Metallic Minerals Division of Nittetsu Mining Co., Ltd.
- The Arqueros mine plays a pivotal role in the training of human resources and technological transfer for our next development

	Information collecting	Geological surveys	Initial exploration	Advanced exploration	Resource evaluation	Economic evaluation	Development
Japan	 <p><b>Various regions in Japan</b>                      1. Silica stone                      2. None                      3. Information collecting ongoing</p>						<p><b>Country or region</b>                      1. Mineral                      2. Our interest                      3. Stage</p>
Middle East	 <p><b>Saudi Arabia</b>                      1. Copper                      2. None                      3. Information collecting underway</p>						
Pacific Ocean						 <p><b>Fiji</b>                      Namosi joint Venture Project                      1. Copper and gold                      2. 2%                      3. Revising economic evaluation</p>	
South America			 <p><b>Peru</b>                      Los Chapitos copper exploration project                      1. Copper                      2. None (participating in option)                      3. Exploration</p>			 <p><b>Chile</b>                      Arqueros mine development                      1. Copper                      2. 80%                      3. In development (from Apr. 2023)</p>	
Africa						 <p><b>Morocco</b>                      Achmmach tin project                      1. Tin                      2. 5%                      3. Economic evaluation ongoing</p>	

## Specific initiatives in the Second Medium-Term Management Plan and their progress

Targets	Environment	1	Develop new demand by developing next-generation wastewater treatment agents	In 2020, launched sales of Polytetsu-T in Kyushu area Uptake increasing due to positive reaction to removal of phosphorous, chromaticity and E. coli from wastewater as well as to being able to reduce chemical additive amounts by roughly 50% Began supply in Kanto region in 2023 and plan to accelerate nationwide expansion
		2	Construct new wastewater treatment agent plants in Taiwan, Southeast Asia, etc. and develop new overseas markets	Currently establishing plans to build wastewater treatment agent plants in Taiwan and Vietnam
	Machinery	1	Develop new overseas markets, especially for dust collectors in Asia	Increased sales in South Korea. Focusing on developing overseas markets, especially Asia
		2	Strengthen cost competitiveness through such improvements as automated production of dust collection filters	Technological studies underway on whether to adopt technology for automating filter manufacturing at domestic plants
		3	Expand sales by developing new applications for smoke separators	Launched single-occupant, box-type smoking booth COCOPA in 2H FY2023

## Business environment and our initiatives

- External environment

  - In the Environment Division, sales of automotive and semiconductor applications are recovering. For Polytetsu materials, we are switching to overseas products to make up for the shortfall in procurement caused by domestic production cutbacks, which is pushing up manufacturing costs
  - In the Machinery Division, machinery-related markets are relatively stable. The smoking booth market has been recovering since the pandemic and demand is strong, especially for public smoking locations
  - **Polytetsu, the mainstay of the Environment Division, is being adopted in new plants for semiconductor production. We have strengthened stable supply by starting operation of a 2,000-ton material yard with an eye to supplying semiconductor plants. We are also undertaking trials to switch to a production method that is expected to increase capacity 1.5-fold. We also bolstered stock facilities in the Kanto and Tokai regions.**
  - **In the Machinery Division, we continued to receive orders for dust collectors from steel and animal feed plants as well as for overseas projects. For smoke separators, in response to strong demand from public smoking locations, we are focusing on increasing sales for single-occupant, box-type smoking booth COCOPA, which we launched in 2H FY2023.**



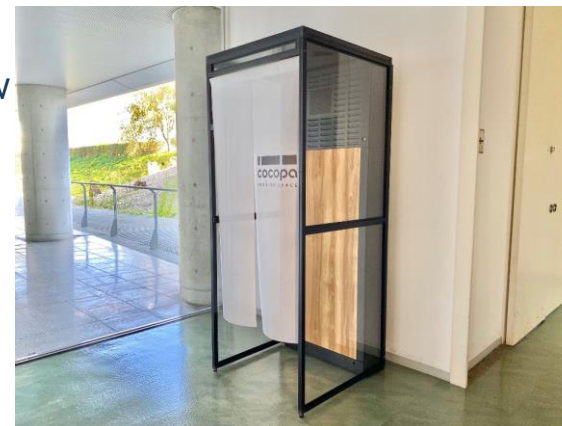
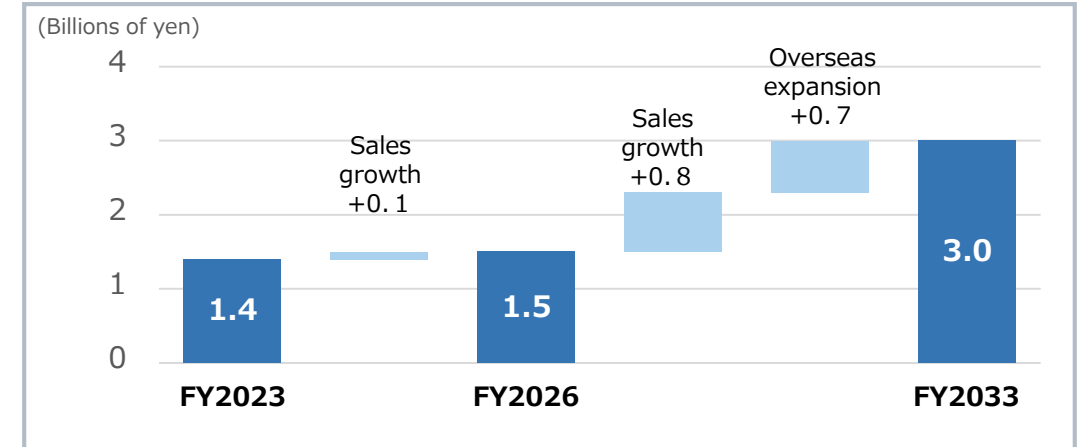
## Long-Term Vision

## Achieve segment profit of 3 billion yen

### Long-term strategy with 10-year horizon and initiatives in the medium-term management plan

- Expand Polytetsu sales (acquire new customers, enter PAC market, etc.) and build stable supply network
- Expand Polytetsu sales overseas (build plants in Taiwan and Vietnam)
- Diversify Polytetsu materials
- Establish Polytetsu manufacturing method conscious of energy efficiency
- Enter domestic baghouse market and expand exports by strengthening the competitiveness of Sinter Lamellar Filter
- Expand sales channels for plasma membranes (develop new applications and develop new markets)
- Expand sales of COCOPA, a single-occupant box-type smoking booth

### Segment Profit Outlook



COCOPA, a single-occupant box-type smoking booth



Inorganic iron flocculant Polytetsu

## Specific initiatives in the Second Medium-Term Management Plan and their progress

Targets	<b>1</b>	<b>Promote studies of new developments</b>	Conducting studies envisioning store development for tenants on idle land
	<b>2</b>	<b>Improve customer satisfaction and ensure profitability through renovations</b>	No concrete renovation plans during Second Medium-Term Business Plan period, with plans to be studied in light of age of buildings and timing of tenant contract renewals
	<b>3</b>	<b>Review profitability and future prospects of existing properties</b>	Steadily lifting rents in light of market environment and with understanding of tenants

### Long-Term Vision

**Effective use of company-owned real estate, efficient management with top priority on stable earnings**

### Long-term strategy with 10-year horizon and initiatives in the medium-term management plan

- Maximize earnings from existing buildings
  - Improve customer satisfaction and secure profitability through renovations of buildings and facilities
- Property use conscious of return on capital
  - Promote studies of new developments, existing properties

### Segment position

- The real estate segment leverages properties inherited from the Mineral Resources Segment
- Acts as a counter to the Mineral Resources Segment, whose earnings are relatively volatile

**▶ Contribute to earnings as a stable revenue source**

## Specific initiatives in the Second Medium-Term Management Plan and their progress

<b>Targets</b>	<b>Group wide</b>	<b>Consider introduction of renewable energy for in-house power generation and consumption</b>	Introducing solar power, wind power and small-scale hydropower facilities, with some facilities already starting operations	
	<b>Geo-thermal</b>	<b>1</b>	<b>Examine and draft plans for securing a stable supply of steam to cover maximum electricity output of the Ogiri Geothermal Power Station</b>	Maintained facility utilization rate among highest in Japan Formulating plans to dig auxiliary production wells and wells for re-injection as we aim establish a steam generation-hot water re-injection system to enable stable steam generation over the long term
		<b>2</b>	<b>Promote investigations for the construction of new geothermal power plants</b>	Regarding development in the Shiramizugoe district, we began geophysical exploration in Sep. 2022 after receiving approval of the mayor and received approval from the mayor in Sep. 2023 for exploration well drilling We will continue with development/investigations while taking sufficient time to explain to local stakeholders to gain their understanding
	<b>Solar power</b>	<b>Engage in stable operations Consider ways to use surplus electricity</b>	All eight solar power plants in Japan have started to connect online, enabling output controls that result in lower loss amounts.	
	<b>Hydro-power</b>	<b>Promote studies for small-scale hydropower generation using seepage in mine tunnels</b>	Conducted water volume studies for limestone mines and considered installation of facilities	

## Long-Term Vision

Renewable energy surveys/development/operations; Achieve carbon neutrality through business activities; Contribute to environmental preservation

## Long-term strategy with 10-year horizon and initiatives in the medium-term management plan

### Existing Businesses

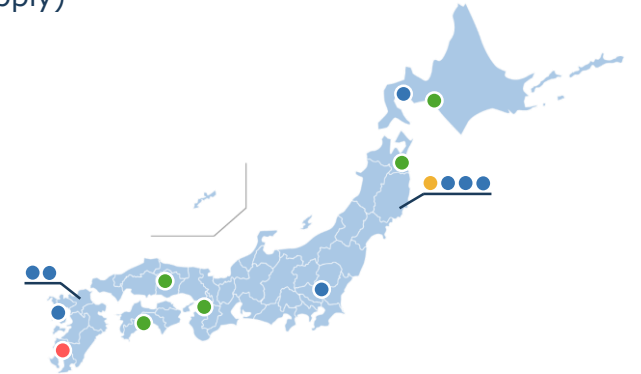
- **Establish stable steam supply system for Ogiri Geothermal Power Station and improve earnings through higher steam volumes**
  - Stabilize reservoirs by digging new auxiliary wells for re-injection
    - Aim for operations to start in FY2026
  - Establish plans to upgrade existing wells and for new production wells

### New Businesses

- **Business expansion through geothermal power generation at Shiramizugoe (15MW)**
  - Development surveys, explanation to local communities
    - Sep. 2023: Received approval from mayor of Kirishima for exploration well drilling plan
    - Plan for re-injection zone exploration well drilling (one well) during Third Medium-Term Management Plan period
    - Target development during the period of the Fourth or Fifth Medium-Term Management Plan
- **Support introduction of renewable energy for internal power generation and consumption**
  - Consider introduction of solar power, wind power, small-scale hydropower

### Network of renewable energy power generation facilities

- New renewable energy power generation facilities (internal consumption)
- Existing renewable energy power generation facilities (solar power)
- Existing renewable energy power generation facilities (small-scale hydropower)
- Geothermal power plants (steam supply)



### Status of initiatives to develop Shiramizugoe geothermal resources

- Develop geothermal resources and promote supply of steam to power plants, leveraging our longstanding expertise in underground resource development as a mining company
  - In accordance with Kirishima City ordinances, we explained results of geophysical exploration as well as future plans for re-injection zone exploration well drilling at a discussion forum with the local community in Jun. 2023
  - Submitted re-injection zone exploration well drilling plans at end-Jun. 2023 to Kirishima City, with approval from the mayor received in Sep. 2023; survey work is underway
  - Pushing ahead with various work after consistently monitoring hot springs and drinking water in close coordination with the local community
  - Investment to total 20-30 billion yen if Shiramizugoe geothermal plant is developed

- **Contribute to the Mineral Resources Segment (Metallic Minerals Division) by developing effective beneficiation processes**

- R&D for low-energy ore processing technologies to reduce loss of valuable resources to tailing by improving beneficiation recovery rates
- For new mine development, conduct R&D for next-generation beneficiation technology targeting refractory ore mines and work to recover valuable resources from tailing and other waste
- Develop low-energy environmental purification technology targeting mine drainage and subsurface water

- **Create new materials with our unique membrane coating technology and contribute to the materials science field**

- Realize new materials that use membrane coatings to control optical qualities, electrical qualities, and chemical stability, as well as boast core material properties and membrane qualities

- **Contribute to the expansion of the Machinery Division by improving/upgrading dust collection filters**

- Develop new elements with low pressure loss, high tensile strength, and low price by optimizing sintering and coating methods for resin filters

- **Contribute to the expansion of the Environment Division by optimizing materials and manufacturing methods for wastewater treatment agents**

- Aim for stable domestic supply and new overseas expansion by establishing manufacturing methods spurred by diversifying iron materials
- Consider adding new functions and uses for new applications. Additionally, develop new wastewater treatment agent technology for incorporation into the material cycle

Mineral Resources Segment related

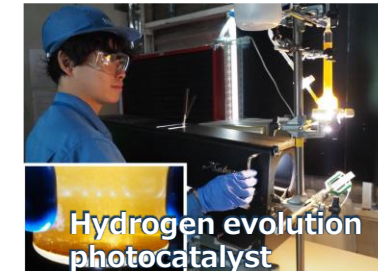
Machinery & Environmental Engineering Segment related

Carbon neutrality related



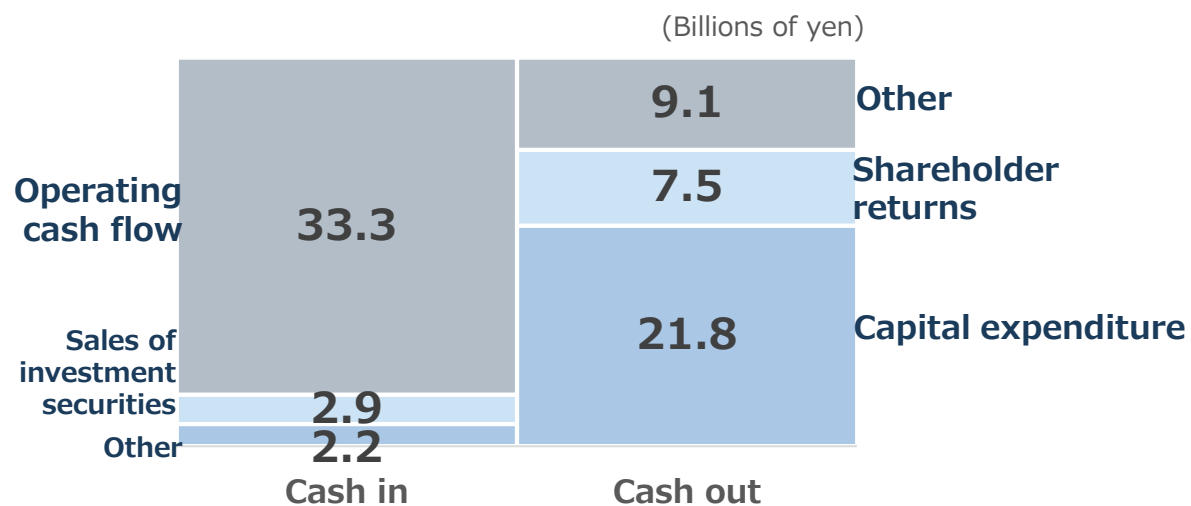
- **Promote technological development that can contribute to achieving energy-derived CO<sub>2</sub> emissions reduction targets by FY2030**

- Develop a green hydrogen recovery system using photocatalytic reactions from hydrogen sulfide
- Establish carbon fixation technology in calcareous materials using ammonia

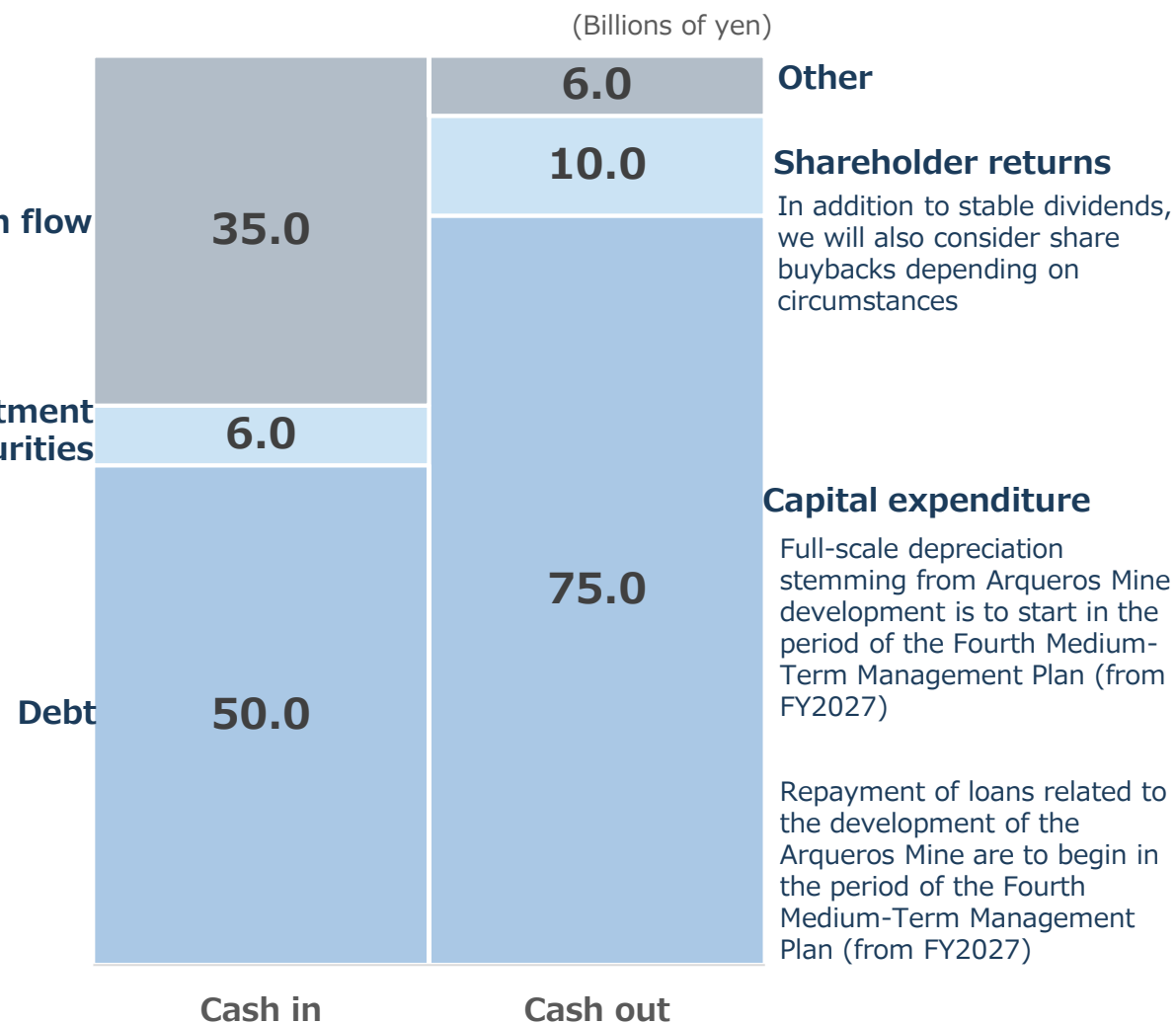


	Material Issues (selection)	Targets	Main Efforts
<b>E</b>	<b>Responding to climate change</b>	Reduce CO <sub>2</sub> emissions 【FY2030 Targets】 ➢ Domestic CO <sub>2</sub> energy-derived emissions down at least 38% (vs. FY2013)  【FY2050 Targets】 ➢ Carbon neutrality in Scope 1, 2 emissions	<ul style="list-style-type: none"> <li>• Continued reductions in energy consumption per unit</li> <li>➢ Aim for continued improvement in energy consumption per unit of at least 1% annually partly by switching to energy-saving facilities and reviewing operations</li> <li>• Introduce renewable energy power generation facilities for internal consumption</li> <li>➢ Plan to introduce solar power facilities with output of approx. 570kW in FY2024. Over medium term, aim to introduce facilities with total output of 3,500-4,000kW</li> <li>• Effectively shift to renewable energy for purchased electric power</li> <li>➢ Using FIT Non-Fossil Certificates with tracking for our FIT solar power plants to effectively shift to renewable energy for power purchased for the Torigatayama Quarry Complex</li> <li>➢ Plan to acquire FIT Non-Fossil Certificates for approx. 17,000MWh/year (equivalent to all purchased energy for our FIT solar power plants) from FY2024 onward</li> <li>• Carbon offset initiatives using company-owned forests</li> <li>➢ We started calculating CO<sub>2</sub> forest absorption amounts for the company-owned forest in Shiraoi, Hokkaido (area of roughly 1,200 ha; SGEC forest certified) from FY2024</li> </ul>
<b>S</b>	<b>Respecting human rights and diversity, and developing human resources</b>	Percentage of women hired for career track positions (Nittetsu Mining): 30% or more  Gender gap in average continuous service (Nittetsu Mining): less than 2 years  Percentage of management positions (FY2030) Women : 5% or more Foreign nationals : 5% or more Mid-career hires : 15% or more	<ul style="list-style-type: none"> <li>• Ensuring diverse human resources</li> <li>➢ Hire throughout the year, regardless of gender, nationality, or whether candidates are recent college graduates or mid-career hires</li> <li>• Introducing systems for accommodative work styles</li> <li>➢ Adopted and expanding systems for accommodative work styles, including telecommuting, staggered schedules, paid leave systems, support systems for family care</li> <li>• Developing human resources</li> <li>➢ Enhance educational initiatives, including nurturing a global workforce and creating a workplace enabling autonomous learning, in line with our human resources development policy</li> <li>• Improve engagement</li> <li>➢ Establish an expert organization and solve various issues emerging from engagement surveys</li> </ul>
<b>G</b>	<b>Strengthening governance</b>	Enhancing the corporate governance system  Strengthening the compliance system  Risk management	<ul style="list-style-type: none"> <li>• Build an organization that responds swiftly and correctly to changes in the management environment and build a management system to ensure fair and highly transparent decision making</li> <li>➢ Transitioned to a company with an Audit and Supervisory Committee (FY2023)</li> <li>➢ Evaluate effectiveness of the Board of Directors (used for external evaluations by third party bodies)</li> <li>• Establishing compliance system in accordance with Group Code of Conduct, establishing/applying internal controls for financial reporting</li> <li>➢ Conduct internal audits at multiple locations</li> <li>➢ Appropriate operation of whistleblowing system</li> <li>➢ Use of external reporting desk (outsourced to law firm)</li> <li>➢ Hold compliance training</li> <li>• Establish appropriate measures ahead of time based on risk management priorities</li> <li>➢ Run evacuation and safety training and continue to review BCP</li> <li>➢ Quality Assurance Committee continuously identifies and evaluates risks and considers responses</li> <li>➢ Taking various initiatives for information security</li> </ul>

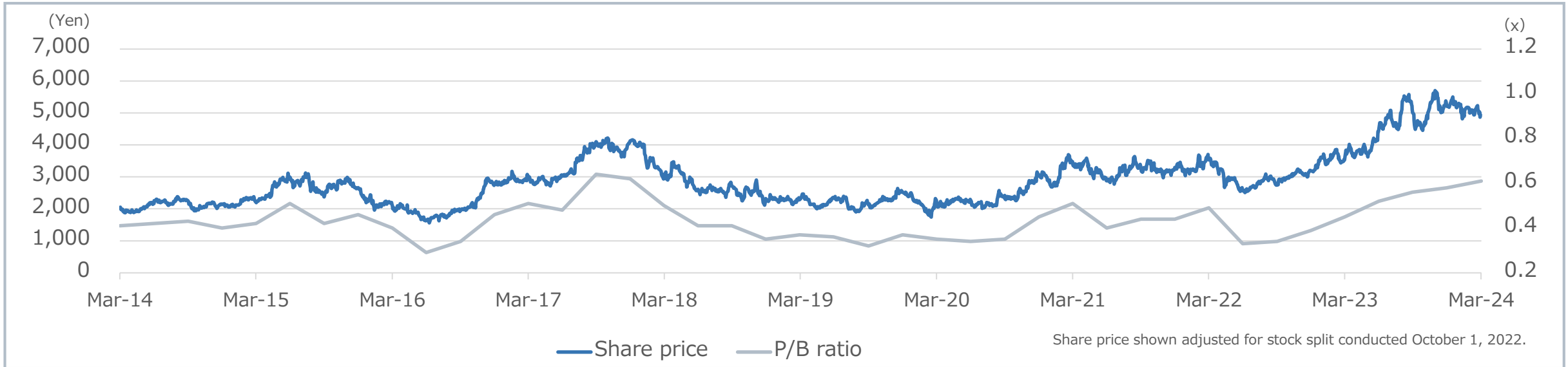
## Period of Second Medium-Term Management Plan (FY2021-FY2023)



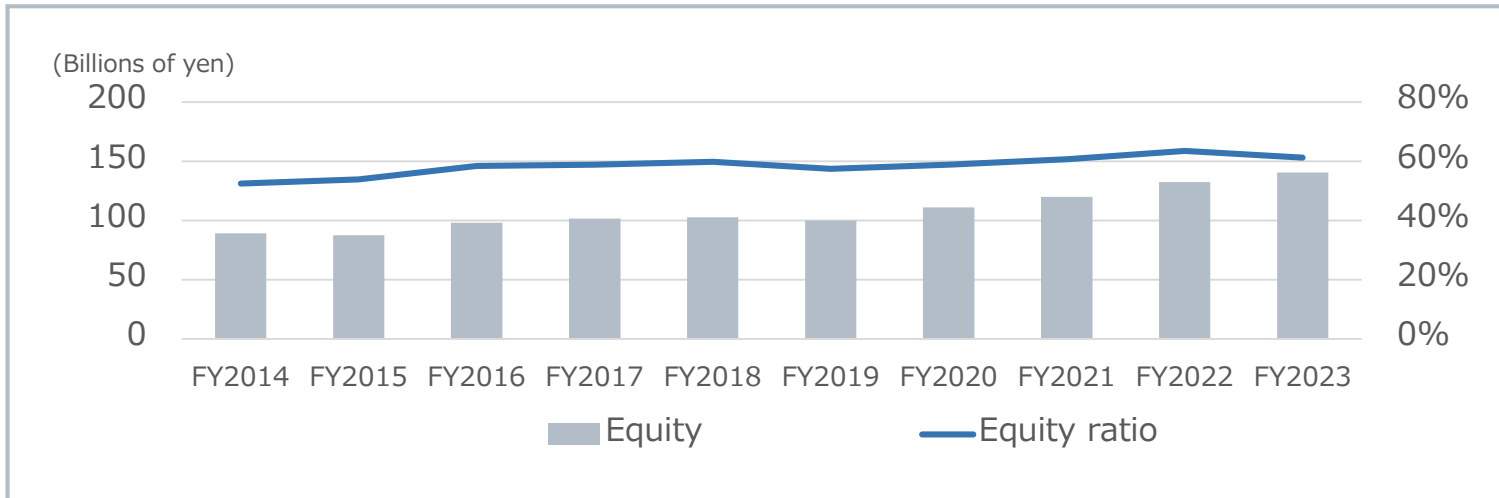
## Period of Third Medium-Term Management Plan (FY2024-FY2026)



## Share Price and P/B Ratio Trends

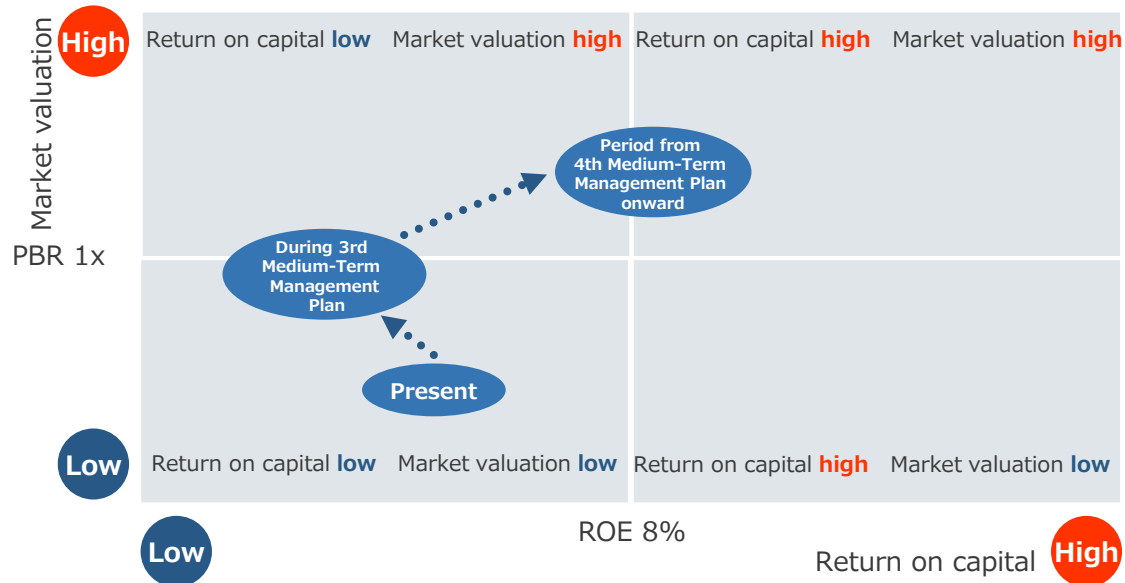
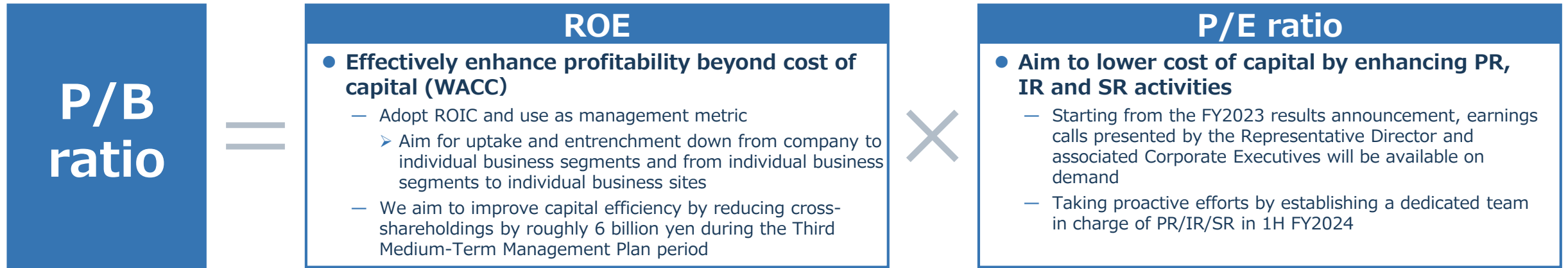


## Changes in Equity



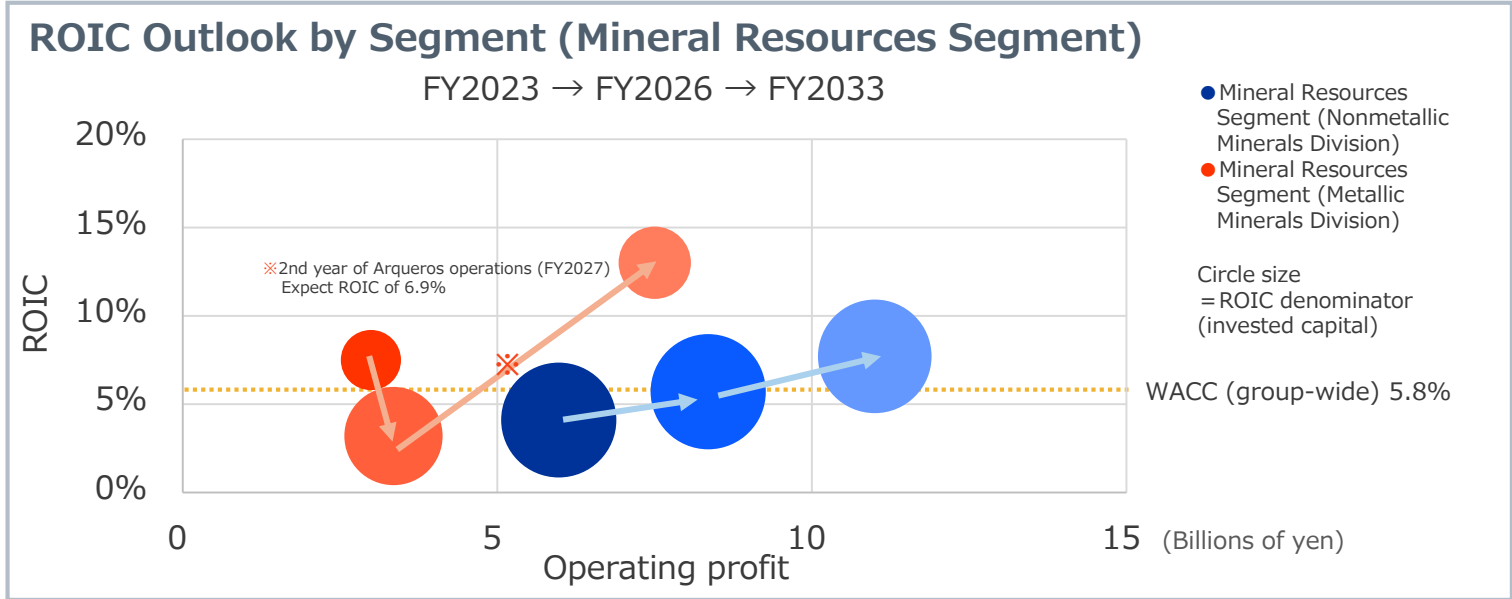
- Earnings have been stable over the past decade resulting in a higher equity ratio
- Shares have increased roughly 2.5 fold
- Enhanced shareholder returns during period of the Second Medium-Term Management Plan (FY2021-FY2023) lifted the P/B ratio from the 0.4x level to around 0.6x
- As of end-Mar. 2024, the P/B ratio was at roughly 0.6x. The P/B ratio is regularly below 1.0x
- There is room to improve PR and IR activities, including explaining specific growth strategies and their prospects, for shareholders/investors



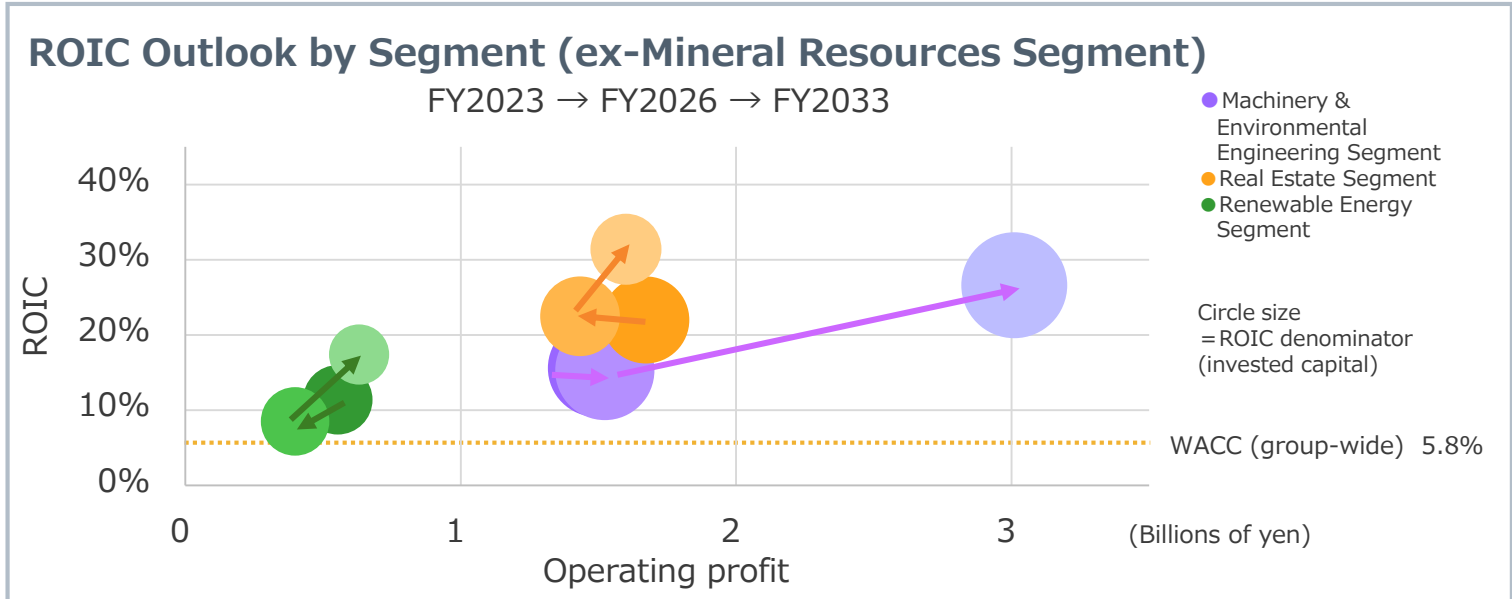


Risk-free rate	+	$\beta$	×	Market risk premium
0.705%		1.068		6-7%
=				
Cost of equity				
approx. 8%				

\* Risk-free rate is yield on 10-year Japanese government bonds  
 \*  $\beta$  is relative to daily TOPIX returns for the past five years  
 \* Market risk premium is historical stock market yield minus risk-free rate

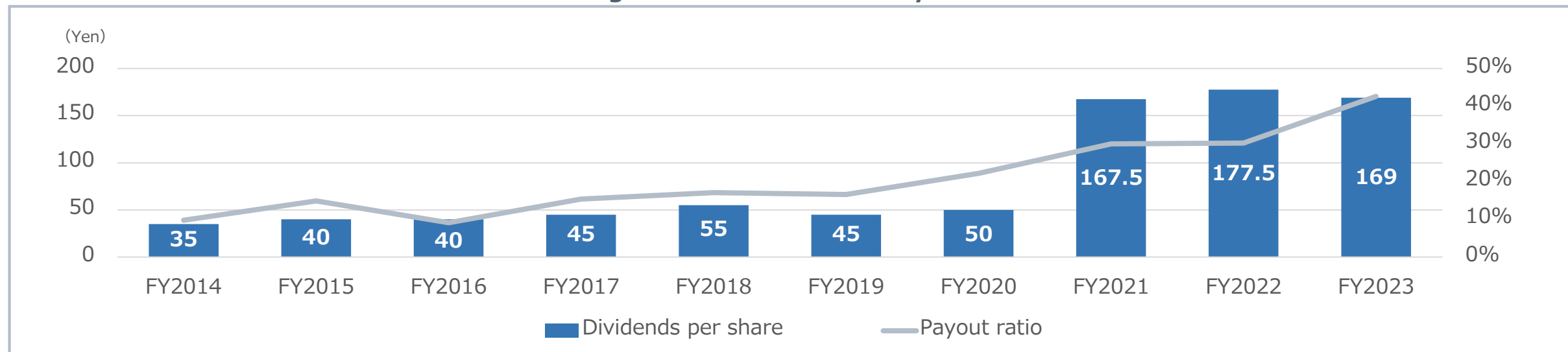


- For the Nonmetallic Minerals Division, we aim to achieve ROIC above WACC by promoting improvement in the value of nonmetallic mineral resources (incl. price increase) and optimizing investment capital
- For the Metallic Minerals Division, ROIC is likely to decline sharply during the Third Medium-Term Management Plan period due to the increase in invested capital arising from Arqueros Mine development. However, with stable earnings expected in FY2026 due to the scheduled start of operations for the Arqueros Mine, ROIC is likely to exceed WACC from FY2027, the second year of the mine's operations



- The Machinery & Environmental Engineering Segment aims for further ROIC improvement by establishing new wastewater treatment agent plants in Taiwan and Vietnam and expanding Polyetsu sales in East/Southeast Asia
- For the Real Estate Segment, we see improved ROIC on stable earnings and depreciation of individual properties
- Once plans progress for geothermal development in the Shiramizugoe district by around the mid-2030s and investments can be recovered, considerable improvement in ROIC is expected for the Renewable Energy Segment

## Changes in Dividends and Payout Ratio



Our core business, the mining industry, is an extremely long-term business, starting with research and development before moving on to subsequent operations spanning several decades or more. During that time, profits will vary due to changes in economic and business conditions, fluctuations in the price of resources, and other factors

In order to achieve sustained growth, we must be prepared for large-scale investment in the future, given not only the nature of our business, meaning the considerable size of investments for mine development and long investment recovery cycles, and the start of new mine development in light of mineral depletion at existing mines

As a result, our basic policy has been to pay stable dividends over the long term while maintaining an optimal balance between equity and shareholder returns

### Dividend Policy in Third Medium-Term Management Plan

Based on the basic policy of paying stable dividends over the long term while maintaining an optimal balance between equity and shareholder returns, we will pay dividends with a **target consolidated payout ratio of 40%**. Additionally, if the P/B ratio at the end of a fiscal year is less than 1x, the lower limit of dividends is **3% of the market value DOE**; if it is 1x or greater, the lower limit is **3% of the DOE**.



## Note regarding forward-looking statements

The plans and outlook of future performance and other forward-looking statements contained in these materials were compiled based on certain assumptions using information currently judged to be reasonable by us. We cannot guarantee the accuracy and completeness of this information.

Actual results may differ significantly to the plans and other forward-looking statements contained in these materials due to various risk factors and uncertainties.

(Billions of yen)

## Net Sales

	FY2021			FY2022			FY2023		
	Plan	Actual	Diff.	Plan	Actual	Diff.	Plan	Actual	Diff.
Mineral Resources: Nonmetallic Resources	51.1	54.7	3.6	49.8	60.0	10.2	49.4	61.5	12.1
Mineral Resources: Metallic Resources	61.5	78.7	17.2	59.9	86.9	27.0	58.4	88.3	29.9
Machinery & Environmental Engineering	12.5	12.0	-0.4	12.7	13.7	1.0	12.8	14.0	1.2
Real Estate	2.8	2.8	0.0	2.7	2.8	0.1	2.7	2.8	0.1
Renewable Energy	1.7	1.7	0.0	1.6	1.7	0.1	1.7	1.7	0.0
Adjustments	-1.2	-1.0	0.1	-1.2	-1.3	-0.1	-1.2	-1.7	-0.5
<b>Total</b>	<b>128.4</b>	<b>149.0</b>	<b>20.6</b>	<b>125.6</b>	<b>164.0</b>	<b>38.4</b>	<b>123.8</b>	<b>166.8</b>	<b>43.0</b>

## Operating Profit

	FY2021			FY2022			FY2023		
	Plan	Actual	Diff.	Plan	Actual	Diff.	Plan	Actual	Diff.
Mineral Resources: Nonmetallic Resources	6.6	7.0	0.4	6.3	5.9	-0.3	4.0	5.9	1.9
Mineral Resources: Metallic Resources	2.6	7.2	4.6	2.1	6.6	4.5	2.5	2.9	0.4
Machinery & Environmental Engineering	1.0	1.0	-	1.0	1.2	0.2	1.1	1.4	0.3
Real Estate	1.5	1.5	-	1.4	1.7	0.3	1.6	1.6	0.0
Renewable Energy	0.4	0.5	0.1	0.4	0.5	0.1	0.4	0.5	0.1
Adjustments	-2.6	-1.6	1.0	-2.3	-2.4	-0.1	-2.3	-1.5	0.7
<b>Total</b>	<b>9.4</b>	<b>15.7</b>	<b>6.3</b>	<b>9.0</b>	<b>13.6</b>	<b>4.6</b>	<b>7.3</b>	<b>11.1</b>	<b>3.8</b>

(Billions of yen)

**Financing  
Plan**

	FY2021			FY2022			FY2023		
	Plan	Actual	Diff.	Plan	Actual	Diff.	Plan	Actual	Diff.
<b>EBITDA*</b>	15.2	21.1	5.9	14.8	19.1	4.3	15.4	17.1	1.7
<b>Interest-bearing liabilities</b>	21.5	20.7	-0.8	25.3	20.8	-4.5	30.4	22.1	-8.3

\*EBITDA=Operating profit before taxes + depreciation costs

(Billions of yen)

**Capital  
Investment  
Plan**

	FY2021			FY2022			FY2023		
	Plan	Actual	Diff.	Plan	Actual	Diff.	Plan	Actual	Diff.
<b>Capital investment</b>	12.1	11.0	-1.1	13.2	8.5	-4.7	17.3	7.6	-9.6
(incl. growth investments*)	(7.0)	(6.3)	(-0.7)	(8.7)	(5.2)	(-3.5)	(13.3)	(2.7)	(-10.6)
<b>Depreciation</b>	5.8	5.4	-0.3	5.8	5.4	-0.3	8.1	6.0	-2.0
(incl. depreciation for third vertical shaft)	-	-	-	(0.2)	(0.0)	-0.2	(2.3)	(0.0)	-2.3

\* Growth investments = Third vertical shaft at Torigatayama Quarry Complex (limestone), new mining area at Hachinohe Mine (limestone), Arqueros Mine

(Billions of yen)

**Investments  
by Segment**

	FY2021			FY2022			FY2023		
	Plan	Actual	Diff.	Plan	Actual	Diff.	Plan	Actual	Diff.
<b>Mineral Resources: Nonmetallic Resources</b>	11.1	10.4	-0.7	9.7	7.8	-1.9	3.5	5.9	2.4
<b>Mineral Resources: Metallic Resources</b>	0.6	0.5	-0.1	2.9	0.4	-2.5	13.1	1.5	-11.5
<b>Machinery &amp; Environmental Engineering</b>	0.1	0.1	-	0.2	0.2	0.0	0.1	0.0	0.0
<b>Real Estate</b>	0.0	0.0	-	0.1	0.0	-0.1	0.0	0.0	0.0
<b>Renewable Energy</b>	0.3	0.0	-0.3	0.3	0.0	-0.3	0.7	0.0	-0.7
<b>Corporate/intersegment eliminations</b>	0.1	-0.1	-0.2	0.0	-0.0	-	-0.1	-0.0	-0.0
<b>Total</b>	12.1	11.0	-1.1	13.2	8.5	-4.7	17.3	7.6	-9.6

(Billions of yen)

	FY2023 Actual	FY2024 Plan	FY2025 Plan	FY2026 Plan	
Net Sales	Mineral Resources: Nonmetallic Minerals	61.5	67.6	68.3	68.4
	Mineral Resources: Metallic Minerals	88.3	96.2	86.5	97.9
	Machinery & Environmental Engineering	14.0	14.8	15.2	15.7
	Real Estate	2.8	2.8	2.8	2.8
	Renewable Energy	1.7	1.7	1.8	1.7
	Adjustments	-1.7	-1.7	-1.7	-1.7
	<b>Total</b>	<b>166.8</b>	<b>181.4</b>	<b>172.8</b>	<b>184.8</b>

Operating Profit	Mineral Resources: Nonmetallic Minerals	5.9	6.7	7.1	8.4
	Mineral Resources: Metallic Minerals	2.9	0.1	0.7	3.3
	Machinery & Environmental Engineering	1.4	1.3	1.4	1.5
	Real Estate	1.6	1.6	1.5	1.4
	Renewable Energy	0.5	0.3	0.4	0.4
	Adjustments	-1.5	-2.6	-2.0	-2.2
	<b>Total</b>	<b>11.1</b>	<b>7.4</b>	<b>9.0</b>	<b>12.8</b>

## Assumptions

Forex ...¥140/USD  
Copper price ...400 cents/pound

(Billions of yen)

	FY2023 Actual	FY2024 Plan	FY2025 Plan	FY2026 Plan
<b>Financing Plan</b>				
<b>EBITDA*</b>	17.1	16.3	16.9	24.5
<b>Interest-bearing liabilities</b>	22.1	37.2	62.4	63.3
*EBITDA=Operating profit before taxes + depreciation costs				
<b>Capital Investment Plan</b>				
<b>Capital investment</b>	7.6	22.7	32.5	18.3
(incl. growth investments*)	(2.7)	(18.3)	(26.2)	(9.7)
<b>Depreciation</b>	6.0	8.8	7.9	11.7
(incl. depreciation for third vertical shaft)	(0.0)	(2.2)	(2.0)	(1.4)
(incl. depreciation for Arqueros Mine development)	-	-	-	(4.0)
* Growth investments = Third vertical shaft at Torigatayama Quarry Complex (limestone), new mining area at Hachinohe Mine (limestone), Arqueros Mine				
<b>Investments by Segment</b>				
<b>Mineral Resources: Nonmetallic Minerals</b>	5.9	4.8	5.6	6.1
<b>Mineral Resources: Metallic Minerals</b>	1.5	17.5	26.4	9.8
<b>Machinery &amp; Environmental Engineering</b>	0.0	0.1	0.1	0.1
<b>Real Estate</b>	0.0	0.1	0.1	0.1
<b>Renewable Energy</b>	0.0	0.2	0.1	1.8
<b>Corporate/intersegment eliminations</b>	-0.0	-0.0	0.2	0.4
<b>Total</b>	<b>7.6</b>	<b>22.7</b>	<b>32.5</b>	<b>18.3</b>