

A Recycling-Oriented World

DOWA

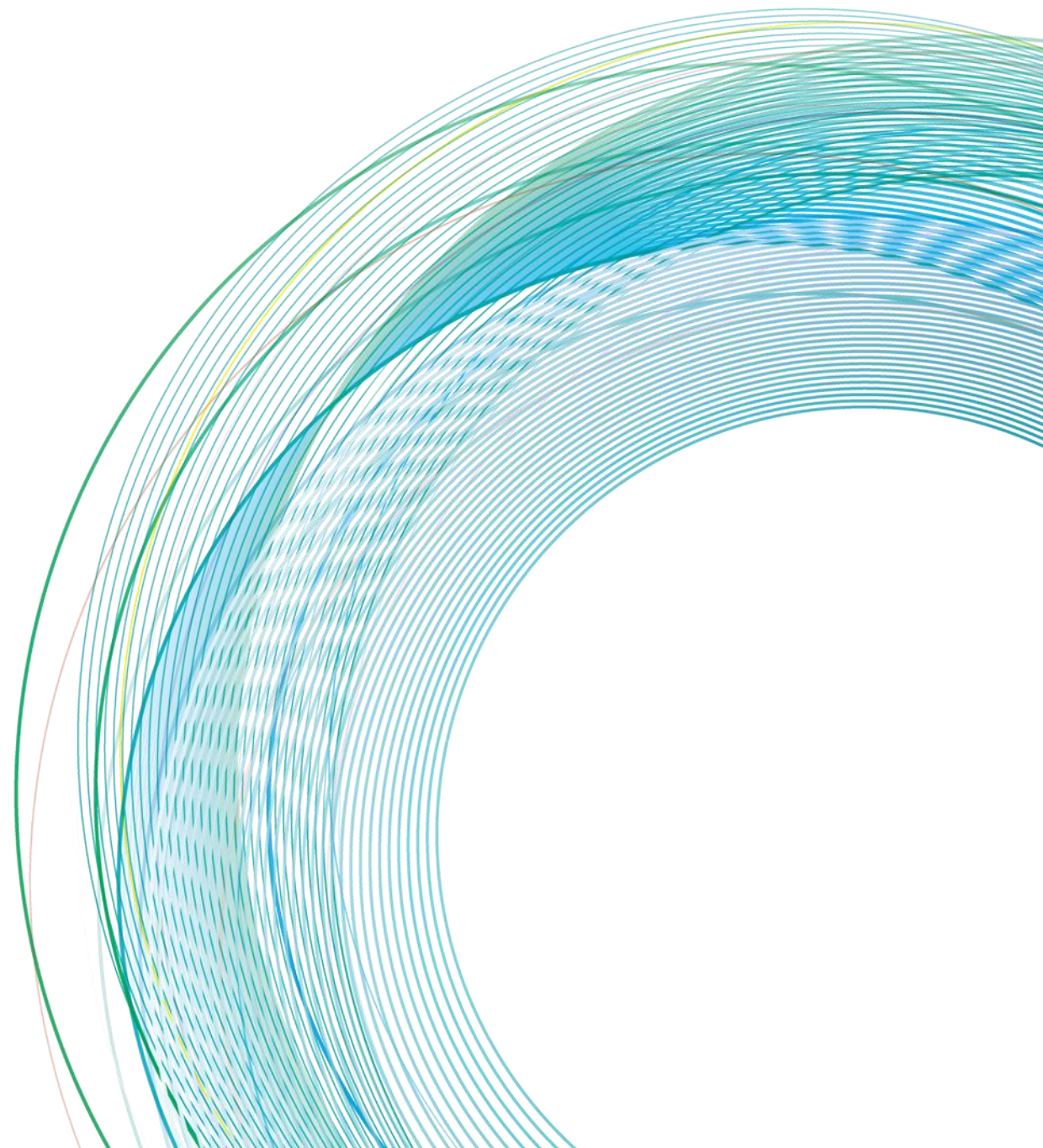
Pursue quality in circularity

Medium-term Plan 2027

DOWA HOLDINGS CO.,LTD.

May 20, 2025

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Pursue quality in circularity

The word "recycling" has been in use for decades in Japan, and the era of pursuing only partial circularity has come to an end. From now on, it is essential to protect the environment, effectively utilize limited resources, and simultaneously develop the economy.

This is why DOWA aims for true circularity.

We strive to return as many materials as possible to the cycle from waste and recyclable resources generated worldwide.

For materials that cannot be returned to the cycle, we ensure they are handled properly.

By diversifying product functions and enhancing durability, we aim to extend the use of limited resources.

As the world and Japan now aim to transition to the circular economy,

we will bring together the technologies we have accumulated over 140 years and continue to pursue higher quality in circularity.

Collect, Separate, Manufacture

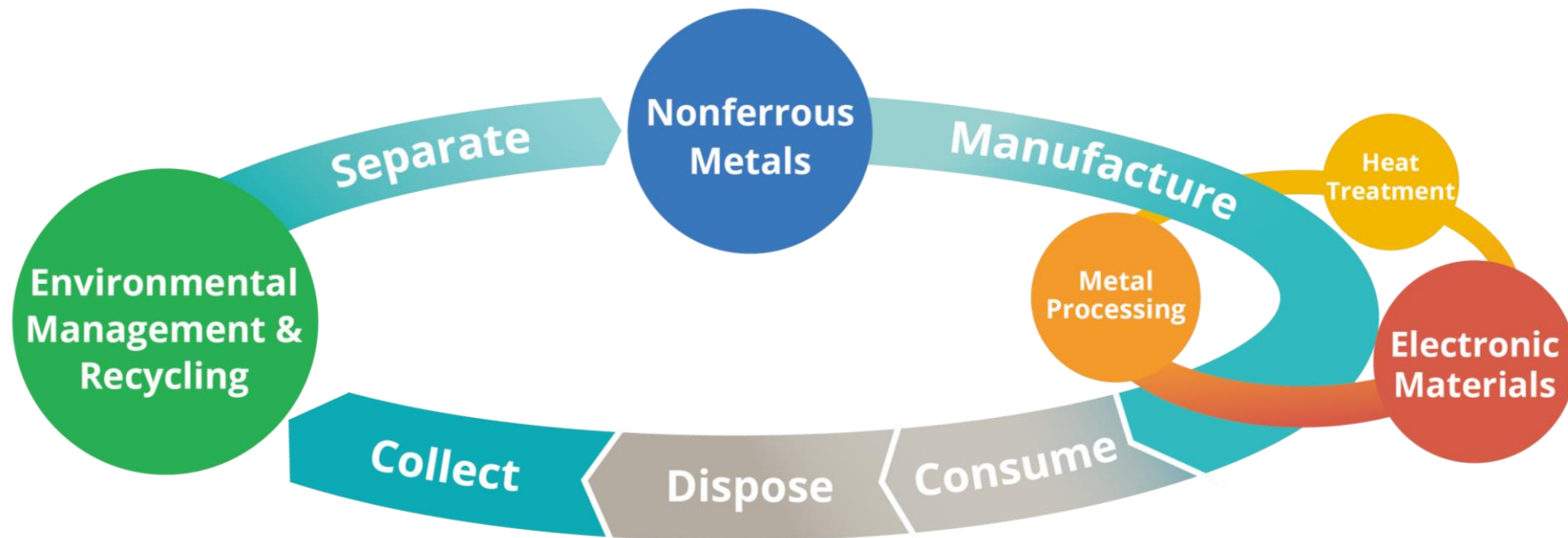
DOWA's businesses leading the circularity.

The DOWA Group has established a unique recycling-oriented business model by combining five businesses.

We possess a global network to collect waste and recyclable resources and recycle a wide variety of metals, while also properly treating non-recyclable waste to reduce environmental impact.

In addition, we produce materials that contribute to groundbreaking technological innovations and provide technologies and services that extend the lifespan of products.

By collaborating with external partners through our circular business model, we create new value, pursue higher quality in circularity, and achieve true circularity.



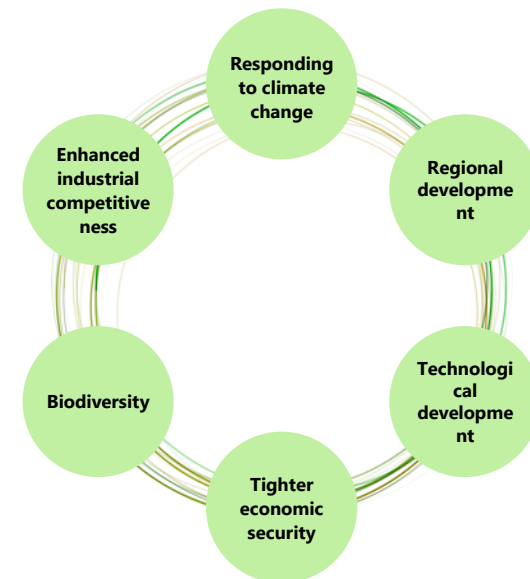
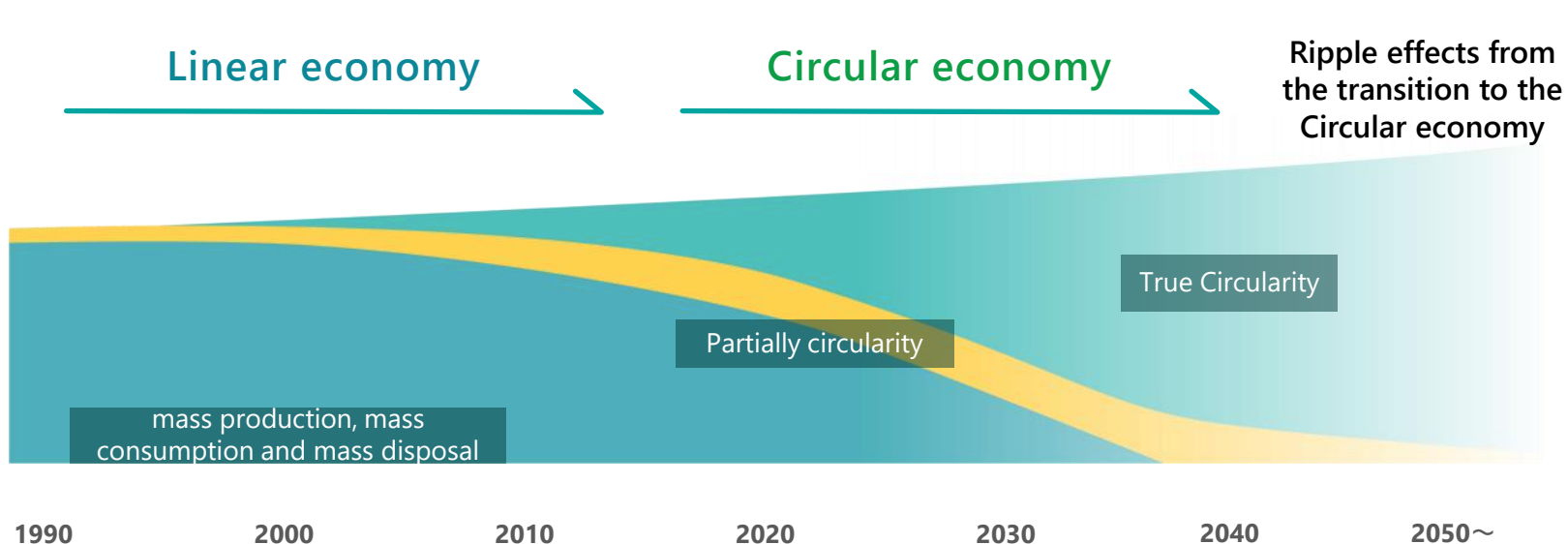
Resource-scarce Japan cannot achieve sustainable growth unless it transitions to the Circular economy.

Linear economy

A one-way economic system characterized by mass production, mass consumption and mass disposal

Circular economy

An economic system in which added value is maximized by ensuring the efficient and circular use of resources at every stage, effectively utilizing stock, and developing services



Circularity has entered an era in which quality matters.

Today, with "recycling" becoming increasingly widespread, we aim to achieve a more integrated, long-term true circularity. By employing new ideas and more advanced technology while coordinating with industry and society as a whole, we pursue the quality in circularity.

Integrated circularity

Rather than discarding materials as waste, putting as much material as possible back into the cycle.

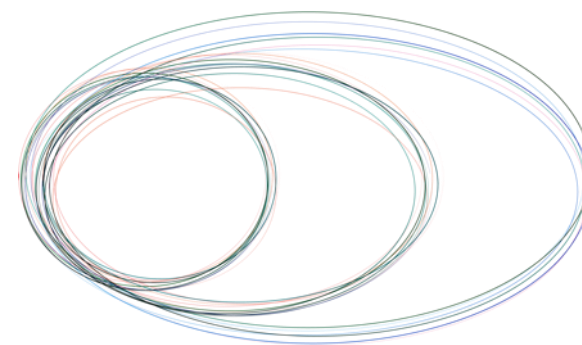
To achieve this, DOWA has developed an integrated circular system by building a network to collect various recycling resources from society while maintaining the technologies and infrastructure to recycle a wide array of resources.



Long-term circularity

The quality of circularity is not limited to recycling.

DOWA diversifies end-use product functionality, improves its reliability, and extends its service life to prolong the end-use product lifecycle, thereby creating a long-term cycle that enables the sustainable use of limited resources.



Pursue quality in circularity to better meet the needs of Japan with its limited resources.

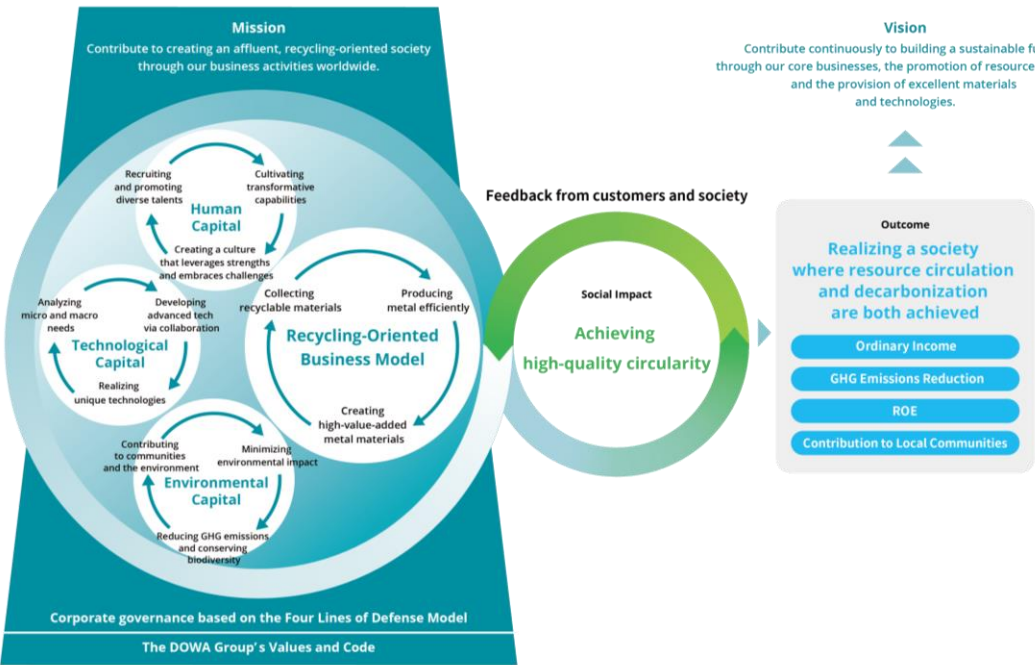
Expanding circulation

- Strengthening the five core businesses
- Creating new cycles through partnerships within and outside the company
- Developing new technologies and businesses to expand circulation through industry-academia collaboration

	Medium-term Plan 2027 Target
Operation income (billion yen)	47.0 (FY2027)
Ordinary income (billion yen)	60.0 (FY2027)
ROA (%)	9 or more (End of FY2027)
ROE (%)	10 or more (End of FY2027)
Shareholder returns	Payout ratio 35% / ¥150 per share, considering share buybacks

Enhancing the quality of capital

- Human Capital : Building a company where all employees can work vibrantly
- Technological Capital: Transforming manufacturing through the use of digital technologies
- Environmental Capital: Strengthening responses to climate change and promoting environmental conservation



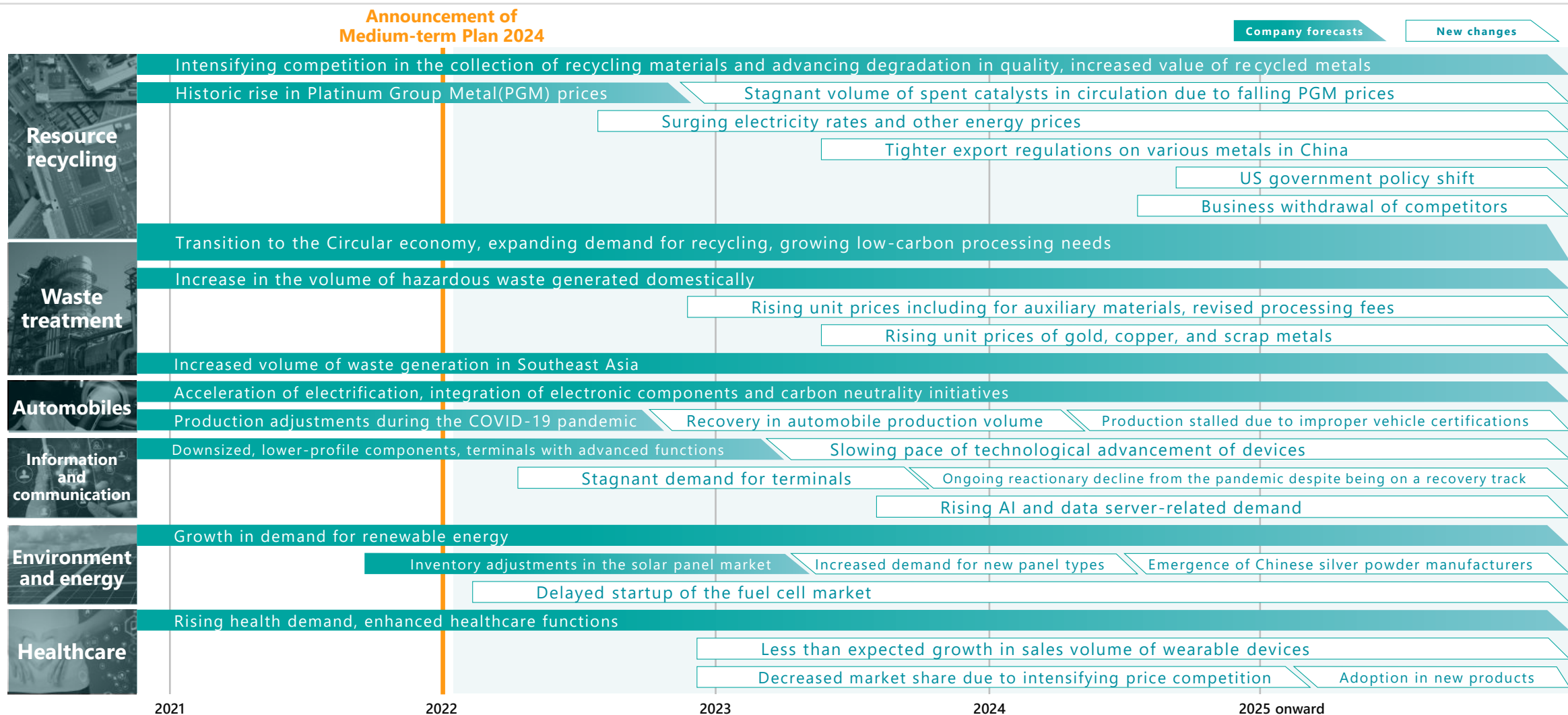
Review of Medium-term Plan 2024

Achievements and Challenges



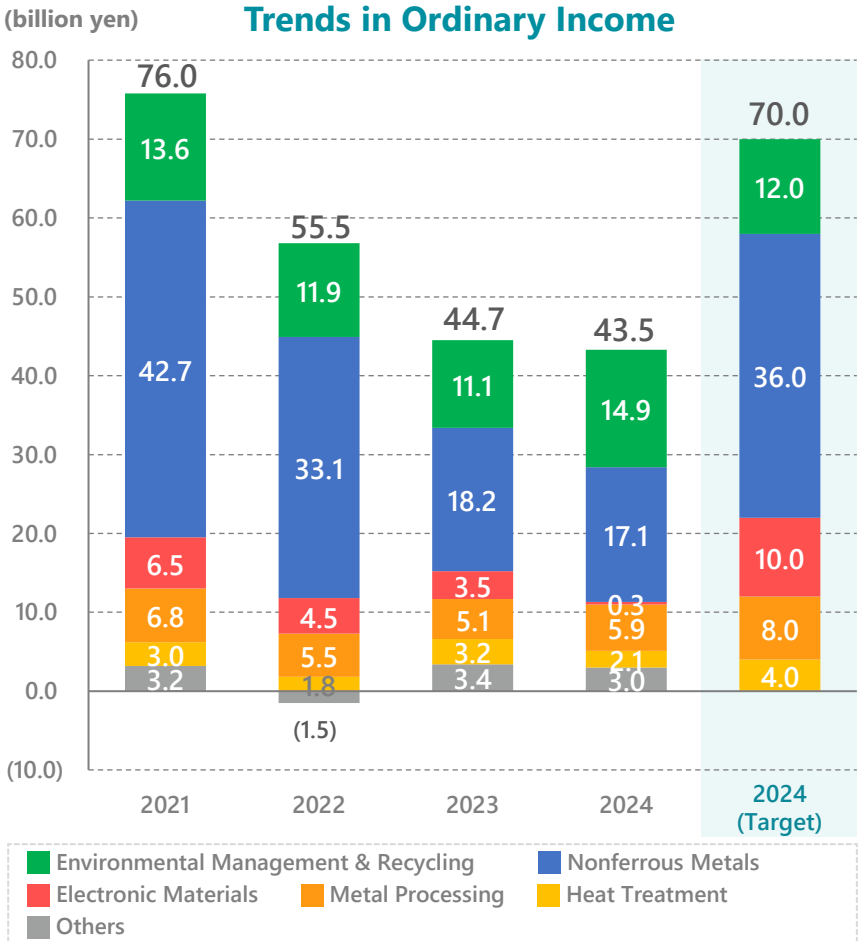
Review of Medium-term Plan 2024 | Changes in the Management Environment

Since FY2022, a series of new changes have significantly impacted the management environment and earnings.



Review of Medium-term Plan 2024 | Financial Target Achievement Status

In response to these new changes, we failed to meet any of the financial targets set forth in Medium-term Plan 2024. Despite strong performance in the Environmental Management & Recycling business, the Electronic Materials business suffered a significant decline in profitability, making it essential to achieve a turnaround.



	Medium-term Plan 2024	FY2024 results	Changes	Major factors
Operating income (billion yen)	60.0 (FY2024)	32.2	(27.8)	
Ordinary income (billion yen)	70.0 (FY2024)	43.5	(26.5)	
Environmental Management & Recycling	12.0	14.9	+2.9	Increased treatment of hazardous waste
Nonferrous Metals	36.0	17.1	(18.9)	Drop in metal prices and significant rise in electricity rates
Electronic Materials	10.0	0.3	(9.7)	Decline in sales of short-wavelength-Infrared LEDs and PDs, silver powder
Metal Processing	8.0	5.9	(2.1)	Decline in sales of products for automobiles and telecommunications
Heat Treatment	4.0	2.1	(1.9)	Decline in demand for automotive applications
Others	0	3.0	+3.0	Improved earnings at Fujita Kanko
ROA (%)	10 or more (End of FY2024)	6.7	(3.3) pt	
ROE (%)	12 or more (End of FY2024)	7.0	(5.0) pt	

Review of Medium-term Plan 2024 | Progress of Key Initiatives (Achievements and Challenges)

In our recycling-oriented business model, we made progress towards the commercialization of new products and technologies.

Themes of focus	Achievements	Challenges
Enhancing metal recycling	<ul style="list-style-type: none"> • Establishment of a recycling business base in Kumamoto • Start of ruthenium recycling 	<ul style="list-style-type: none"> ▶ Expansion of metal recycling
Achieving both resource recycling and decarbonization	<ul style="list-style-type: none"> • Development of the private sector's first integrated system for the development, production and evaluation of Bio-coke fuel • Construction of a TSL pilot plant for the demonstration of coal alternative fuel 	<ul style="list-style-type: none"> ▶ Commercialization of decarbonization technologies ▶ Reduction of Scope 1 emissions through an expanded scope of application
Enhancing products and services targeting growth markets	<ul style="list-style-type: none"> • Acquisition of customer certification for fuel cell material • Expansion of the copper rolled products business in Asia 	<ul style="list-style-type: none"> ▶ Reaping the benefits of investments ▶ Continuing with future-oriented investments
Reinforcing the structure for supporting the development of new businesses and technologies	<ul style="list-style-type: none"> • New establishment of DOWA × Tohoku University Co-creation Research Center, launch of three research themes • New establishment of scheme to support employees pursuing doctoral degrees while working 	<ul style="list-style-type: none"> ▶ Launch of company-wide development project ▶ Increase in the number of patents filed

Review of Medium-term Plan 2024 | Progress of Key Initiatives (Achievements and Challenges)

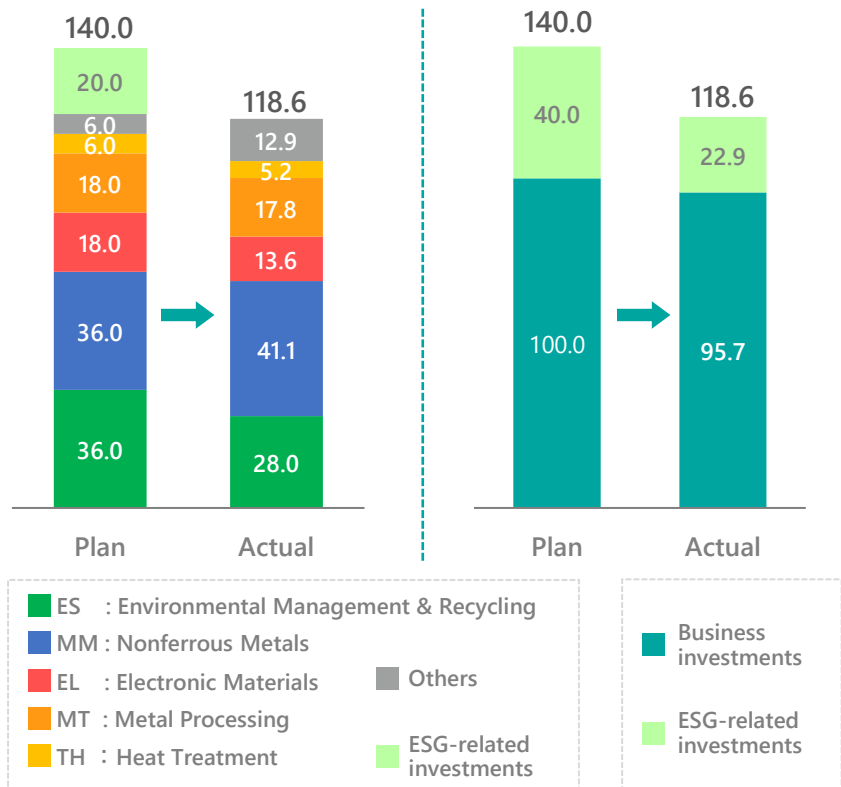
Improvements to sustainability management are entering a phase where activities are streamlined and directly connected with business contributions.

Themes of focus	Achievements	Challenges
Building a sustainability promotion structure	<ul style="list-style-type: none"> • Holding Sustainability Committee and Sustainability Subcommittee meetings 	<ul style="list-style-type: none"> ▶ Streamlining activities
Enhancing risk management structure	<ul style="list-style-type: none"> • Commencing operation of the risk management plan • Reorganizing the quality management system 	<ul style="list-style-type: none"> ▶ Implementing effective risk countermeasures
Strengthening corporate governance	<ul style="list-style-type: none"> • Increasing the number of outside directors who are women • Increasing the percentage of independent directors on the Board of Directors 	<ul style="list-style-type: none"> ▶ Further strengthening of governance
Responding to climate change	<ul style="list-style-type: none"> • Establishment of FY2030 contribution targets and a roadmap for climate change action • Setting DOWA Green Action (DGA) targets 	<ul style="list-style-type: none"> ▶ Promotion of an implementation plan ▶ Monitoring the results of activities
Enhancing human capital	<ul style="list-style-type: none"> • Extension of mandatory retirement • Improving the ratio of newly hired employees who are women 	<ul style="list-style-type: none"> ▶ Enhancing the pool of human resources who can succeed in a competitive environment ▶ Developing an organization where people want to work
Driving DX	<ul style="list-style-type: none"> • Completing the development of a Groupwide cloud platform 	<ul style="list-style-type: none"> ▶ Organizational and workstyle reforms

Review of Medium-term Plan 2024 | Benefitting from the Effects of Investments

Business investment was implemented as planned, and some initiatives realized contributions to earnings.

Investment in FY2022 through FY2024
Plan 140.0 billion yen → 118.6 billion yen



	Key measures	Achievements	Evaluation
ES	Expanding treatment of hazardous waste	Introduction of new facilities for hazardous waste Increase in hazardous waste processing sales	○
	Launch of the second waste treatment site in East Java (DESI)	Launch of operation in January 2023	○
MM	Increasing the processing capacity of Nippon PGM	Completion of electric furnace upgrade in FY2023	△
EL	Strengthening revenue base of the semiconductor business	Securing large-scale project for ultraviolet LEDs in FY2023	△
	Establishing a system for mass-producing fuel cell materials	Acquiring customer certifications	×
	Developing silver powder in line with development of high-efficiency solar panels Improving the performance of conductive atomized powder	Expanding sales of conductive atomized powder	△
MT	Expansion of the Asia business	Increase in sales volume in Asia Management streamlining due to the consolidation of Thai-based sites	○
TH	Development and expanded sales of heat treatment facilities (Z-TKM) to achieve carbon neutrality	Launch of mass production for consigned handling of heat treatment Order for one unit received from a major automotive parts manufacturer	○
Others	Launch of a Groupwide cloud platform	Entered operation in 2023 Building of data utilization infrastructure and accelerated use of AI	○

Review of Medium-term Plan 2024 | Revisions to the Business Portfolio

To improve profitability and management efficiency, we revised our business portfolio over the course of Medium-term Plan 2024. Going forward, we will continue to regularly verify each business to make effective use of our limited management resources.

Results of Revisions to the Business Portfolio Over the Course of Medium-term Plan 2024

Environmental Management & Recycling	<ul style="list-style-type: none">Contraction of the precious metal recycling business in SingaporeWithdrawal from the home appliance recycling business in China
Nonferrous Metals	<ul style="list-style-type: none">Termination of tolling contract with Onahama Smelting and Refining Co., Ltd. (concentration of management resources in the metal recycling business)Absorption-type merger of Zinc Excel Co., Ltd. by Dowa Metals & Mining Co., Ltd. (consolidation of sales contacts)Turning Akita Zinc into a wholly owned subsidiary (stable supply of zinc, enhanced international competitiveness, improved management efficiency)Absorption merger of subsidiaries related to the zinc business with Akita ZincTransfer of interest in Palmer Zinc-Copper Exploration Project
Electronic Materials	<ul style="list-style-type: none">Strengthened criteria for the continuation of new development themes and narrowing down of the number of themes
Metal Processing	<ul style="list-style-type: none">Consolidation of metal processing business production sites in Thailand (integration of two companies)End of production at copper rolled product press site in Taiwan

Medium-term Plan 2027

Pursue quality in circularity



In addition to addressing challenges unique to Japan, including population decline and the depopulation of rural areas, it is also necessary to deal with policy shifts implemented by various countries.

The Japanese government is promoting the shift to the Circular economy, which spells a positive for the DOWA Group.

Politics



- ▲ Shift to the Circular economy as Japan's national strategy
- ▲ Widespread adoption of environmentally conscious manufacturing (development and design)
- ▲ Rising value of key mineral resources in economic security
- ▼ Uncertainty about the future due to US policy shifts
- ▼ Resource hoarding by various countries
- ▲ Driving up resource prices

Society & Culture



- ▲ Women's empowerment and advances in diversity
- ▲ Improved workstyles
- ▼ Concentration of populations in Japan's urban areas / depopulation of rural areas
- ▼ Shrinking size of the domestic market

Economy



- ▲ Regulations aimed at achieving carbon neutrality / changing needs
- ▲ Further increases in demand for renewable energy
- ▲ Further progress of electrification and integration of electronic components
- ▼ Introduction of carbon pricing
- ▼ Intensifying competition to acquire smelting materials (electronic substances and concentrates)
- ▼ Energy and auxiliary material costs remaining high

Technology



- ▲ Advancement of DX technologies related to AI and IoT
- ▲ Growing needs driven by decarbonization, AI and other initiatives
- ▼ Growth of Chinese EV manufacturers / challenges faced by Japanese manufacturers
- ▼ Slowdown in growth of smartphone and wearable device markets

▲ : Positive factors ▼ : Negative factors

Pursue quality in circularity to better meet the needs of Japan with its limited resources.

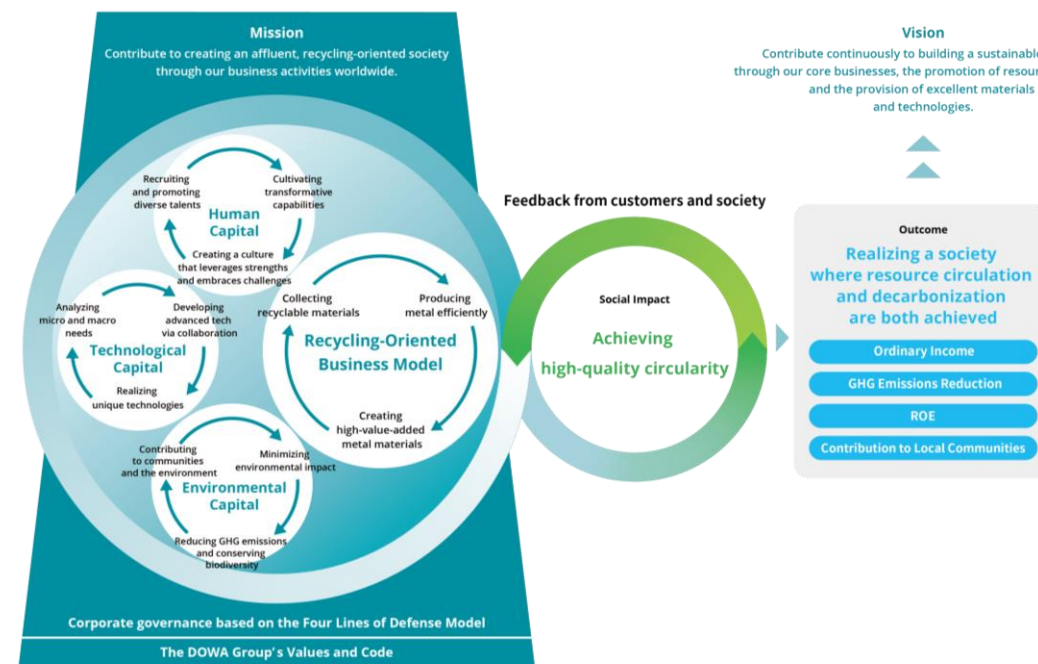
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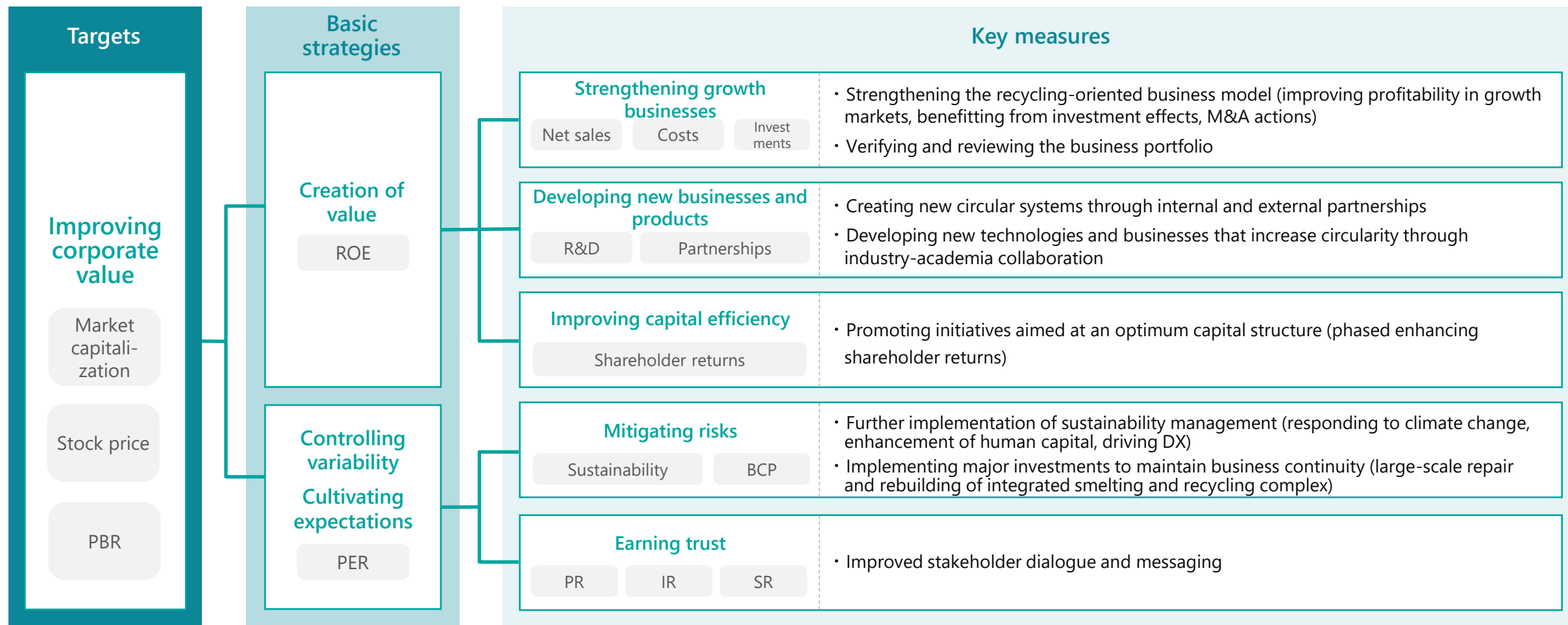
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Medium-term Plan 2027 | Basic strategies

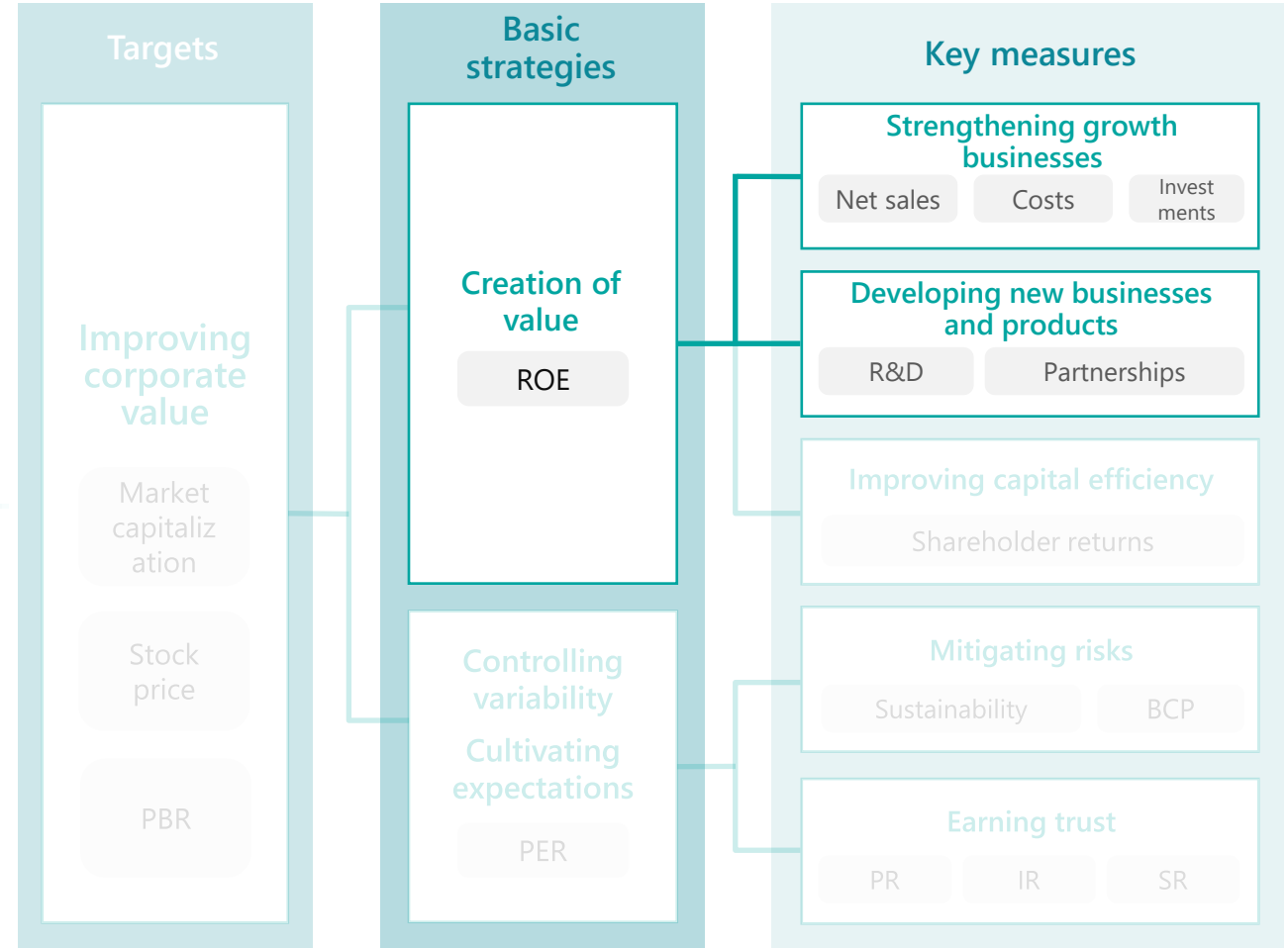
In Medium-term Plan 2027, we aim to improve corporate value through the basic strategies of creation of value, controlling variability and cultivating expectations.



Basic strategies

Creation of value

Strengthening growth business
Developing new businesses and products



We will promote measures to strengthen global resource recycling.

We aim to expand the scope of our waste treatment and recycling business in Japan and Asia through acquisitions.



Resource recycling

Environmental Management & Recycling Business

- Establishing comprehensive recycling sites in Japan (launch of new Kumamoto Plant, utilization of new site in Tochigi)
- Increased collection of materials for recycling
- Development of recycling technologies for used lithium-ion batteries and solar panels
- Expansion into new business areas through partnerships and acquisitions

Nonferrous Metals Business

- Processing of high value-added raw materials and production/sale of valuable metals utilizing industrial complex functions
- Increasing the ratio of recycled raw materials in zinc smelting

Waste management

Environmental Management & Recycling Business

- Ongoing active acceptance of hazardous waste
- Securing earnings through the acquisition of post-PCB waste
- Promoting the treatment of highly profitable waste in Southeast Asia
- Promoting the design and construction of a new successor disposal site in Indonesia

Medium-term Plan 2027 | Strengthening the Recycling-oriented Business Model (2)

We will enhance profitability by consistently providing products and services offering high competitiveness to constantly growing markets. We will focus on the commercialization of previous investment projects as well as developing and expanding sales of new products.



Automotive

Metal Processing Business

- Shifting to high value-added products through optimization of the product portfolio
- Expanding sales volume of copper alloys in Asia
- Tapping into new metal plating demand for xEV high-voltage terminals and other applications

Heat Treatment Business

- Expanding adoption of Z-TKM at our own plants
- Expanded sales of Z-TKM and V-TKM in response to customers' decarbonization needs

Environment and Energy

Electronic Materials Business

- Refining differentiating factors in silver powder for solar panels
- Development and market launch of conductive materials for next-generation solar panels
- Expanded sales of fuel cell materials

Metal Processing Business

- Expanded sales of metals and ceramic substrates for power modules

Telecommunications

Electronic Materials Business

- Expanded sales of conductive atomized powder for MLCCs
- Increased market share of LEDs and PDs for sensors

Metal Processing Business

- Development of new applications of copper rolled products for data servers and similar equipment

Medium-term Plan 2027 | Creating New Circular Systems Through Internal and External Partnerships

We will create new circular systems by creating synergies that link the information and technologies of the DOWA Group.

Coordination between the Environmental Management & Recycling Business and Nonferrous Metals Business

Achieving both resource recycling and decarbonization

Dilemma of increasing DOWA's greenhouse gas emissions when resource recycling is expanded.

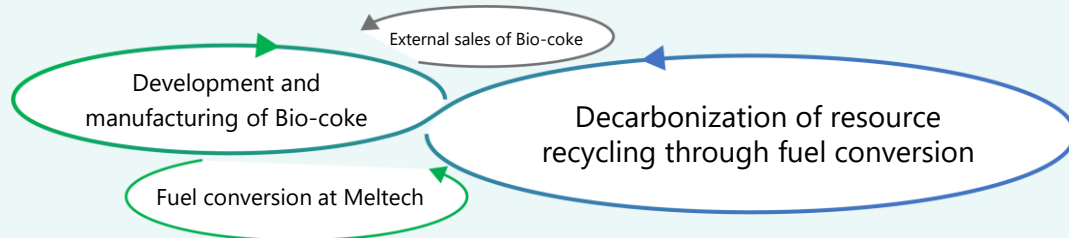
Decarbonization of the smelting process through fuel substitution with Bio-coke

Environmental Management & Recycling

- Consider diversification of raw material sources
- Aim to manufacturing and sell Bio-coke at domestic and overseas sites

Nonferrous Metals

- Achieve fuel substitution with Bio-coke in TSL furnace in light of the results of demonstration testing at a pilot plant

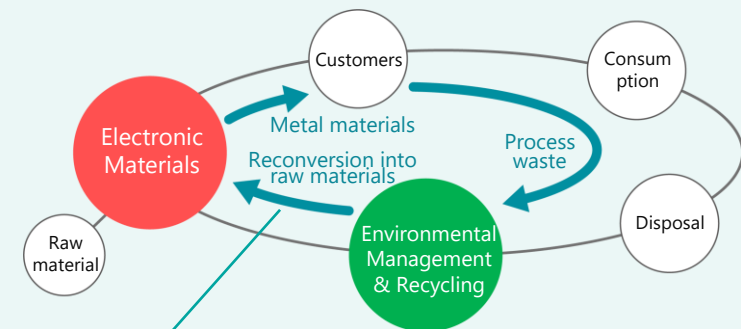


Coordination between the Environmental Management & Recycling Business and Electronic Materials Business

Establishing new solutions responding to resource recycling needs

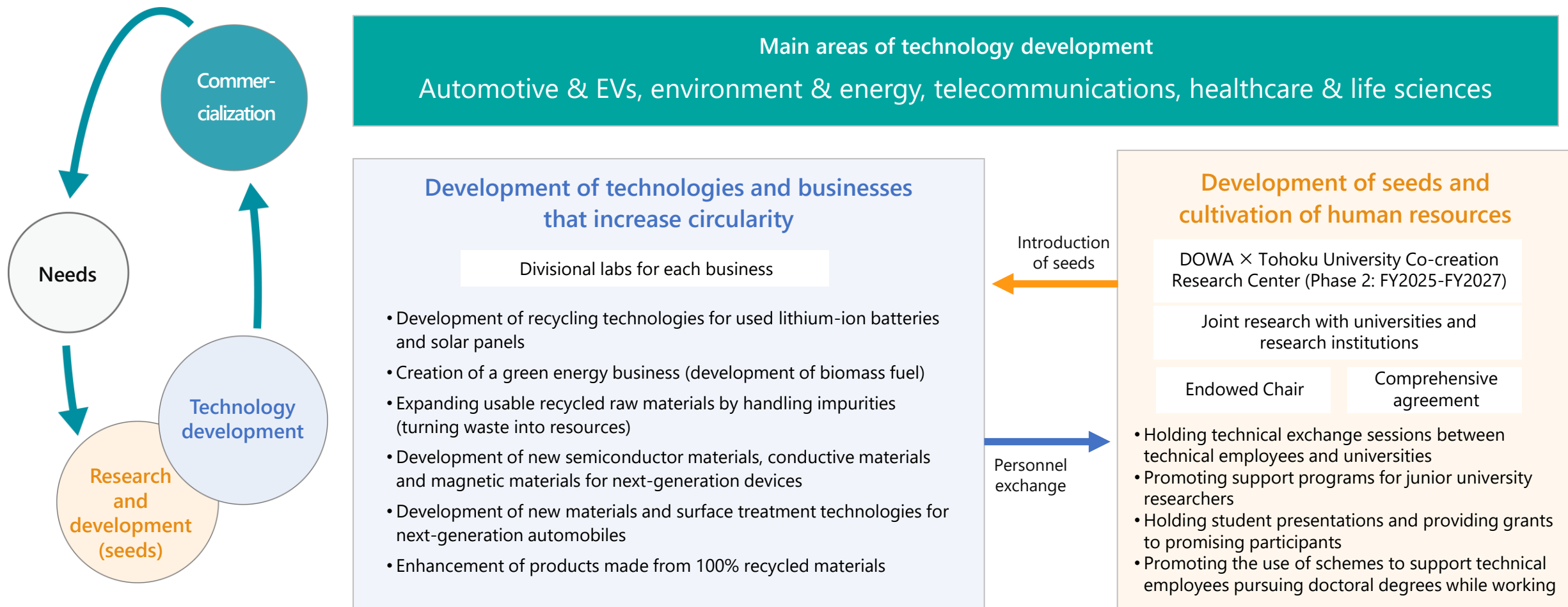
The introduction of mandatory resource recovery from process materials and used products has driven growing demand in the electronic component industry, especially in Europe and the US.

We aim to establish new solutions that respond to recycling needs



We have built a closed loop that reconverts customers' process waste into metal materials, and delivers them back to customers as products for electronic components, thereby improving recycling efficiency

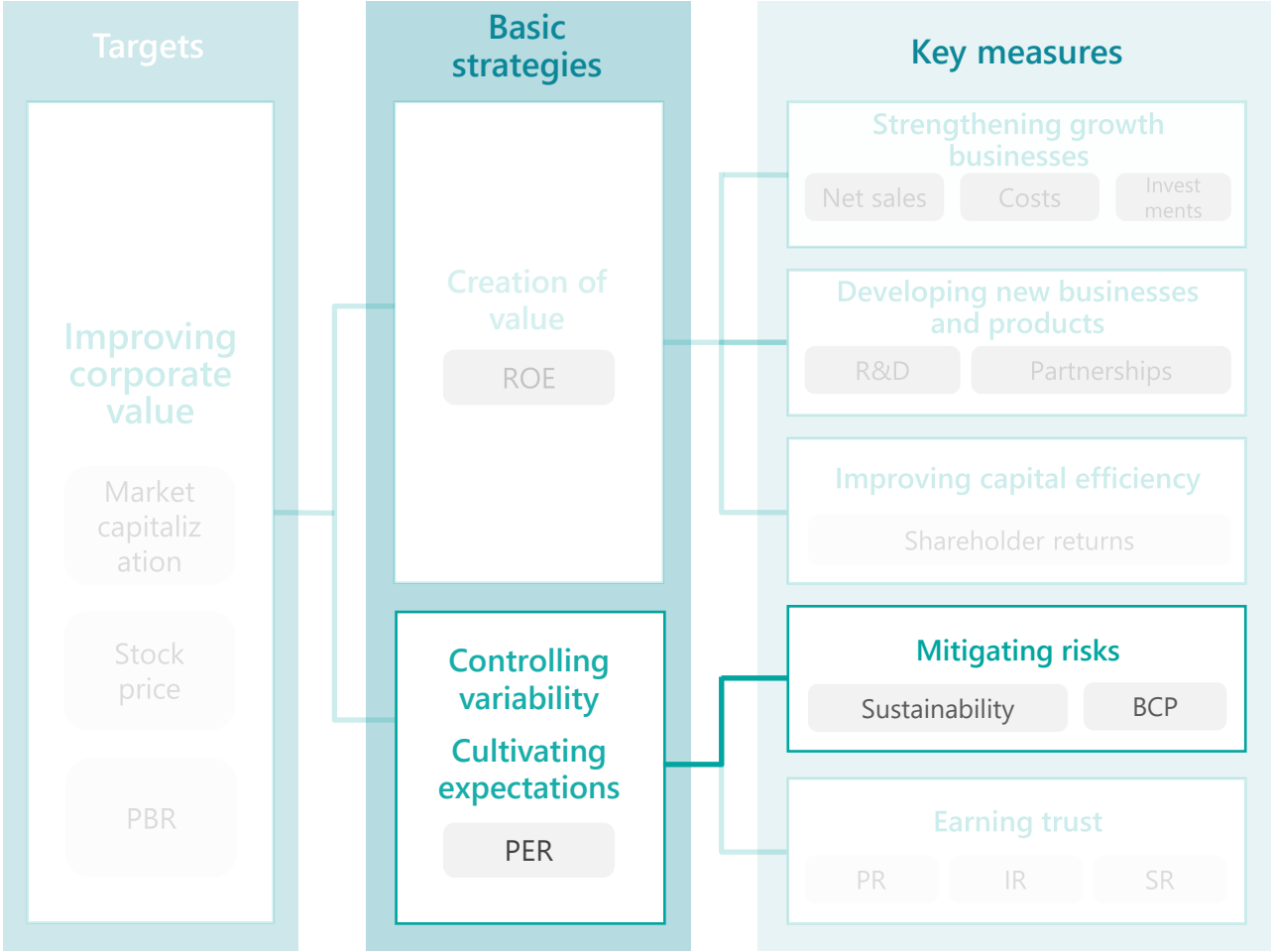
Through industry-academia collaboration, we will focus on developing new technologies and businesses that create inter-business coordination (enhancing circularity), strengthening the recycling-oriented business model and cultivating internal and external technical talent.



Basic strategies

Controlling variability Cultivating expectations

Mitigating risks

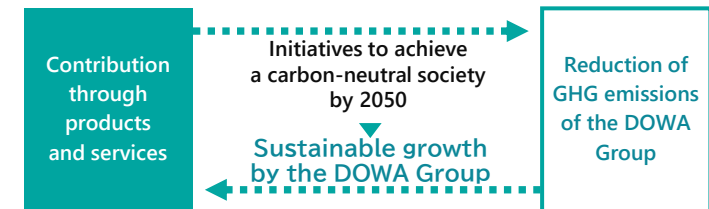


Medium-term Plan 2027 | Responding to Climate Change

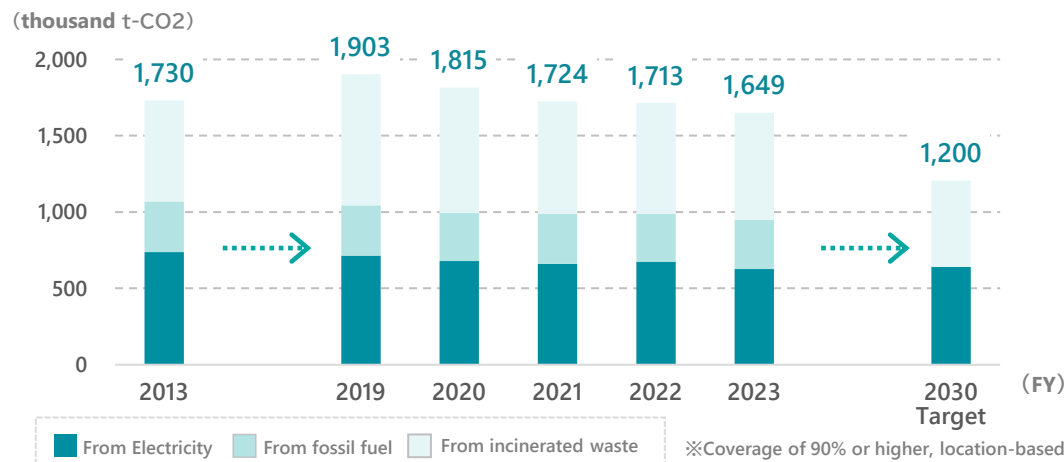
The action policy, target setting and formulation of a plan are complete.
During Medium-term Plan 2027 we will transition to the implementation phase.

Approach

- We will take response to climate change with a two-pronged strategy of reducing greenhouse gas emissions while creating and expanding products and services that contribute to society's measures to combat climate change (DOWA Green Action)
- We aim to shape a carbon neutral society of 2050 that leads to the sustainable growth of the DOWA Group



GHG Emission Targets and Results



Initiatives under Medium-term Plan 2027

Promoting response to climate change balanced with improved business competitiveness

- (1) Work towards targets based on an action plan
 - (2) Track overall progress through annual monitoring
 - (3) Revise measures and plans flexibly based on social trends
- GHG emission reductions: Set reduction targets for FY2027
 - Expansion of DOWA Green Action: Expand net sales and number of items
 - Consider medium-term plans and targets beyond 2030

To achieve our vision, we are driving initiatives to build a culture where employees take pride in both their work and the company, while contributing with energy and vitality.

Vision (Our Goal in 2030)

Creating an organization that continues to grow as it strives to create economic and social value

Expanding the pool of successful talent

- Strengthening recruitment capabilities across the entire group
- Developing core human resources
- Establishing a basic educational platform

Creating an organization where people want to work

- A comfortable working environment
- work-style reform
- Promoting diversity
- Improve employee engagement

A company open to both internal and external stakeholders

- Information sharing and promotion of interpersonal communication
- Enhancement of information disclosure both internally and externally

Medium-term Plan 2027 | Driving DX

Over the course of Medium-term Plan 2027, we will use a Groupwide cloud platform and DX-oriented human resources to transform the organization and workstyles through the use of big data and digital technologies.

Medium-term Plan 2024 (FY2022–FY2024)

Labor-saving, automation, and efficiency improvement

- Development of a Groupwide cloud platform (entered operation in August 2023)
- Start of AI utilization
- Cultivation of DX-oriented human resources (cumulative 193 employees over three years)

Support for business activities Strengthened measures to respond to cyber risks

- Strengthening security at domestic sites
- Provision of information security training



Medium-term Plan 2027 (FY2025–FY2027)

Creation of high-efficiency plants and business opportunities

- Implementing business transformation through the linking of business data
- Business transformation at production sites and offices
- Business transformation driven by DX-oriented human resources

Reinforcing the business structure Improving IT governance

- Strengthening security at overseas sites
- Conducting information security training (ongoing)



Business
growth

Business
continuation

We will launch measures to fundamentally address the challenges faced by smelting and recycling complex.

We will build a sustainable business infrastructure and link the shift to the Circular economy with enhanced value of the DOWA Group.

Challenges

External

- Consistently securing key mineral resources domestically for economic security.
- Intensification of competition to acquire smelting materials.
- Sudden decline in the working population.
- Achieving both resource recycling and decarbonization.

Internal

- The site and facility layout have been in use for over 100 years, and the aging of equipment and infrastructure is also significant.
- A fundamental solution to the declining labor force is needed through a significant improvement in labor productivity.

Overview of smelting and recycling complex rebuilding project

Strengthen circular functions and play a central role in the global circular economy

Expected investment amount

- Over 100.0 billion yen (FY2027: 10.0 billion yen, FY2028–FY2030: 90.0 billion yen)
 - FY2025–FY2026: Careful examination of investment details, FY2027 onwards: Start of construction, continuing to FY2031 and beyond
 - A large-scale and long-term investment project. Consider equipment and processes from a blank slate.

Expected returns

- Expansion of usable recycled raw materials by better handling impurities (turning waste into resources)
- Enhanced production lineup and expanded production volume for rare metals and other critical mineral resources (enhanced circularity)
- Also pursue logistics streamlining, improved work environment and enhanced safety through the introduction of renewable energy and driving DX (solving fundamental challenges)

Medium-term Plan 2027

Numerical Targets



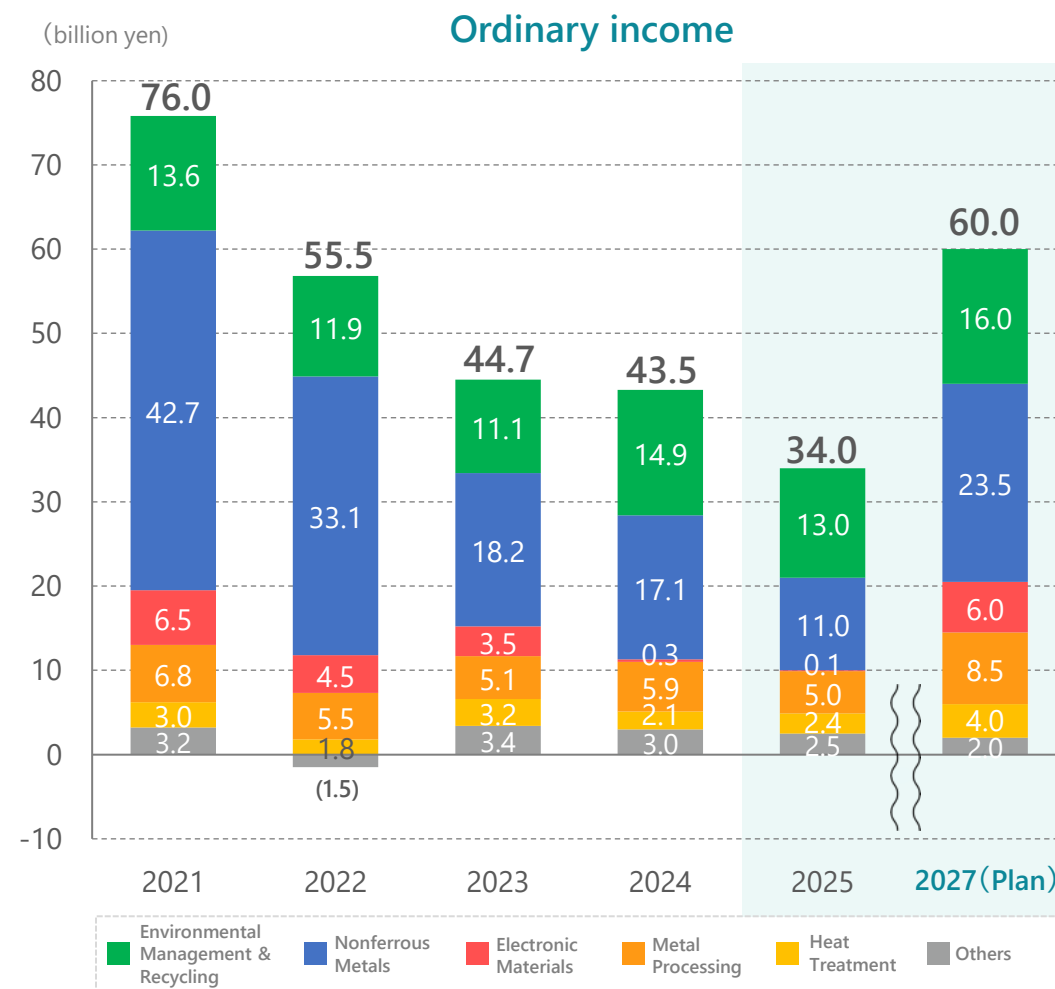
Medium-term Plan 2027 | Numerical Targets

We aim to achieve ordinary income of 60.0 billion yen and an ROE of 10% in FY2027, the final year of the plan.

		—	Medium-term Plan 2024			Medium-term Plan 2027 (Targets)	
		2021	2022	2023	2024	2025	2027
Operating income (billion yen)		63.8	44.6	30.0	32.2	24.0	47.0
Ordinary income (billion yen)		76.0	55.5	44.7	43.5	34.0	60.0
ROA*(%)		12.1	8.5	7.0	6.7	—	9
ROE*(%)		17.6	7.6	7.8	7.0	—	10
Assumptions	Exchange Rate:(¥/\$)	112.4	135.5	144.6	152.6	142.0	142.0
	Copper: (\$/t)	9,691	8,551	8,362	9,370	9, 000	9, 000
	Zinc: (\$/t)	3,254	3,332	2,479	2,874	2,600	2,600

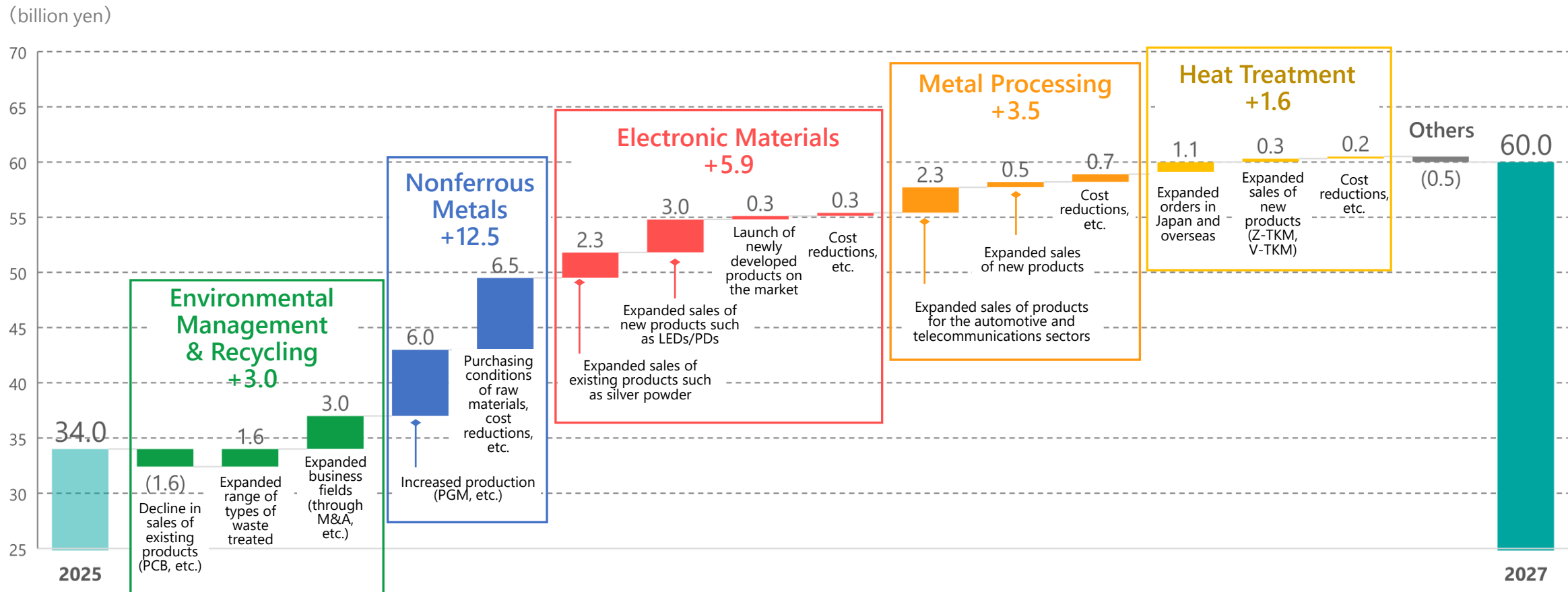
* ROA (Return on Assets): Ordinary income divided by the average of total assets at the start and end of the year.

* ROE (Return on Equity): Net income attributable to parent company shareholders divided by the average of equity at the start and end of the year.



Medium-term Plan 2027 | Factors Behind Changes in Ordinary Income (Compared with FY2025)

From the cumulative efforts of measures including the recovery of volume for existing products, the sales expansion and market launch of new products, and the creation of new businesses, we aim to meet our ordinary income target.



We aim to enhance profitability through the cumulative efforts of cost reductions, including through the recovery of market share for core products after securing new projects, and the optimization of development resource allocations.

Medium-term Plan 2024

Business strategies

- For core products, expand our market share while securing business for next-generation products
 - Launch new products at an early stage and cultivate them as pillars of revenue
- ▼
- Decline in net sales and market share of core products due to the changing market environment and intensifying competition
 - Sluggish growth in sales of new products due to a delayed development of application markets and slowdown in market growth

Measures in Medium-term Plan 2027

Concentrate resources in areas where we can demonstrate our competitive advantage and steadily secure new projects

Sales expansion initiatives

Silver powder: Secure early demand for next-generation solar panels expected to be widely adopted in H2 of FY2025

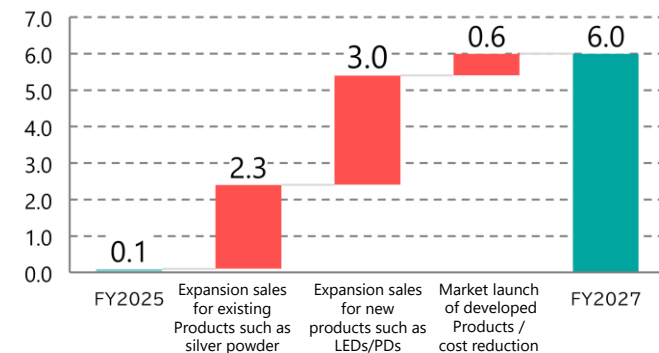
LEDs/PDs: Secure large-scale projects promising large volumes (FY2025, FY2026)

New conductive powder: Develop new conductive powder that addresses requests from the solar panel market to reduce costs, and secure first-mover advantage

Cost reductions

- For new products for which market growth has deviated from expectations, restrict development resources, and focus on developing next-generation applications for core products and product development for applications in already established markets.
- Work to build on earnings through the cumulative efforts, including productivity improvements and technological developments aimed at reducing material unit costs

Revenue Recovery Measures and Effects (billion yen)



Medium-term Plan 2027 | Capital policy and Capital Allocation

Our capital policy under Medium-term Plan 2027 is premised on maintaining a sound financial base with the basic approach of covering funding needs with the funds generated from business, while improving profit through business investment and enhancing shareholder returns.

Cash inflow

* After adjustments for research and development expenses

250.0 billion yen (3 years)

- Maintain our credit ratings (JCR: A+, R&I: A) to hedge against increased funding needs due to sudden market fluctuations or a deterioration in earnings and expenses.
- Ensure an equity ratio of approximately 60%.
- Target a 50% reduction in holdings of listed company shares by FY2030.
- Funds from the sale of these shares will be allocated to the large-scale repair and rebuilding of an integrated smelting and recycling complex to commence from FY2027.

Business Investment
100.0 billion yen

[Business investment 100.0 billion yen]

- Creating a resource-recycling society: 60.0 billion yen
- Enhancing products and services which reduce social and environmental risks: 40.0 billion yen
 - Investment in existing businesses (growth investment, maintenance and upgrade investment): 90.0 billion yen
 - Large-scale repair and rebuilding of integrated smelting and recycling complex: 10.0 billion yen (approx. 100.0 billion yen to be invested by FY2030, starting from FY2027)

ESG Investment
45.0 billion yen

- Protecting the environment: 17.0 billion yen, occupational safety and health: 14.0 billion yen, digital transformation (DX): 4.0 billion yen, responding to climate change: 3.5 billion yen, enhancement of human capital: 2.0 billion yen

Laying the groundwork for the future
65.0 billion yen

[Research and development: 30.0 billion yen]

- Plan to invest 30.0 billion yen in research and development, mainly in the Electronic Materials Business aimed at the development of new businesses, products and technologies.

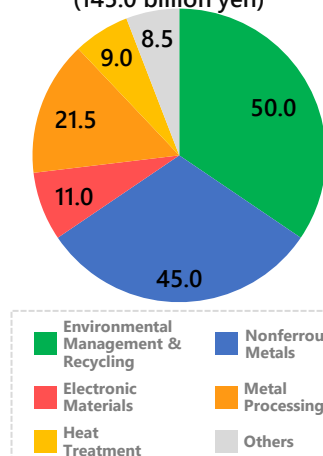
[M&A and procurement of raw materials: 35.0 billion yen]

- From M&A activities, we will expand the scope of our waste treatment and recycling operations in Japan and Asia (20.0 billion yen).
- Investment to secure smelting raw materials containing key mineral resources in a stable and long-term manner (15.0 billion yen).

Shareholder returns
32.0 billion yen or more

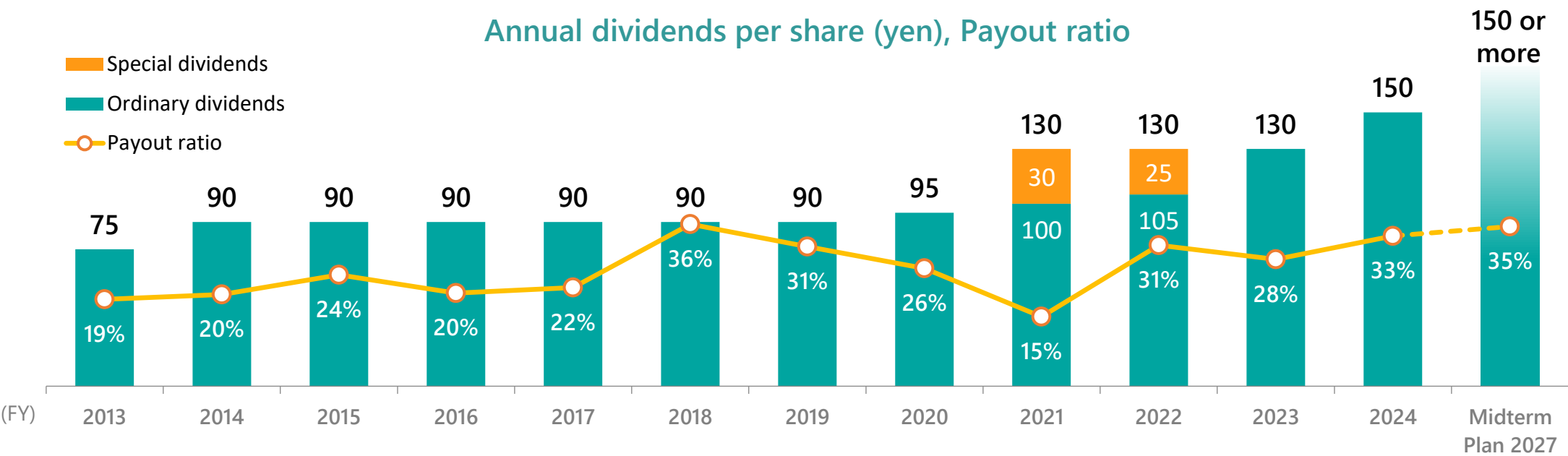
- The payout ratio is raised from 30% to 35%, with the minimum dividend per share set at 150 yen.
- The acquisition of treasury stocks will be considered based on future funding requirements and the financial conditions.

Breakdown of total investment (145.0 billion yen)



Taking into consideration profit plan and financial condition under Medium-term Plan 2027, the shareholder return policy for FY2025 to FY2027 is as follows.

Shareholder return policy	Dividends	Payout ratio of 35% or 150 yen per share, whichever is higher
	Acquisition of treasury stocks	The acquisition of treasury stocks will be considered based on future funding requirements and the financial conditions



We aim to expand the equity spread by improving profitability and reducing the cost of capital.

Analysis of the current situation and recognition of issues

- Average ROE* over the past ten years: 9.7% ⇔ cost of shareholders' equity: 6-8%
- Average ROE over the past six years (excluding FY2021, when profits reached a record high): 7.6%
- To achieve a PBR of at least 1.0x, it is necessary to constantly achieve an ROE that exceeds the cost of shareholders' equity



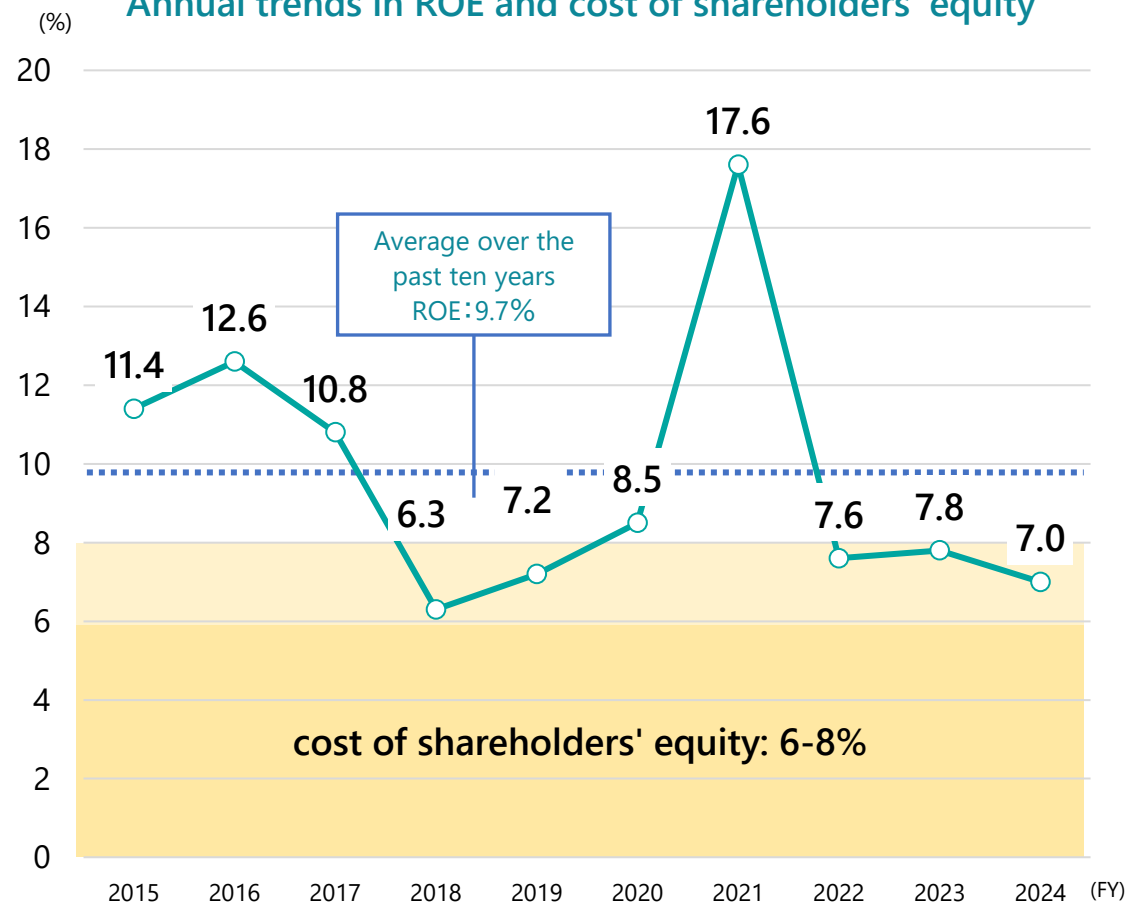
Basic policy on improving PBR

Aim to improve both indicators based on the formula: $PBR = ROE \times PER$

Initiatives under Medium-term Plan 2027

- Promote initiatives to create value, aiming to achieve an ROE of 10% by the end of FY2027.
- Strive to control the cost of capital by “controlling variability”, while “cultivating expectations” through enhanced disclosures and more in-depth dialogue with markets to achieve improvements to PER.

Annual trends in ROE and cost of shareholders' equity



* Considering the characteristics of DOWA's businesses, which are highly susceptible to changes in the external environment, ROE is evaluated on a cumulative basis over a set period.

Medium-term Plan 2027

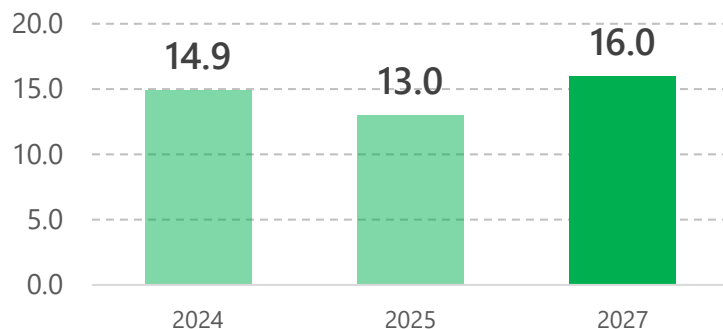
Strategies in Each Business



VISION

As an innovating environmental leader in resource recycling,
we will provide high-quality solutions globally, contributing to a safer and more secure future.

Ordinary Income (billion yen)



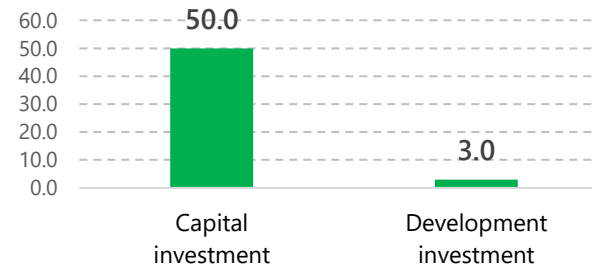
Factors behind changes (FY2024 → FY2027)

- + Expanded handling of automotive recycling (plastic recycling)
- + Launch of the new Kumamoto Plant for home appliance recycling
- + Improved earnings in Southeast Asia (Thailand and Singapore)
- + Expansion into new business fields through external partnerships and M&A
- △ Reduced PCB processing volume in domestic waste treatment

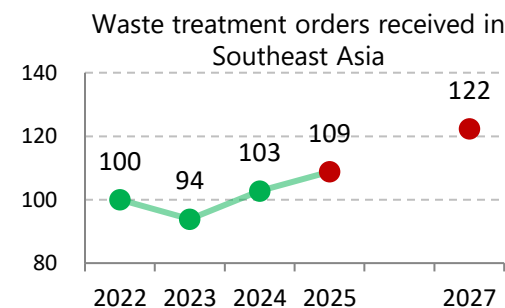
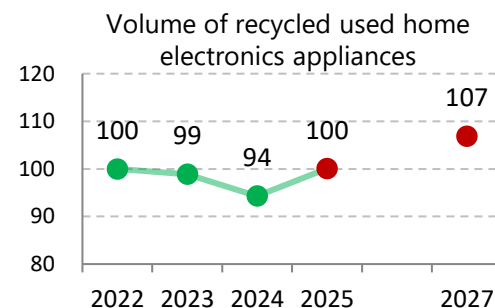
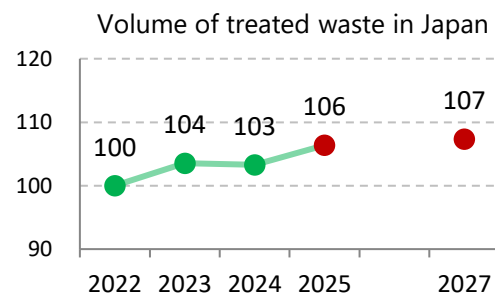
Key measures

- Establishment of comprehensive recycling sites (New Kumamoto Plant, utilization of new site in Tochigi)
- Development of recycling technologies for used lithium-ion batteries and solar panels
- Expansion into new business areas through partnerships and acquisitions
- Acquisition of post-PCB waste
- Promoting the treatment of highly profitable waste in Southeast Asia
- Planning and construction of a new successor landfill site in Indonesia

Capital investment (for 3 years)



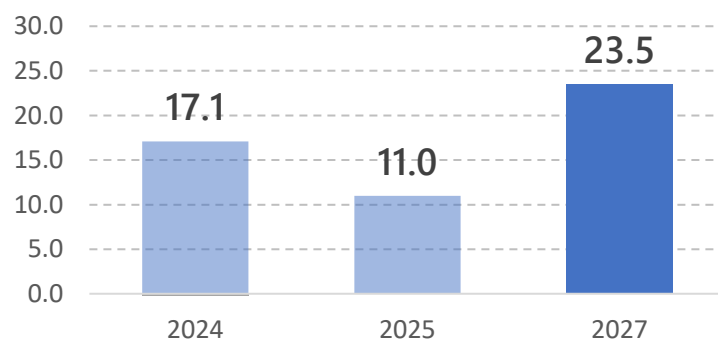
Volume trends



VISION

We will drive enhancements to the qualitative strength of our integrated smelting and recycling complex functions to develop a sustainable smelting business model.

Ordinary Income (billion yen)



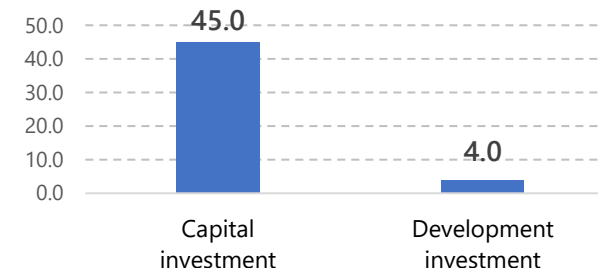
Factors behind changes (FY2024 → FY2027)

- + Increased processing of industrial complex raw materials and recycling raw materials
- + Increased collection and processing of used spent catalysts
- + Increased sales through increased processing of residue inventory at AKITA ZINC CO., LTD.
- + Falling electricity costs
- + Increased revenue from overseas zinc mines

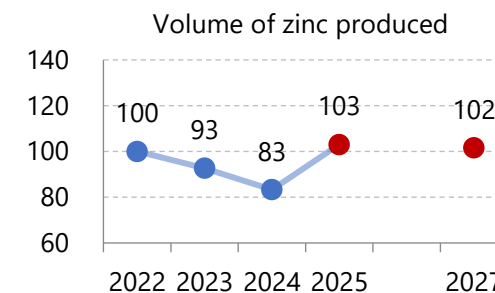
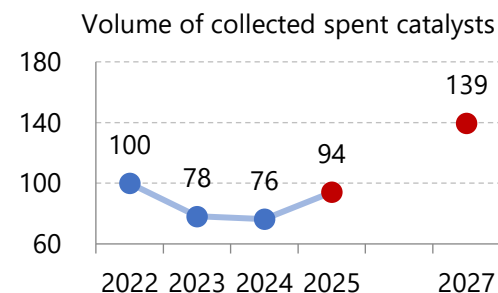
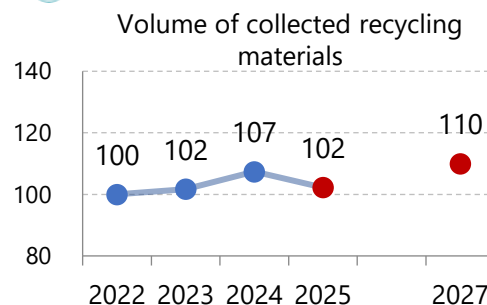
Key measures

- Processing of high value-added raw materials and increased production of recycled metals utilizing industrial complex functions
- Increasing the ratio of recycled raw materials in zinc smelting
- Increasing collection and processing of spent catalysts
- Stable operation of overseas zinc mines (Tizapa and Los Gatos)
- Large-scale repair and rebuilding of integrated recycling and smelting complex

Capital investment (for 3 years)



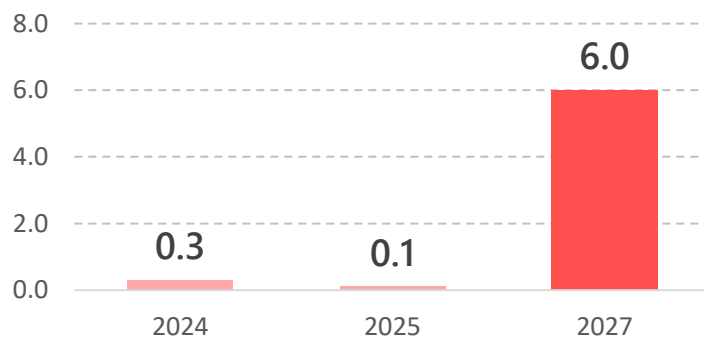
Volume trends



VISION

We will become one of the world-leading material manufacturer, offering niche-leading products in highly profitable markets.

Ordinary Income (billion yen)



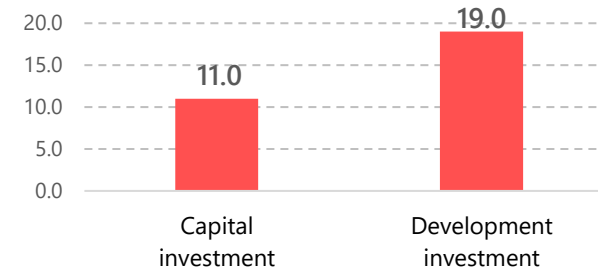
Factors behind changes (FY2024 → FY2027)

- + Securing large-scale projects for short-wavelength-Infrared LEDs and PDs, leading to increased market share
- + Regaining market share through the development of technologies for silver powder
- + Expanded sales of conductive atomized powder for MLCCs
- + Improved earnings through revision of sales prices for existing products

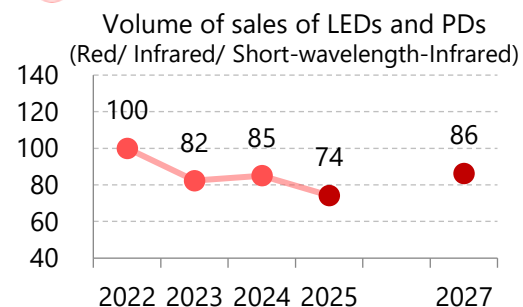
Key measures

- Securing next-generation projects involving high-performance LEDs and PDs designed for sensors, and shift to mass production
- Refining differentiating factors in silver powder for solar panels
- Development and market launch of conductive materials for next-generation solar panels
- Expansion sales of fuel cell materials
- Expansion sales of conductive atomized powder for MLCCs

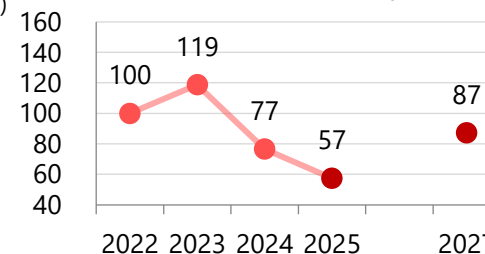
Capital investment (for 3 years)



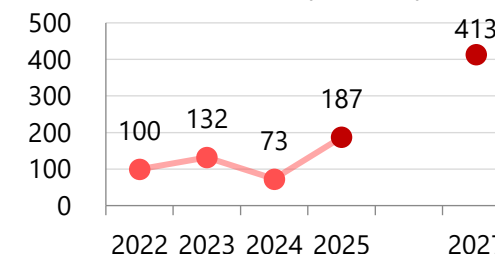
Volume trends



Volume of sales of silver powder



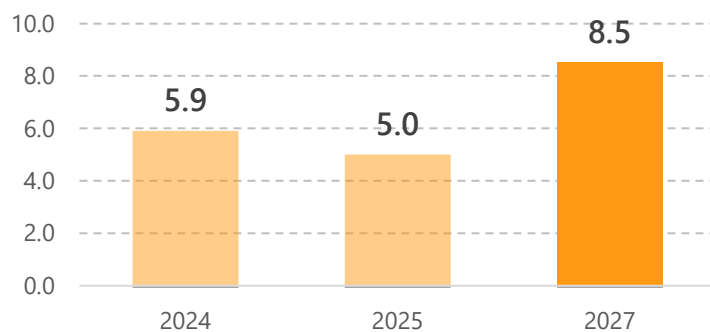
Income from paid samples



VISION

We will provide services and products that exceed expectations with a customer-centric approach, while continuing to take on the challenge of creating new value which is of significance to society.

Ordinary Income (billion yen)



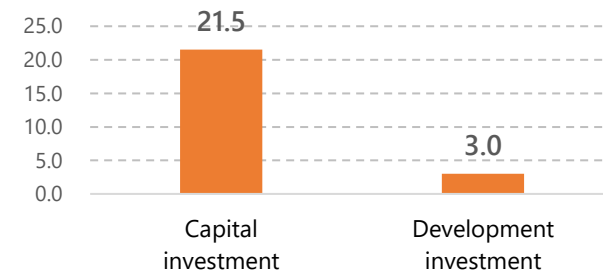
Factors behind changes (FY2024 → FY2027)

- + Expanded sales and price revisions of high value-added copper rolled products for automotive applications
- + Expanded sales of copper rolled products for data servers
- + Expanding sales volume of copper alloys in Asia
- + Expanded sales of precious metal plating for xEVs
- + Expanded sales of metals and ceramic substrates for power modules

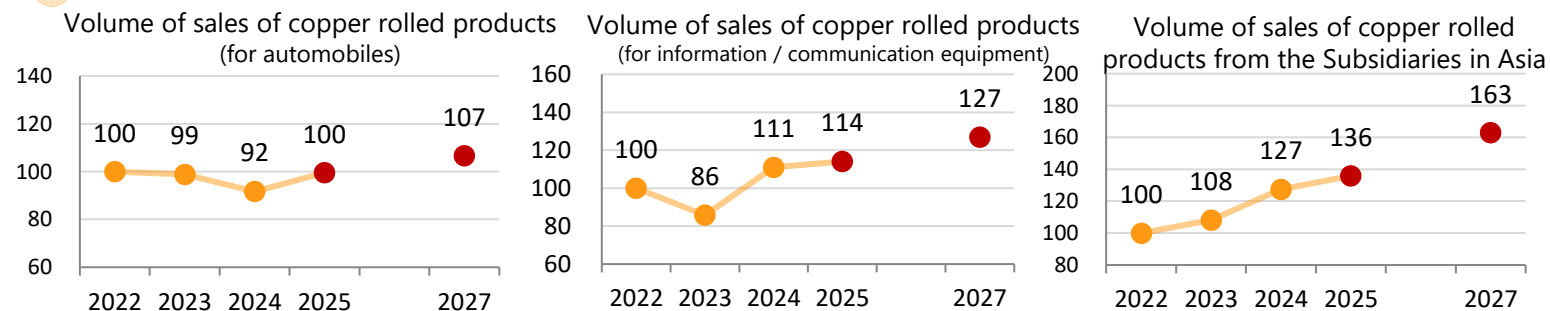
Key measures

- Shifting to high value-added products through optimization of the product portfolio
- Development of new applications of copper rolled products for data servers and similar equipment
- Expansion sales volume of copper alloys in Asia
- Tapping into new metal plating demand, such as plating for xEV high-voltage terminals
- Stepped up production capacity of metal and ceramic substrates for power modules

Capital investment (for 3 years)



Volume trends

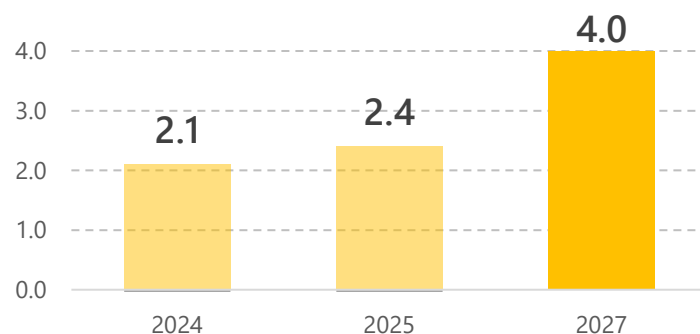


VISION

We will establish an indispensable presence in the area of heat treatment and survive in a globally changing market.

We will leverage our strengths in both software and hardware to help shape a carbon neutral society.

Ordinary Income(billion yen)



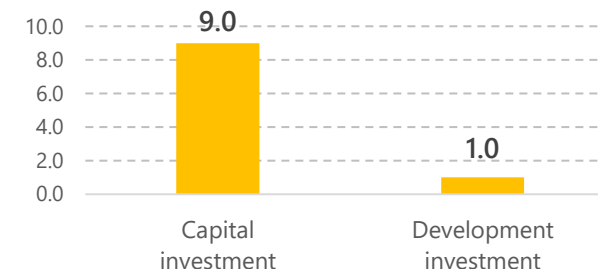
Factors behind changes (FY2024 → FY2027)

- + Expanded orders for heat treatment processing due to customers switching to outsourcing
- + Expanded sales of Z-TKM and V-TKM
- + Securing orders from new fields and customers
- + Expanded equipment sales and maintenance services in the Indian market

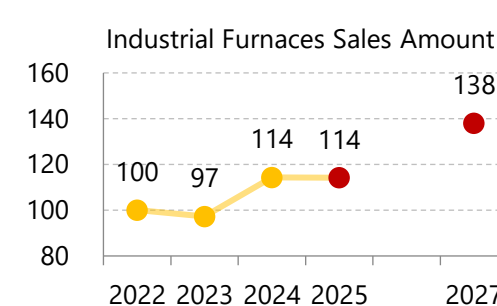
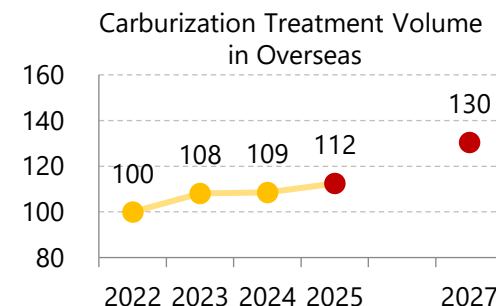
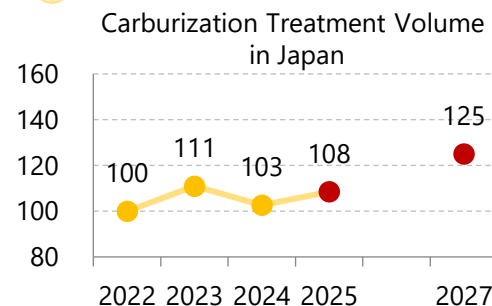
Key measures

- Promoting decarbonization through the expanded adoption of Z-TKM at our own plants
- Expansion sales of Z-TKM and V-TKM in response to customers' decarbonization needs
- Development of a global sales structure to increase business with non-automotive customers in Japan and non-Japanese customers overseas.
- Accelerating investment in labor savings and automation with the aim of achieving operator-free equipment operation

Capital investment(for 3 years)



Volume trends



◎ Sensitivities Operation income FY2025

(million yen)

	Assumptions	Fluctuations	Sensitivities
Exchange rate	142.0 ¥/\$	±1 yen	490
Copper	9,000 \$/ton	±100 dollars	30
Zinc	2,600 \$/ton	±100 dollars	530

Exchange rate sensitivity; Nonferrous Metals 420 million yen and Electronic Materials 70 million yen.

◎ Exchange Rate and Metal Prices

	Medium-term Plan 2024 (results)				Medium-term Plan 2027		
	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
Exchange rate (¥/\$)	112.4	135.5	144.6	152.6	142.0	142.0	142.0
Copper (\$/ton)	9,691	8,551	8,362	9,370	9,000	9,000	9,000
Zinc (\$/ton)	3,254	3,332	2,479	2,874	2,600	2,600	2,600

The social issues (materiality) the DOWA Group aims to address during Medium-term Plan 2027 have been identified. Two themes have been added to sustainability activities planned through FY2024, based on the importance of each item.

Materiality in Medium-term Plan 2027	Basic Policy
Creating a resource-recycling society	<ul style="list-style-type: none"> Continually contribute to the formation of a sustainable recycling-oriented society through the effective utilization of natural resources and enhancement of various recycling initiatives
Enhancing products and services that reduce social and environmental risks	<ul style="list-style-type: none"> Continuously provide customers with products and services that reduce various social and environmental risks, such as those represented by climate change and increased waste
Protecting the environment	<ul style="list-style-type: none"> Reduce the environmental impact related to the operation of all DOWA Group sites
Ensuring occupational safety and health	<ul style="list-style-type: none"> Improve the work environment by preventing accidents and disasters, providing peace of mind to everyone working in the DOWA Group
Enhancing human capital (renamed from "increasing organizational power")	<ul style="list-style-type: none"> Enhance human capital including the overall human resources and organizations of the DOWA Group by championing the successes of a diverse range of talent, strengthening human resource development, and adapting to diverse workstyles
Respecting human rights *Newly added	<ul style="list-style-type: none"> Safeguard the human rights of all people associated with the corporate activities of the DOWA Group by conducting human rights risk assessments, promoting human rights training, and establishing remediation measures
Strengthening corporate governance	<ul style="list-style-type: none"> Develop, maintain and improve high-level corporate governance
Promoting risk management	<ul style="list-style-type: none"> Ascertain risks to the DOWA Group and implement timely and appropriate countermeasures
Upgrading the quality assurance *Newly added	<ul style="list-style-type: none"> Establish quality assurance systems, promote the digitalization of analysis and assessment, put in place mechanisms to prevent improper conduct, and strengthen product quality assurance
Responding to climate change	<ul style="list-style-type: none"> Reduce emissions of greenhouse gases (GHG) such as CO₂, and drive enhancements to products and services that will contribute to society's action on climate change
Driving DX (data utilization)	<ul style="list-style-type: none"> Utilize big data and digital technologies to transform organizations and workstyles

A Recycling-Oriented World

DOWA

Forward-looking statements made in this document, such as business forecast, are based on the information available at this time and on certain premises that the Company assumes to be reasonable. Actual performance may differ materially from such forecasts due to a variety of factors