A Recycling-Oriented World

DOWA

DOWA HOLDINGS CO.,LTD.

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Website: https://hd.dowa.co.jp/en/index.html

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Paper | Supporting responsible forestry
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DOWA HOLDINGS CO.,LTD. DOWA REPORT 2025



Integrated Report
DOWA HOLDINGS CO., LTD.
For the year ended March 31, 2025

DOWA REPORT 2025

DOWA

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 Japan and the world now aim to transition to a circular economy, we will bring together the technologies we have accumulated over 140 years and continue to pursue higher quality in circularity.

Cover
DOWA THERMOENGINEERING CO., LTD.
Hamamatsu Plant (top), Hamamatsu-kita Plant (bottom) (Hamamatsu City, Shizuoka Prefecture)

Scope of Coverage
Companies included in the PDF “Subsidiaries and Affiliates” located in the Financial Reports section of our corporate website: https://hd.dowa.co.jp/en/ir/library/annual.html

Period of Reporting
From April 1, 2024, to March 31, 2025, herein referred to as “fiscal 2024.” Parts of this report may refer to initiatives and activities outside this period.

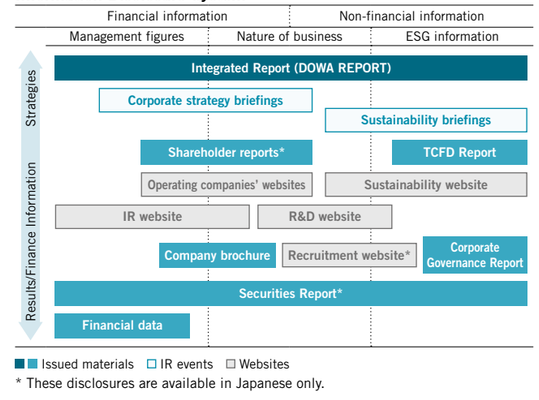
Note on Numerical Descriptions
The financial figures in this report have been rounded down.

Note on Forward-Looking Statements
Forward-looking statements in this report, such as performance forecasts, are based on the information available to the Company’s management team at the time of publication and on certain premises that it believes to be reasonable. Accordingly, actual performance may differ materially from such forecasts due to a variety of factors.

Guidelines Referenced
- The Integrated Reporting Framework of the International Financial Reporting Standard (IFRS) Foundation
- Guidance for Collaborative Value Creation of Ministry of the Economy, Trade and Industry

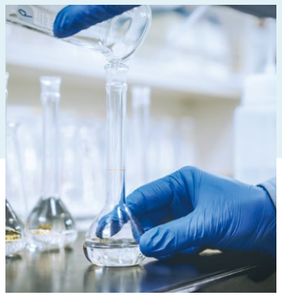
Use of Abbreviations
This report uses the following abbreviations. HD: DOWA HOLDINGS CO., LTD.; ES: Environmental Management & Recycling Business; MM: Nonferrous Metals Business; EL: Electronic Materials Business; MT: Metal Processing Business; TH: Heat Treatment Business

Information Disclosure System



* These disclosures are available in Japanese only.





The Ubiquity of "Recycling" Today Inspires Us to Aim for True Circularity.

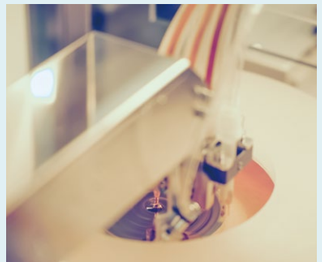
The DOWA Group has established a unique recycling-oriented business model by combining five businesses, and the transition to a circular economy is a major tailwind for the Group.

Driven by our recycling-oriented business model based on the technologies we have developed over 140 years, we will pursue high-quality cycles with the aim of achieving true, integrated, long-term circularity.

By continuing to pursue quality in circularity, we will contribute to the realization of a sustainable society and further enhance our corporate value.







True Circularity

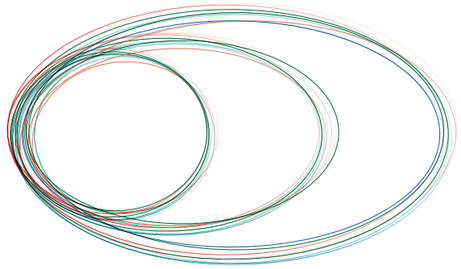
Integrated Circularity

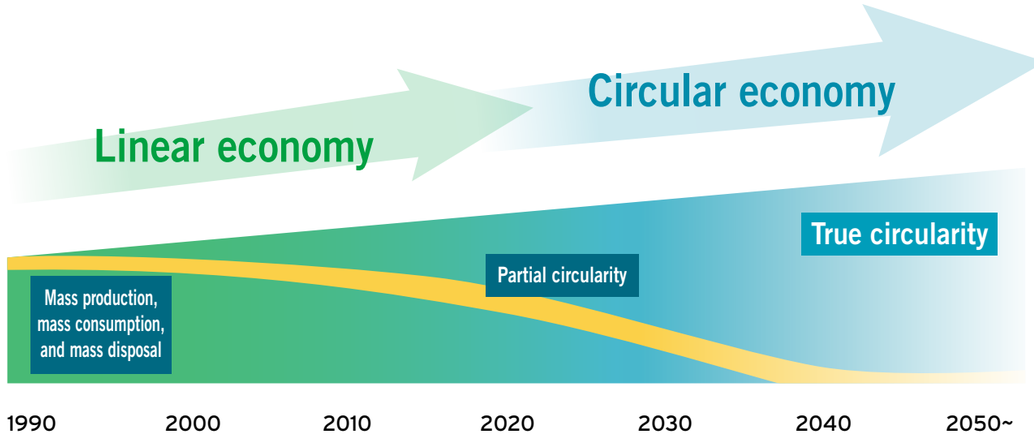
This means putting as much material as possible back into the cycle, rather than discarding materials as waste.
To achieve this, DOWA has developed an integrated circular system by building a network to collect various recycling resources from society while maintaining the technologies and infrastructure 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 durability, 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.





Our Ideas and Technology Came from Limited Resources and a Disadvantageous Location.

Because "black ore" has so many impurities, our extraction and smelting technology were created.

Because our location made it difficult to import raw materials, we transitioned to 100% recycled materials at our smelters.

Because this was uncharted territory, we took on the challenge of building a global network for the recovery of recyclable resources.

It was by pursuing methods for further utilizing these resources under these limitations that we arrived upon the ideas and technologies that now distinguish DOWA.



From "Black Ore" with Many Impurities, We Extracted Many Different Kinds of Metal and Even More Knowledge

Separation Technology

DOWA began as a mining and smelting company in Kosaka, Akita Prefecture. The mine's silver ore resources were depleted a little over a decade after our founding, but we succeeded in developing smelting technology for the large quantity of "black ore" (complex sulfide ore) that lay untapped underneath. Through our experience in separating and recovering a variety of metals from "black ore" with many impurities, we developed separation technology that has been an immense strength in our later recycling work.



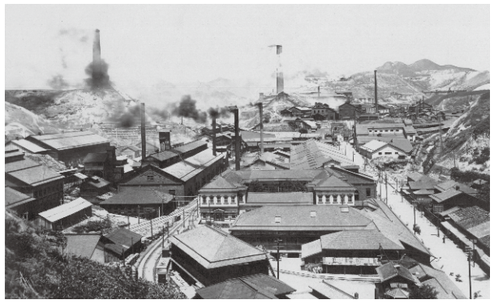
Collection System

Once it became the norm to import ore from overseas, it became difficult to procure enough ore in Kosaka, an inland region of Akita Prefecture. To survive, we repurposed the site into a smelter of recycled resources, ahead of the world, and expanded our recovery of these resources. This enabled us to quickly build a global network for resource recovery and establish a collection system for a variety of resources.



Continuity Is Our Duty

As mine operators, we are responsible for the livelihoods of the people who work there. We ensure that people have what they need in order to live, as well as developing municipal infrastructure and taking the optimal environmental measures. Through corporate management based on founder FUJITA Denzaburo's philosophy of "coexistence with workers and the residents of local communities," we were working to uphold our duty for better continuity of communities and the environment before the term "sustainability" entered the public lexicon.



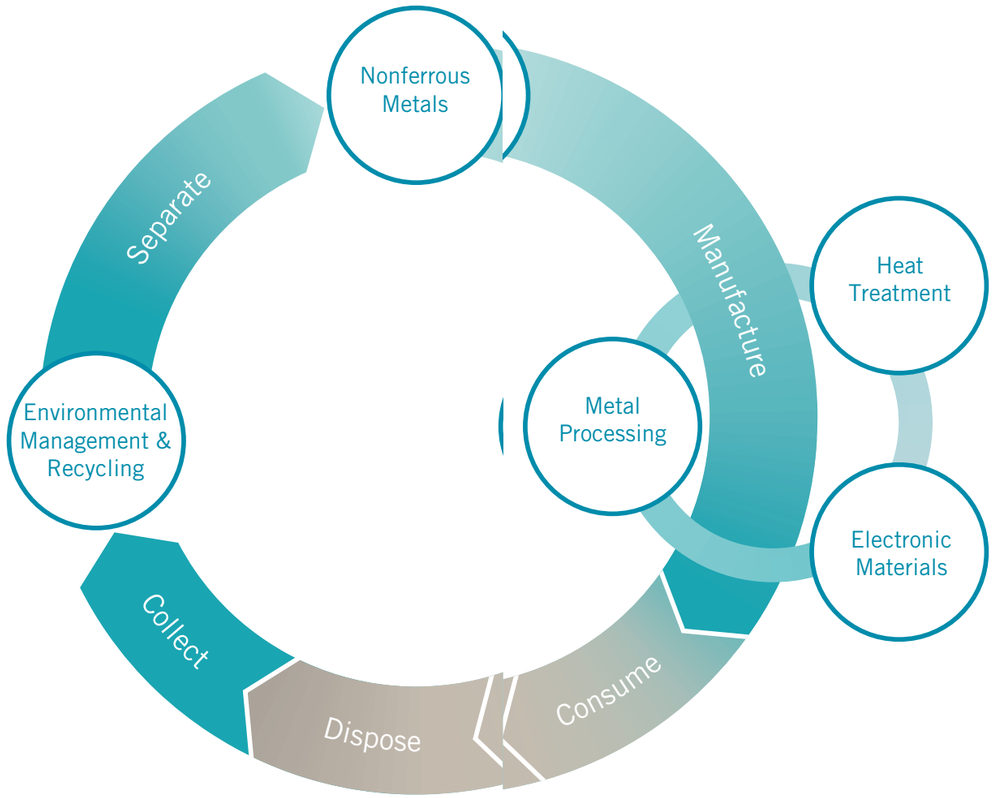
DOWA's Businesses A re Leading Circularity.

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.

Collect and Separate

We have built an integrated smelting and recycling complex through the combined efforts of our Environmental Management & Recycling Business, which handles waste, and our Nonferrous Metals Business, which possesses metal separation technology. We collect waste and recyclable resources from a variety of industries around the world and give these resources new value.



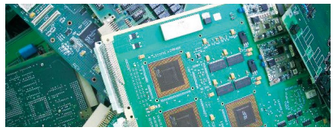
Manufacture

In our Electronic Materials Business, Metal Processing Business, and Heat Treatment Business, we develop and manufacture high-value-added materials, primarily using metals as raw materials. We leverage our expertise and advanced technologies, such as semiconductors and conductive materials, copper rolled products, and surface heat treatment, to contribute to technological innovation for the automotive, electronic device, and energy fields.

DOWA's Five Business

Environmental Management & Recycling

Turns waste into resources through correct measurement, correct collection, and correct handling.



Nonferrous Metals

Creates recycled metal materials with separation technology based on what we learned from "black ore."



Electronic Materials

Combines metals to build a new world with functions that have never been seen before.



Metal Processing

Supports advanced technology and total reliability through exceptional refining of metal.



Heat Treatment

Treats metal to extend product life and resource cycles.



Overall Picture of the DOWA Group

Facts and Figures

History

141 years
Founded in 1884

Number of Employees (consolidated)

11,337
7,043 in Japan
4,294 overseas
(as of March 31, 2025)

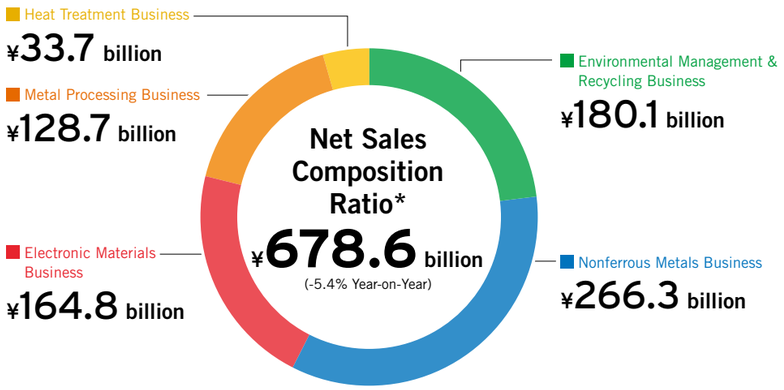
Subsidiaries and Affiliates (consolidated)

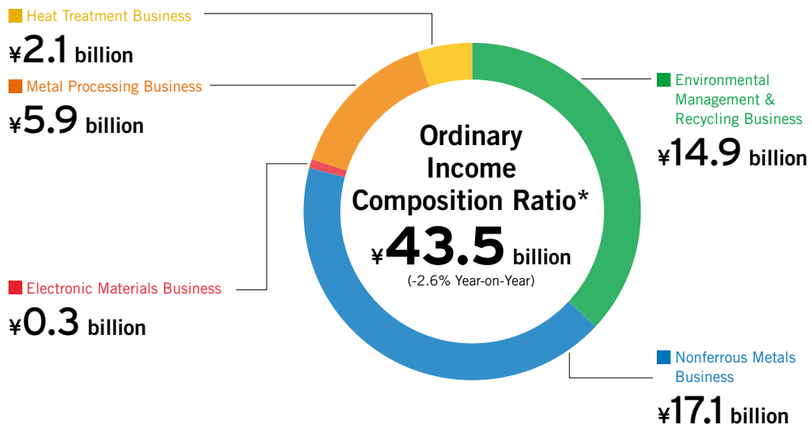
100 companies
62 in Japan, 38 overseas
(as of March 31, 2025)

Plants and Waste Treatment Facilities

73 bases
42 bases in Japan
31 bases overseas
(as of March 31, 2025)

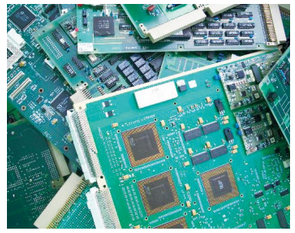
Performance (FY2024)





* Excluding Other and adjustments

Business Overview



Environmental Management & Recycling Business

Total handling of waste, from collection to incineration/landfilling and recycling, ahead of the industry. With comprehensive strength in waste handling and accurate analysis technology, we have built a reliable network to recover as many resources as possible from waste. Waste that cannot be repurposed is incinerated and landfilled to reduce environmental impact.

Waste treatment | Soil remediation | Recycling | Southeast Asia



Nonferrous Metals Business

DOWA's Nonferrous Metals Business has developed through technology to recover a wide range of metals, including copper, zinc, and precious metals, created based on what we learned from the hard-to-treat black ore that used to be collected at our Kosaka Mine in Akita Prefecture. Utilizing recycled raw materials in addition to the limited natural resources, we efficiently produce around 20 types of recycled metals, playing an essential role in the transition to a circular economy.

Precious metals and copper smelting | Platinum group metals smelting | Zinc smelting | Resource development and raw material procurement



Electronic Materials Business

We have leveraged the characteristics of various metals to find new applications and functions. We supply a wide range of metal materials to fields such as electronic devices and energy, realizing innovative products and new experiences.

Semiconductors | Electronic materials | Advanced fine materials



Metal Processing Business

We perform precise, intricate processing of metals, primarily for the automotive field. Through our advanced technology and total reliability, we support innovation in the automotive and electronic device fields.

Copper rolled products | Electroplating | Metal-ceramics substrates



Heat Treatment Business

Our surface heat treatment increases the durability of parts, ensuring safety and security in mobility. This contributes to the extension of life cycles of vehicles such as automobiles and longer usage of limited resources.

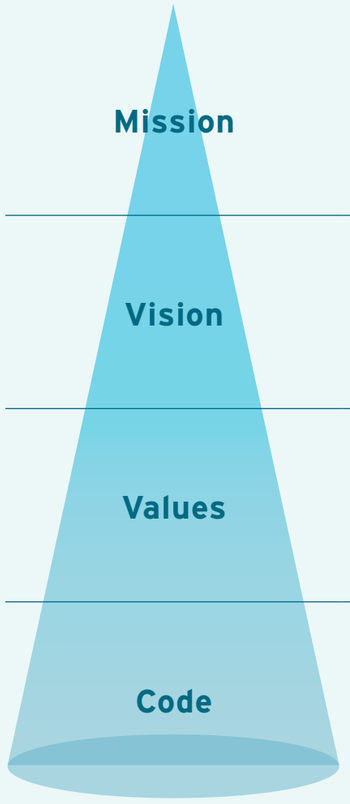
Heat treatment processing | Industrial furnaces

Corporate Mission

We revised our Mission, Vision, Values, and Code in October 2020, based on a long-term perspective. In drafting these revisions, we took into account the culture and corporate spirit we have fostered throughout our history, embedding the values and philosophy of our founder, Fujita Denzaburo, to carry forward his legacy. These guidelines will serve as the foundation of our corporate activities, allowing us to contribute to solving social challenges through our business endeavors.

DOWA's Mission
https://hd.dowa.co.jp/en/company/philosophy.html

The DOWA Group's Mission, Vision, Values, and Code



The reason for the existence of the DOWA Group
Contribute to creating an affluent, recycling-oriented society through our business activities worldwide.

The vision of the DOWA Group (our goal in 2030)
Contribute continuously to building a sustainable future through our core businesses, the promotion of resource recycling, and the provision of excellent materials and technologies.

The values of the officers and employees of the DOWA Group
- Properly understand social issues and address them
- Act honestly and responsibly
- Engage in fair competition
- Embrace change and turn it into an opportunity to challenge ourselves
- Respect diversity and individuals

The exemplary behavior and judgment for the officers and employees of the DOWA Group

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The Origins of Sustainability-Focused Management



Founder
FUJITA Denzaburo
(1841–1912)

DOWA's founder, Fujita Denzaburo, was a businessman during Japan's Meiji era who contributed to the industrial world through his involvement in a broad range of businesses that included construction, railways, textile spinning, power generation, and newspapers, in addition to mining.

Fujita founded the Company in Kosaka Town (Akita Prefecture), where he donated large sums to elementary schools based on the conviction that education is the source of national wealth and power. Further, through the Company's predecessor, Fujita Gumi, he established social capital by introducing electric utilities, constructing railways, maintaining waterworks, and building schools, housing, hospitals, and leisure facilities, such as theaters and sports centers.

This social capital was made available not only to those directly or indirectly involved with the mine but also to residents of local communities. Sustainability management at the DOWA Group is corporate management conducted from a long-term perspective, drawing from Fujita Denzaburo's philosophy of "coexistence between workers and the residents of local communities."

Message from the President

Pursuing Quality in Circularity to Enhance Our Corporate Value and Realize a Sustainable Society



SEKIGUCHI Akira
Representative Director
President and Executive Officer
CEO

Pursue Quality in Circularity

With the Japanese government's announcement of The 5th Fundamental Plan for Establishing a Sound Material-Cycle Society in August 2024, the transition to a sustainable, circular economy has been established as a critical policy issue to be tackled as a national strategy.

In the more than 140 years since the DOWA Group began as a mining business in Kosaka, Akita Prefecture during the Meiji era (1868-1912), we have developed a business model that will contribute to the building of a recycling-oriented society. As Japan and the world as a whole transition to a circular economy, the value of our business has inevitably increased, and I view contributions through our business as the Company's new mission.

As a roadmap to fulfilling that mission, we designated "Pursue quality in circularity" as the main theme of Medium-term Plan 2027, which we announced in May 2025. We intend to pursue even greater quality in circularity by taking pride in the contributions we have made to a recycling-oriented society over so many years and bringing together the technology and knowledge we have developed thus far.

Becoming a Company That Is Resilient to the Market Environment

I will start by looking back on Medium-term Plan 2024, which concluded in fiscal 2024. Formulated by a combination of backcasts from our vision for 2030 and forecasts from our position at that time, Medium-term Plan 2024 centered on implementation of measures that balanced improvements in social value and economic value.

The first main theme, "Evolution of recycling-oriented business model," saw the commercialization of new products and technologies, while the second, "Strengthening sustainability management," laid the foundations for bringing contributions through our business to fruition. I am pleased that these measures were executed successfully. Additionally, our initiatives to increase business investments and shareholder returns were mainly executed according to plan through our capital policy of consciously balancing growth investments, maintenance of a sound financial foundation, and enhancement of shareholder returns.

With that said, while our financial targets for fiscal 2024, the final year of the Medium-term

Plan, were ¥60 billion in operating income and ¥70 billion in ordinary income, unfortunately our results were ¥32.2 billion in operating income and ¥43.5 in ordinary income. While we improved profitability and business efficiency by reviewing our business portfolio, centering on the Nonferrous Metals Business, the Company's income was severely impacted by changes in our external environment such as decreases in metal prices, particularly platinum group metals, increases in electricity prices, stagnation of the Chinese economy, and fluctuations in production in the automotive industry. Our Electronic Materials Business in particular suffered a major loss of income due to drastic market changes.

I am conscious that the outlook for the global economy is extremely unclear and it is difficult to make accurate predictions for the future. It is extremely important to build businesses that can respond quickly and flexibly to changes so that we can be resilient to major changes that could happen in future. The other key will be to develop as many stable businesses as possible that are not affected by external changes. That is to say, we need a good balance between businesses that are highly adaptive to changes in our environment and businesses that are robust enough to withstand changes. That is the Group's basic principle for achieving steady profits in the medium to long term.

The Competitive Edge We Will Build Through Quality in Circularity

As I mentioned at the beginning, the Japanese government has designated a transition to a circular economy as a government strategy. Thus far, circularity has centered on the three Rs, reduce, reuse, and recycle, but we are now entering an age where qualitative innovation in the area of resource recycling will be required, so the social value of the work done by our Environmental Management & Recycling Business and Nonferrous Metals Business will grow more and more. On the other hand, many companies will enter the recycling business in order to meet society's demand, so we can also expect competition to intensify. If we stick to the same business practices as before, we will get lost in the shuffle.

It is with that background in mind that we designated "Pursue quality in circularity" as the main theme of Medium-term Plan 2027 (FY2025-2027) with the aim of using the technologies and recycling-oriented business model that we have developed over the last more than 140 years as growth drivers to realize a cycle of high quality.

"Quality in circularity" comprises two elements: "integrated circularity" and "long-term circularity."

Under "integrated circularity" we will carry out initiatives to regenerate and utilize waste that we have thus far been unable to utilize as part of our resource recycling. After usable resources are collected, we are left with hard-to-treat waste containing concentrated hazardous substances. There is a social need for advanced treatment technology to treat that waste safely and stably and detoxify or decrease it, and that need is likely to grow. In addition to resource collection by our Nonferrous Metals Business, which is essential to the Company's promotion of resource recycling, our Environmental Management & Recycling Business is working on intermediate treatment of industrial waste, so we intend to integrate our knowledge and technology from these fields to strengthen the role of recycling and safe treatment as our two wheels. We will further refine elements such as our technology, know-how, and sales platform to take our businesses to a higher dimension.

Our Electronic Materials Business, Metal Processing Business, and Heat Treatment Business are providing products and technical services with added value such as high functionality, durability, energy conservation, and resource conservation. These will contribute to long-term circularity by diversifying the functionality of end products such as automobiles and electronic devices and playing an extremely important role in extending product life cycles themselves.

Strengthening and growing our core businesses through approaches from these two angles is what we mean by "pursuing quality in circularity," and is the fundamental strategy of Medium-term Plan 2027.

When we formulated Medium-term Plan 2027, for some of our businesses our considerations were based not only on our vision for 2030 but on our vision for 2035 to 2040 too. We intend to accurately ascertain the competitive advantages our five core businesses possess, always addressing future social issues, and strengthen each business and consistently increase our corporate value.

Issues to Tackle to Improve Profitability

During the Medium-term Plan 2027 period, we intend to steadily generate profits from the business investments we made under Medium-term Plan 2024. The most crucial issue in Medium-term Plan 2027 is a quick recovery of our Electronic Materials Business, where profitability dropped. We are considering and preparing for execution of specific measures, such as revising our business for conductive powder for next-generation solar panels from a blank slate and securing large orders for LEDs and photo diodes (PDs), which can be expected to sell in large quantities, and we are already in the execution phase. These businesses are the fastest of our five core businesses to adapt to market changes, and we intend to keep an eye on market trends and adapt quickly and flexibly.

Another major issue is the rebuilding of our smelting and recycling complex function in Akita. We are conscious that simply upgrading a facility we have used for more than 100 years is no longer enough to keep pace with changes such as more advanced recycling of metal resources (material recycling) and the stable supply of critical mineral resources, so in addition to upgrading aged facilities, we will carry out dramatic infrastructure development, improving productivity through means such as unmanned operations, remote operations, and remote monitoring and using DX to transform work practices and create workplaces where



diverse personnel can work easily. We plan to invest ¥10 billion during Medium-term Plan 2027 and a total of over ¥100 billion by fiscal 2030. It is a major investment and it is difficult to promise that investment can be recouped in the short term; this investment is intended to build a critical business foundation that will enable the Group to occupy an important position in the circular economy 10 or 20 years from now. I ask for your understanding.

Widening the Scope of Circularity

To further expand our business domain, it will be essential to make our five core businesses more competitive while facilitating closer collaboration between businesses. Our Environmental Management & Recycling Business and Nonferrous Metals Business, two businesses with a high affinity, have already been working together, and their collaborations are a characteristic of the Group. New technological collaborations are also beginning in addition to these two businesses' collaborations. For example, we are beginning to see facility technology that can be used in multiple businesses, such as technology from our Heat Treatment Business being used in waste treatment furnaces in our Environmental Management & Recycling Business. We will explore many new opportunities for businesses to utilize each other's strengths through sharing technology and sales information or collaborating on technology in these ways, and create value that other companies cannot imitate.

Additionally, since it will be impossible for all of the things that are needed in order to realize and promote a circular economy to be done by the Company alone, we will actively work on co-creation with strategic partners. These initiatives are not intended solely to expand the scope of our business; the three key points are whether the parties involved can complement each other's strengths and differentiating elements to become more competitive, whether we can display outstanding leadership in a specialized field, and whether we can build trust relationships with partners.

For example, NIPPON PGM Co., Ltd., a joint venture with TANAKA PRECIOUS METAL TECHNOLOGIES Co., Ltd., has been combining the DOWA Group's dry smelting technology for nonferrous metals and the TANAKA Group's technology for collecting and refining precious metals for more than 30 years, recycling platinum group metals from spent automobile exhaust gas purification catalysts. Acids Co., Ltd., a company selling sulfuric acid that we launched jointly with another company in the same industry, has achieved steady operations for more than 20 years by paying attention to differences in its existing customer bases. The success story we announced in June 2025 about horizontal recycling of materials with Murata Manufacturing Co., Ltd. is another result that we achieved through a long-standing trust relationship.

We are also effectively utilizing M&A as a means to carry out business development with a sense of urgency. In particular, we aim to expand the domain of our businesses related to waste treatment and recycling through M&A, both in Japan and in Southeast Asia. Many Japanese companies with significant interest in a circular economy are expanding into Southeast Asia, so our policy is to start by collaborating with those Japanese companies. We then intend to use success stories from our collaborations with Japanese companies, utilizing our existing Group bases while encouraging involvement from local companies. I have a strong desire to make Japan a hub for resource recycling in Southeast Asia.

Going forward, we will continue to think outside our current domain and actively expand the scope of our cycle to include fields where we can expect synergies, businesses with potential for development, and fields where we can put the Company's knowledge and personnel to good use.

Balancing a Response to Climate Change with Profitability

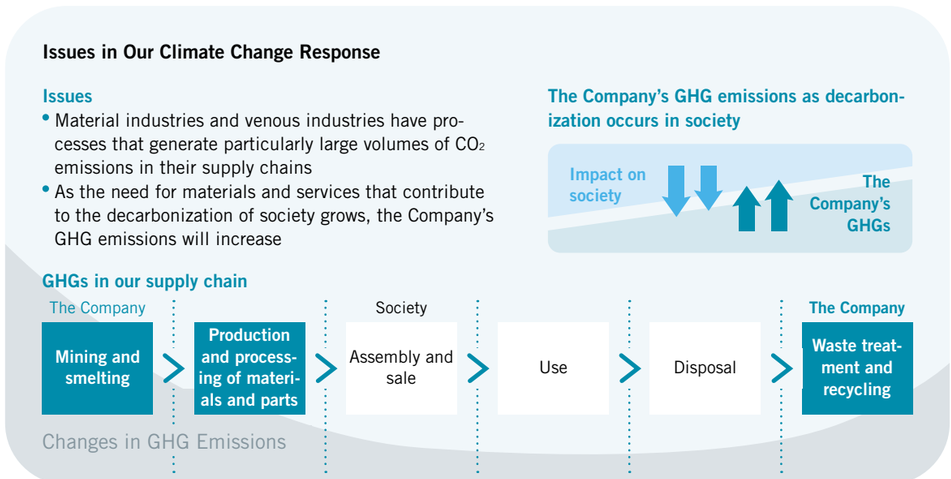
We aim to achieve a carbon-neutral society by 2050. Under Medium-term Plan 2027, we will execute measures against climate change that enable a balance with making our businesses more competitive, based on the response policies, targets, and action plans from the last three years.

We will continue to focus on developing technology to balance direct reduction of GHG emissions and a greater competitive edge for our businesses. For example, we will utilize the Bio-coke developed by our Environmental Management & Recycling Business as fuel for waste treatment furnaces and metal smelting furnaces. This will serve as an alternative to fossil fuels and contribute to a transition to carbon-neutral energy. This initiative is extremely promising: if it goes smoothly, we will be able to create and sell carbon credits while operating our factories.

In terms of reducing GHG emissions from electricity, we are working to increase our ratio of electricity generated in-house through measures such as introducing solar panels, but our zinc smelter in Akita (Akita Zinc) requires a large amount of electricity, so it is not realistic to achieve our transition to renewable energy entirely by generating our own electricity. We therefore believe that transitioning to zero-carbon power supplies according to Japan's Strategic Energy Plan will also be an important solution.

We are also providing the market with a wide range of products and services that contribute to measures against climate change. We have named these DOWA Green Action and intend to increase net sales by at least 1.6 times between fiscal 2022 and fiscal 2030. Material life cycles are one of the Company's social missions, but since the recycling process requires an enormous amount of energy, there is no avoiding the fact that expanding sales will directly increase GHG emissions. GHG emissions are also unavoidable in the incineration of waste.

However, we hope that you will use life cycle assessments (LCAs) to objectively evaluate how the use of the Company's products and services contributes to decarbonization throughout our supply chain, so that you can see that it is possible to balance continuous growth of the Company with the realization of a carbon-neutral society.



Strengthening of Management Foundation

Many of our production bases in Japan are in regions facing social issues such as population decline and an aging population. This means that there is an urgent need to strengthen our management foundation by means such as introducing DX and strengthening our technical capabilities and human capital in order to continue our business activities.

In our implementation of DX, we established a foundation for our work under Medium-term Plan 2024 by integrating business data in initiatives such as transformation of our businesses and upgrades of our core systems. At our production sites, DX has been employed in the form of detection of defects and use of image recognition AI. This has contributed to safer facilities and more advanced production technology, as well as contributing to the profits of our businesses. Realizing more transformations of our sites will be the key in Medium-term Plan 2027. It will not be simple, but we will steadily create systems optimized to the Company and each site rather than simply adopting popular technologies. We also intend to continue developing DX personnel.

It is people who take on new endeavors such as developing new technology and maintaining thorough quality control, so human resources development will be essential for the continuous growth of the Group. With such dramatic changes taking place in society, we need personnel who will continue autonomously learning and updating their knowledge, and developing personnel who can understand and relate to a diverse range of values will be important in order to strengthen collaboration between internal and external parties. We will also work to create workplaces where employees can work vibrantly, so that each employee can think for themselves and develop their empathy through various experiences and challenges.

There have also been times when strengthening of communication was an unexpected side benefit that provided opportunities for collaboration between businesses. Our Sustainability Committee, established in 2022 to strengthen our sustainability-related activities, regularly gathers together relevant parties from our operating companies and holdings to exchange opinions and share information on cross-business issues such as carbon neutrality, DX, and personnel development. This has provided more opportunities for relevant parties to discuss their businesses, and there have been cases where collaborations between businesses have arisen as a result. We are even beginning to see effects in businesses where there used to be a lot of vertical division. This simple activity has reaffirmed the importance of open communication.

Strengthening Risk Management and Governance

Having been in the age of VUCA for so long, it is impossible to anticipate all risks and fully prepare for them. This is why a governance system that enables flexible responses to the risks that do eventuate plays such an important role in management.

There is a tendency to focus on external numerical standards such as the ratio of outside directors and the percentage of women among directors and auditors. One of our policies for strengthening the Company's governance is to select outside directors who take an interest in the Company's businesses in and of themselves, understand industry-specific issues and the strategic significance of our measures, and can give opinions based on their own experience.

In addition to creating a Board of Directors that is conducive to outside directors stating their views, we have taken various measures to enable inside directors to actively express their opinions at Board of Directors' meetings.

However, the time available at Board of Directors' meetings is limited and we found that outside directors did not receive enough information about the aims and thoughts of our executive side. The executive side now takes the time to provide preliminary explanations about important matters to outside directors before Board of Directors' meetings. In recent years, we have also created opportunities for outside directors to exchange opinions with managers and other personnel from our businesses. These have been positively received by our outside directors and have led to more active discussion at Board of Directors' meetings. While execution of business is left to each operating company, topics related to Group-wide management strategies are discussed at a cross-business level by the Corporate Strategy Committee and Sustainability Committee. Additionally, at our Business Management Committee's monthly meetings, the status of our business is confirmed based on the previous month's figures, which strengthens governance at a practical level. With regard to risk management in particular, we have built a Four Lines Model connecting the three levels of the Company—DOWA Holdings, operating companies, and operating subsidiaries—as well as the Internal Audit Department of DOWA Holdings to further strengthen our structure.

Message to Stakeholders

Since the Group was first established in 1884, we have sincerely engaged with various social issues and our business environment and passed on a culture of conducting good, honest business through our technology. Going forward, our new mission will be to realize sustainable economic growth based on that spirit as the Japanese government and governments around the world transition to circular economies. However, an issue we face is that it is difficult to make the Company's overall stance and role in directly addressing social issues visible to the general public. The phrase "Pursue quality in circularity" clearly communicates the direction the DOWA Group intends to take, and expresses our desire for as many people as possible to support us in this.

The DOWA Group will continue to pass on the tradition of good, honest business that has been passed on since we were first established and make steady progress toward the realization of a sustainable society. I would like to express my heartfelt wish for the ongoing understanding and support of our stakeholders with a long-term view.



August, 2025

Akira Sedgioh

Representative Director
President and Executive Officer
CEO

DOWA's History

Adapting to Change

Since its founding in 1884, the DOWA Group has worked in the field of basic materials to support the economic development of Japan. Over the course of its history of more than 140 years, the Group has transformed its business and improved and developed its corporate structure while being subject to the variety of business conditions that come with the changing times. Therefore, it is safe to say that our ability to adapt to change, developed over many years, is a characteristic of the DOWA Group.

1884–1989

Evolution beyond a Mining Business

DOWA was established in 1884, after the Japanese government sold the Kosaka mine, the largest silver mine in Japan at the time. More than a decade later, DOWA faced financial difficulties when the mine's silver ore reserves became depleted, compounded by a drop in silver prices. However, DOWA managed to develop technology capable of refining black ore, a complex sulfide ore found in large quantities at the bottom of the silver deposits. This allowed us to revive the Kosaka mine as a copper mine.

From that point on, DOWA expanded as a mining-oriented company, boosted by demand generated by two world wars and post-war reconstruction. The Plaza Accord of 1985, however, led to a rapid appreciation of the Japanese yen and a subsequent and substantial drop in domestic prices for nonferrous metals. This drop in prices caused the profitability of mining, DOWA's then-primary business, to plummet. As a consequence, DOWA was forced to shift away from a mining-oriented business structure.



1907: Roaster at Kosaka mine (currently Kosaka Smelting & Refining Co., Ltd.)



Around 1960: Okayama refinery (currently DOWA Electronics Materials Okayama Co., Ltd.)



Around 1980: Toyooka Plant (currently DOWA Metal Co., Ltd.)

1990–2009

Diversification and Corporate Structure Reorganization

Since 1990, after moving on from mining, we have worked to diversify our business. These efforts built the foundations for the DOWA Group's businesses today but had yet to improve profit levels in any significant way. Taking in this situation, we went forward with reorganizing our corporate structure starting in 2000, with an emphasis on reforming our profit and asset structures and reducing interest-bearing debt. In addition, we committed management resources to our core businesses—the Environmental Management & Recycling Business, the Nonferrous Metals Business, the Electronic Materials Business, the Metal Processing Business, and the Heat Treatment Business—a decision that allowed us to showcase our competitiveness for many years after.



2007: Start of full-scale recycling of nonferrous metals



2009: Start of waste treatment in Southeast Asia

2010 Onward

Stabilization of Profits and Strengthening of Earnings Power

We have utilized our five core businesses to develop a recycling-oriented business model that features an unprecedented smelting and recycling complex that combines appropriate waste treatment with metal recycling. These businesses have also enabled us to provide highly functional materials, technologies, and services and to develop a plethora of niche products. Today, these strengths, among others, make it possible for us to do business on the global stage. We will continue to improve corporate value by strengthening financial and nonfinancial aspects of the DOWA Group.



2010: Introduction of recycling of used lithium-ion batteries

Founding
- Launched Nonferrous Metals Business

1884

1914-1918 World War I

- Launched Metal Processing Business

1919

1939-1945 World War II

- Launched Heat Treatment Business

1958

- Launched Electronic Materials Business

1962 Cuban Missile Crisis

1965

1970

- Launched Environmental Management & Recycling Business

1977

1980

1985 Plaza Accord is announced

1990

1993 European Union is established

2000

2008 Global financial crisis

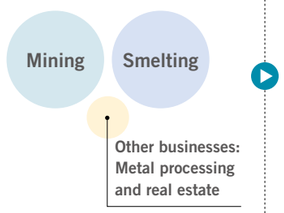
2010

2015 Paris Agreement is adopted

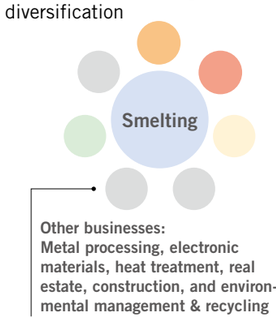
2020

»Changing Our Business

Founding–1980s
Business centered on mining and smelting



1990s
Transition from mining toward diversification

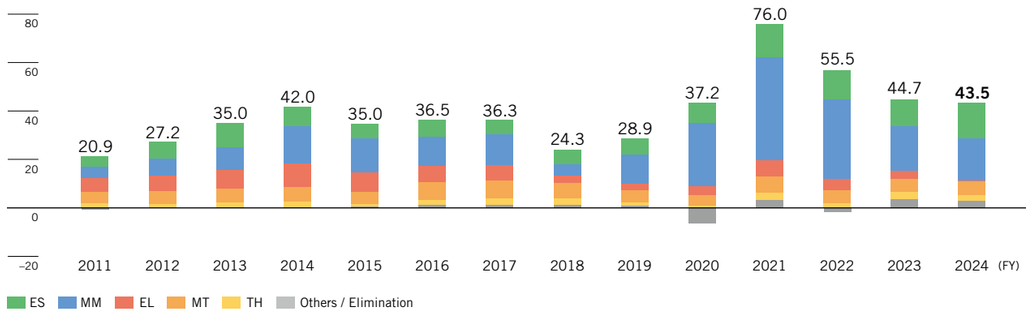


2000s
Formation of recycling-oriented business model using our five core businesses



»Growth of Core Businesses

Ordinary Income Trends
(Billions of yen)

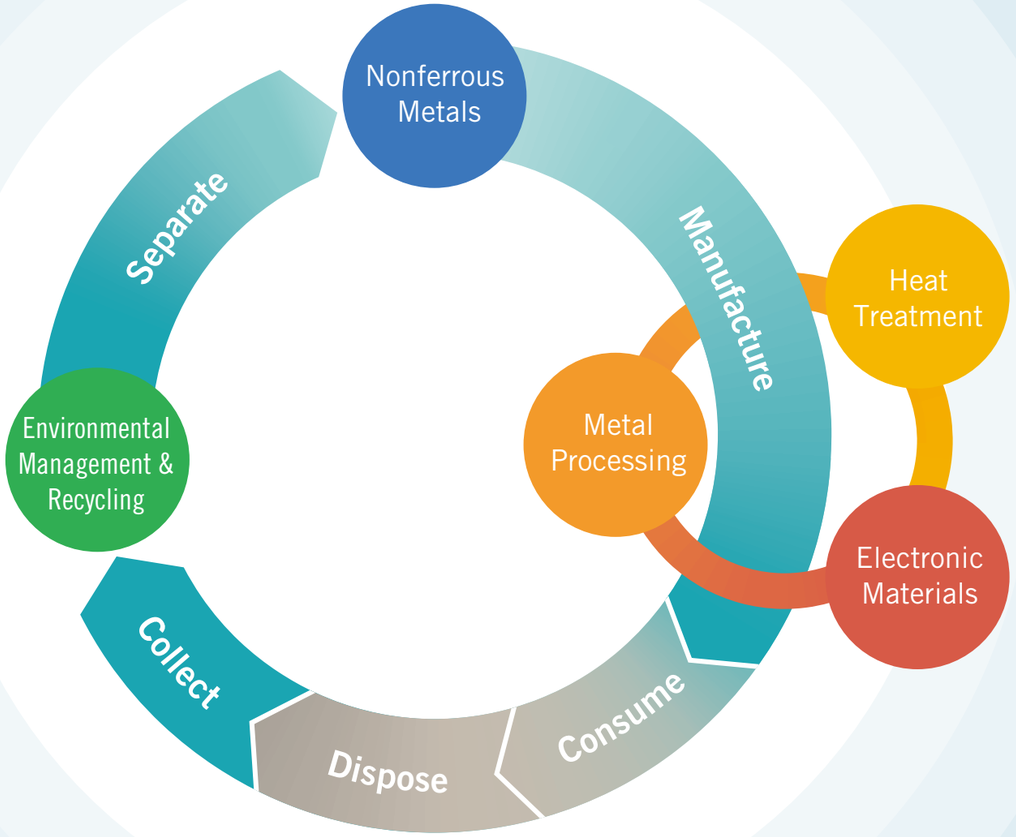


DOWA's Strengths

Recycling-Oriented Business Model

The DOWA Group has a unique recycling-oriented business model that combines its five core businesses.

We offer a wide range of products and services, from materials to parts, with a wide range of applications. These products and services are developed by leveraging our unique and advanced technological capabilities, earning us top market shares and high profitability. In addition, by providing products and services to a wide range of markets, we have created a highly diverse and stable profit structure that is less susceptible to trends in any one market.

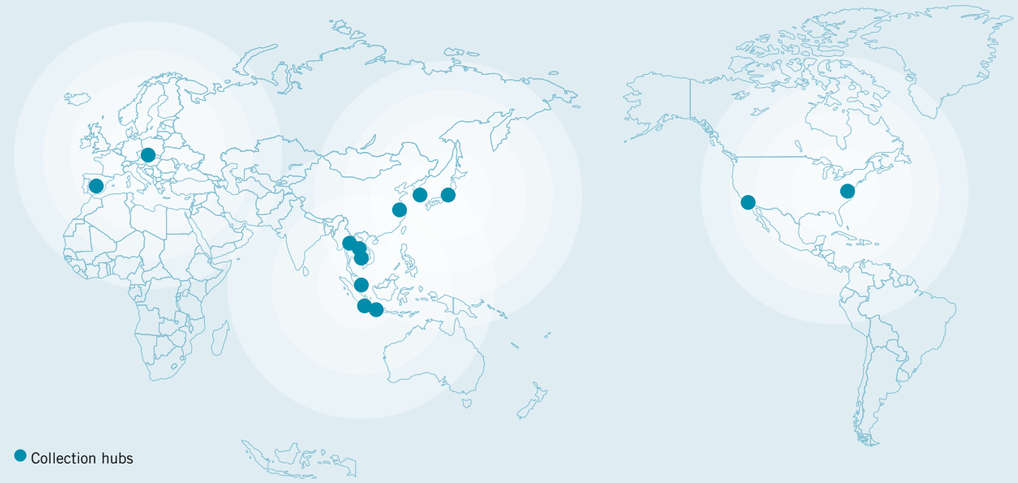


DOWA's Strengths: The Source of Our Recycling-Oriented Business Model

Collect
Collection of Recyclable Resources

Global Collection Network

Our Company has established a global recyclable resource collection network spanning Japan, Asia, North America, and Europe. With pre-processing functions such as crushing, sorting, and heat treatment, as well as both dry and wet smelting methods, we are able to handle a wide variety of recyclable resources—this is one of our key strengths. Additionally, we have established a high level of reliability in sampling and analytical precision. Through direct sales, flexible customer service, and accumulated know-how in material collection, we meet the diverse needs of our clients.



Responding to Diverse Waste

The recyclable resources produced by customers' factories also contain waste. To handle this, we have a waste processing network that covers all of Japan. We operate one of the country's largest incineration facilities, ensuring the safe and efficient reduction of factory waste. We have the equipment and the permits necessary to process almost all types of industrial waste. In particular, we have established a technical advantage in dealing with hazardous waste.



Examples of Hazardous Waste

Occurs mainly in factories and other manufacturing processes ▶

- Explosive, toxic, infectious, etc.
- Containing heavy metals (lead, fluorine, etc.)
- Hazardous substances
- PCB (polychlorinated biphenyls)

And other waste

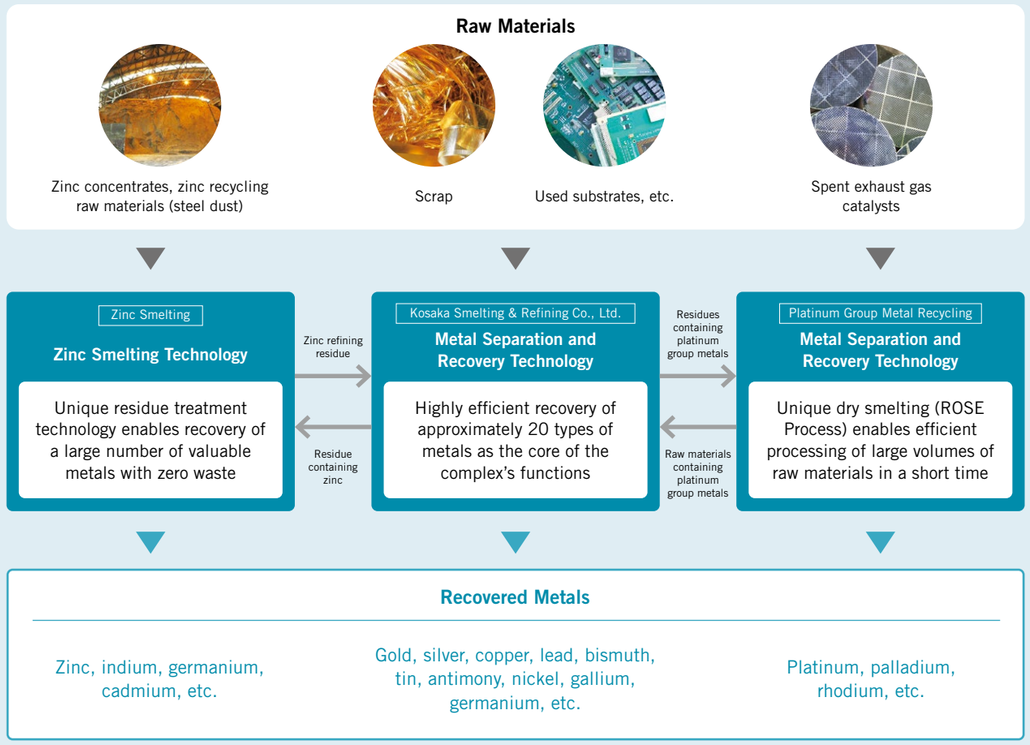
DOWA's Strengths: The Source of Our Recycling-Oriented Business Model

Separate
Highly Efficient Metal Production

A Smelting and Recycling Complex Function

Infrastructure
We have created a fully integrated smelting and recycling complex that centers on a recycling smelter that operates solely on recyclable resources without the need for ore-based raw materials (Kosaka Smelting & Refining Co., Ltd.) and includes Group sites of the Environmental Management & Recycling Business and Nonferrous Metals Business, which are located adjacent to the smelter. The interconnection of these sites' functions enables us to separate many useful metals from recyclable resources in an efficient and economical way.

Technology
Key technologies that support the smelting and recycling complex include Kosaka Smelting and Refining Co., Ltd.'s metal separation technologies, technologies for the production of high-purity zinc, and technologies for recovering platinum group metals (PGMs) from spent exhaust gas purification catalysts. These unique DOWA Group technologies form the foundation of the complex.



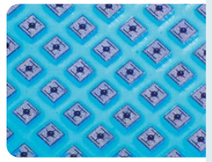
Manufacture
High Value-Added Metal Materials

Harnessing the Potential of Metals through Technical Expertise

In the Electronic Materials Business, Metal Processing Business, and Heat Treatment Business, we develop high-value-added materials and services, primarily using metals. We leverage our extensive expertise and advanced technologies, such as single-crystal and thin-film growth technology for semiconductor materials, technology to control the characteristics of a wide range of powders, alloy control technology for copper rolled products, and surface heat treatment to increase the durability of metals, to contribute to technological innovation for the automotive, electronic device, and energy fields.

DOWA Group Products with a High Market Share

Infrared LEDs
Infrared LEDs are utilized in blood sensors and proximity sensors.



High-purity gallium
High-purity gallium is an essential material in the manufacturing of semiconductor products such as LEDs.



Silver powder
DOWA's silver powder is used in many solar panels both inside and outside Japan.



Silver oxide powder
This material is used for button batteries in small electronic devices such as watches.



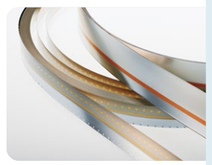
Magnetic recording materials
Used in data storage tapes for data centers, etc.



Copper rolled products used in automobiles
Our highly functional copper rolled products are supporting the electrification of vehicles.



Silver electroplating
Used for applications such as switch parts, contributing to the durability and reliability of these parts.



Atmospheric heat treatment furnaces
This equipment is used for surface treatment of automobile parts to increase wear resistance.



Value Creation Process

The DOWA Group will continue to pursue quality in circularity by expanding cycles through our recycling-oriented business model and further improving the quality of the capital we have amassed thus far. This is the means by which we aim to realize our Vision (our goal for 2030) and enhance our corporate value.

Mission Contribute to creating an affluent, recycling-oriented society through our business activities worldwide

Vision
Contribute continuously to building a sustainable future through our core businesses, the promotion of resource recycling, and the provision of excellent materials and technologies

Input

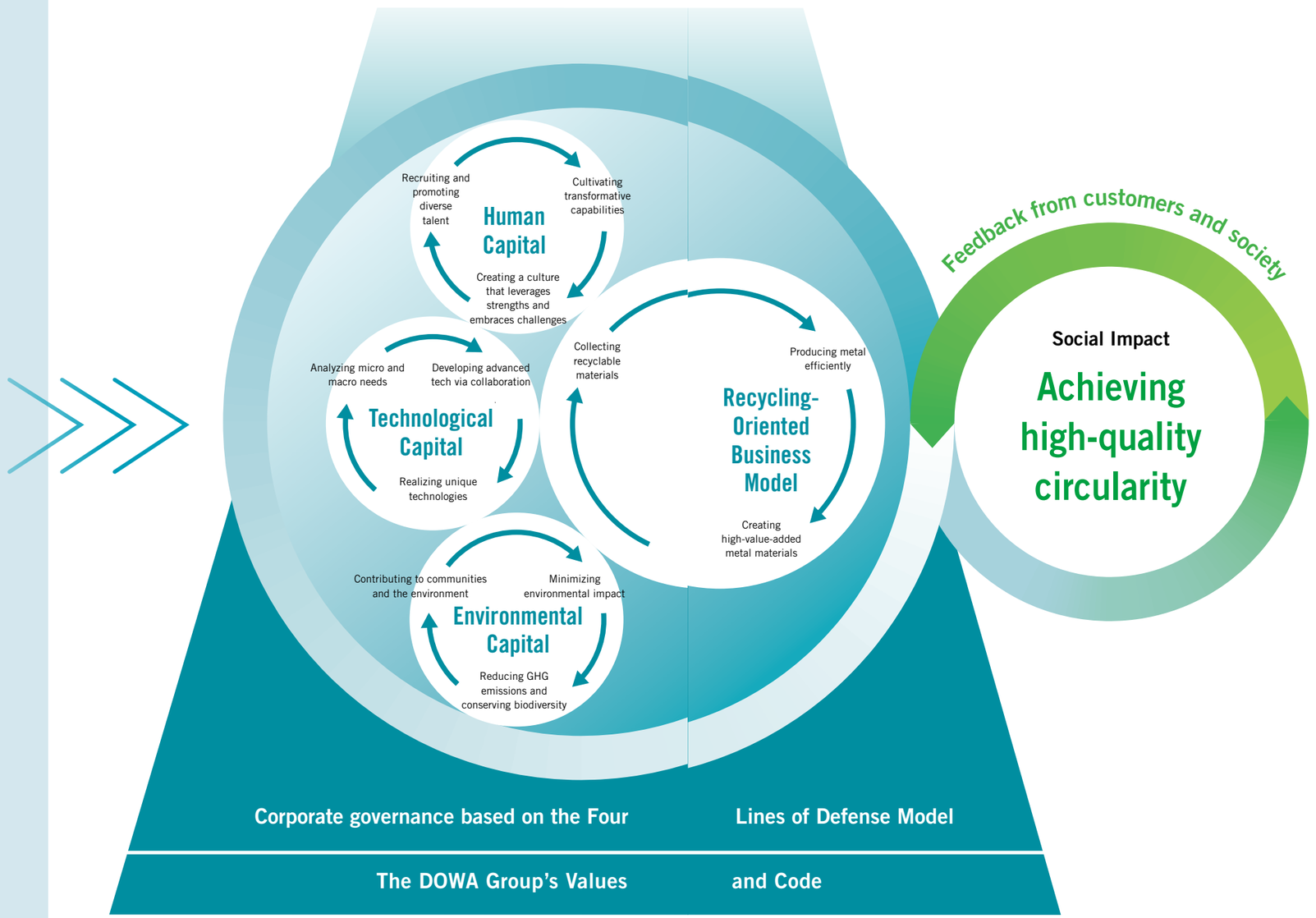
- **Plants and Waste Treatment Facilities** (End of FY2024)
  42 bases in Japan
  31 bases overseas
  Capital expenditures **¥46.7 billion**

- **Diverse and Wide-Ranging Core Technologies** (End of FY2024)
  R&D expenses **¥8.9 billion**

- **Diverse Human Resources to Implement Transformation** (End of FY2024)
  Number of employees (consolidated) **11,337**
  (7,043 in Japan, 4,294 overseas)

- **Relationships of Trust with Stakeholders** (End of FY2024)
  Number of countries that have granted waste treatment permits **6 countries**

- **Financial Base to Support Business Activities** (End of FY2024)
  Shareholders' equity **¥357.3 billion**
  Interest-bearing debt **¥81.2 billion**
  Equity ratio **59.15%**



Outcome

Realizing a society where resource circulation and decarbonization are both achieved

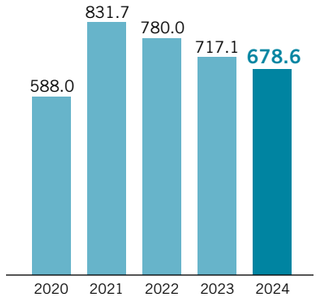
- Increase in Ordinary Income
- GHG Emissions Reduction
- Increase in ROE
- Contribution to Local Communities

Highlights*1

Financial Highlights

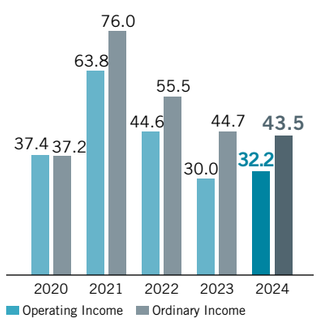
Net Sales

(Billions of yen)



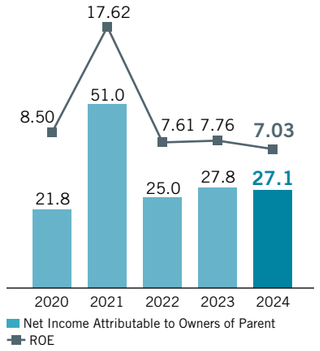
Operating Income / Ordinary Income

(Billions of yen)



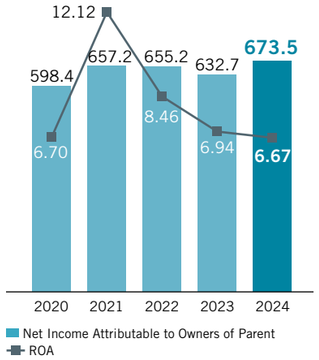
Net Income Attributable to Owners of Parent / ROE*2

(Billions of yen / %)



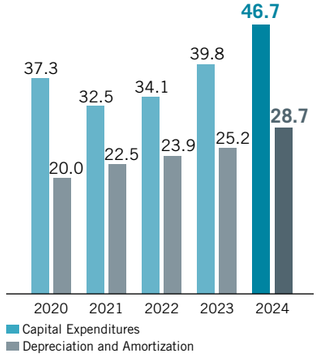
Total Assets / ROA*3

(Billions of yen / %)



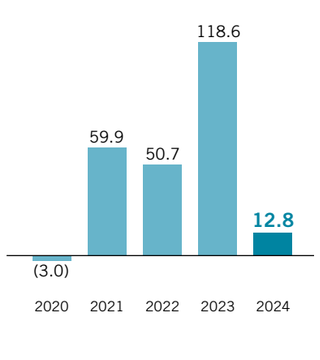
Capital Expenditures / Depreciation and Amortization

(Billions of yen)



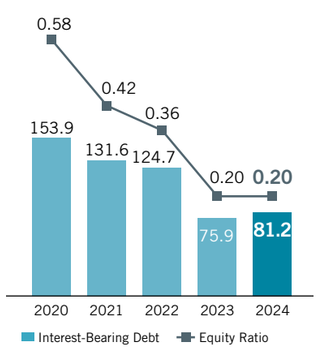
Cash Flows from Operating Activities

(Billions of yen)



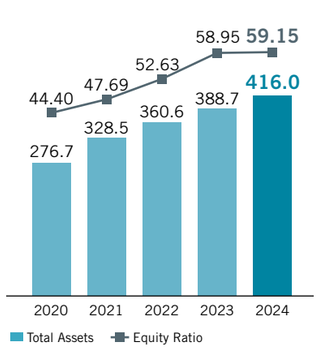
Interest-Bearing Debt / Debt / Equity Ratio

(Billions of yen / Times)



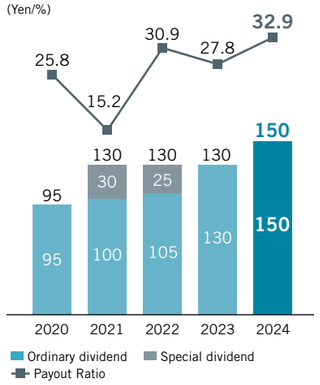
Total Assets / Equity Ratio

(Billions of yen / %)



Cash Dividends / Payout Ratio

(Yen/%)

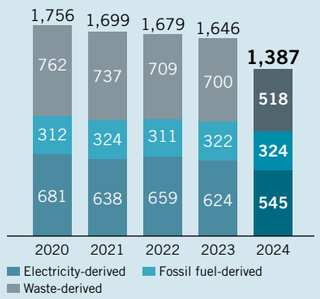


*1 The years stated in the graphs are ended March 31. Thus, "2024" refers to the fiscal year that ran from April 1, 2024, through March 31, 2025.
*2 Net income attributable to owners of parent divided by the average of shareholders' equity (the amounts after deducting non-controlling interest amounts from equity amounts) at the start and end of the fiscal year.
*3 Ordinary income divided by the average of total assets over the course of the fiscal year.
*4. Past fiscal years' CO_2 emissions figures have been changed. Please refer to "Responding to Climate Change" on P.53 for details.

Non-Financial Highlights

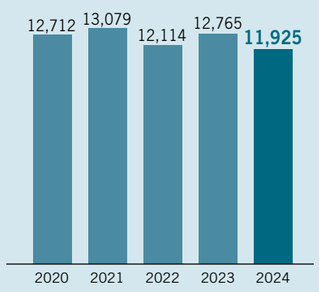
CO_2 Emissions*4

(Thousand t-CO_2)



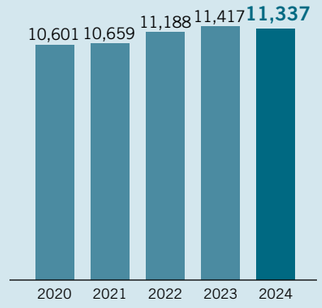
Freshwater Consumption

(1,000 m³)

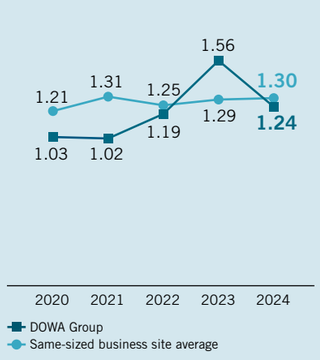


Number of Employees*5

(People)

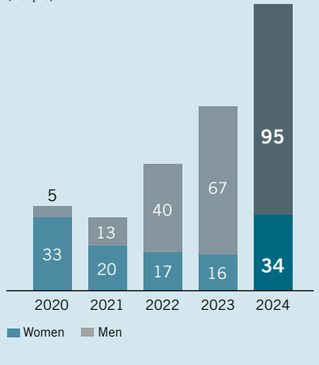


Frequency Rate of Accidents at Work*6



Number of Employees Who Took Childcare Leave*7

(People)



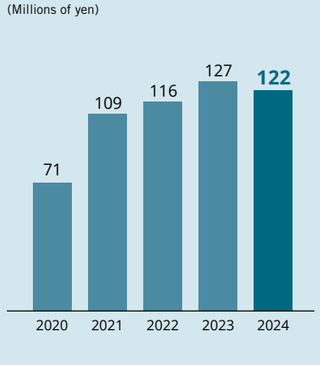
Rate of Annual Paid Leave Taken

(Days / %)



Amount Invested in Education

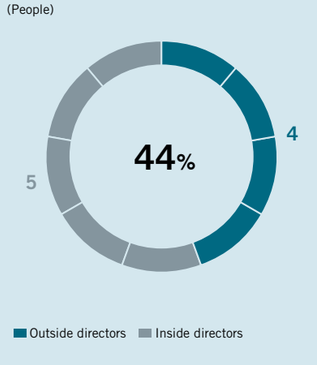
(Millions of yen)



Ratio of Outside Directors

(As of June 28, 2025)

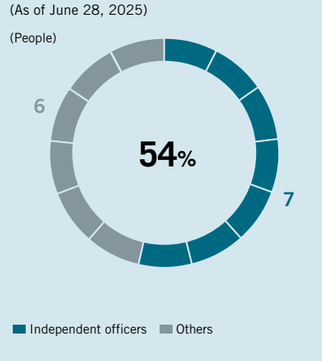
(People)



Ratio of Independent Directors and Auditors

(As of June 28, 2025)

(People)



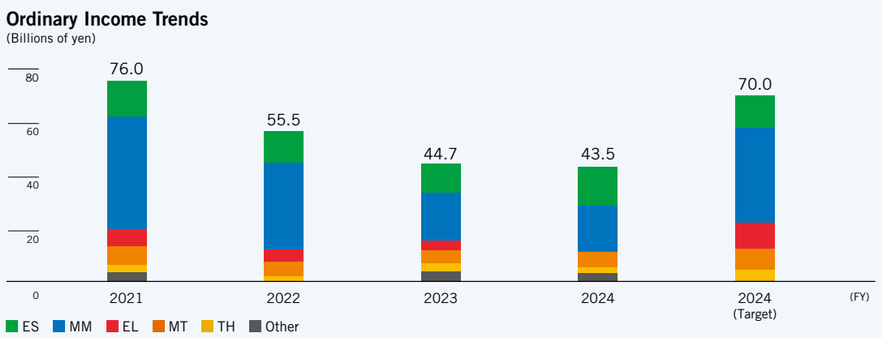
*5 Figures for the entire Group, including part-time employees.
*6 Contractors and dispatch workers are not included in these figures. Please refer to P.60 for figures including contractors and dispatch workers.
*7 Based on the provisions of the Act on Childcare Leave, Caregiver Leave, and Other Measures for the Welfare of Workers Caring for Children or Other Family Members (Act No. 76, 1991), the number of persons taking childcare leave, etc. as defined in Article 71-(iv)-(a) of the Ordinance for Enforcement of the Act on Childcare Leave, Caregiver Leave, and Other Measures for the Welfare of Workers Caring for Children or Other Family Members (Ordinance of the Ministry of Labor No. 25, 1991).

Message from the CFO



We Are Establishing Capital Policy to Support the Growth and Sustainability of Our Recycling-Oriented Business Model and Increase Our PBR

HOSONO Hiroyuki
Director
Managing Executive Officer, CFO



Financial Targets and Results for the Final Year of Medium-term Plan 2024

	Plan	Result
Operating income	¥60.0 billion	¥32.2 billion
Ordinary income	¥70.0 billion	¥43.5 billion
ROA	10% or higher	6.6%
ROE	12% or higher	7.0%
Business investment	¥140.0 billion (three-year cumulative total)	¥118.6 billion (three-year cumulative total)
Dividends per share (Yen)	115 or higher	150

Fiscal 2024 in Review

Under Medium-term Plan 2024, we implemented measures balancing increasing our economic value with increasing our social value in an effort to enhance our corporate value and contribute to the realization of a sustainable society. However, due to impacts from many changes that occurred after we announced the Medium-term Plan in May 2022, we fell short of the financial targets for fiscal 2024, the final year of Medium-term Plan 2024.

Breaking the results down by business, the Environmental Management & Recycling Business achieved higher profits than planned due to an increase in processing of hazardous waste. The Nonferrous Metals Business, on the other hand, achieved lower profits than planned due to factors such as falling PGM prices and rising electricity charges. The profitability of the Electronic Materials Business decreased dramatically due to factors such as intensifying competition for short-wavelength infrared LEDs and photo diodes (PDs) for wearable devices and a decrease in sales of silver powder. The Metal Processing Business and Heat Treatment Business also achieved lower profits than planned as production volumes stagnated due to factors such as certification fraud at Japanese automobile manufacturers.

In terms of business investment, we invested ¥118.6 billion of the ¥140 billion planned for the three-year period. Key investments included the construction and opening of a second landfill site in East Java (DESI) by the Environmental Management & Recycling Business, the expansion of the Metal Processing Business's Asian business, and the development and expansion of sales of heat treatment facilities (Z-TKM) that achieve carbon neutrality by the Heat Treatment Business. Some of these measures contributed to profits during the Midterm Plan 2024 period to a certain degree, and we have assessed that steady progress has been made in achieving returns on those investments.

We also concurrently optimized our business portfolio, and transferred the interests of the Palmer Zinc-Copper Exploration Project to our joint business partner to enable orderly asset replacement.

Medium-term Plan 2027

To continue growing in future, it will be necessary to address issues such as population decline and regional depopulation in Japan. Attention will also need to be paid to policy changes in countries around the world. On the other hand, I believe that the shift to a circular economy being facilitated by the Japanese government will have a positive impact on the Company. Based on this outlook, we established "Pursue quality in circularity" as the theme of Medium-term Plan 2027, which will span the three-year period from fiscal 2025 to fiscal 2027, and are carrying out initiatives for sustainable growth.

A financial issue the Company is facing is that our PBR (price-to-book ratio) is below 1. To solve this issue, we have set two basic strategies in Medium-term Plan 2027 to enhance

our corporate value: “creation of value” and “controlling variability and cultivating expectations.” ROE (net return on equity for the period) will need to be increased in order to create value, and PER (price-to-earnings) will need to be improved to control variability and cultivate expectations, so measures will be carried out to improve both of these indicators.

Creation of Value

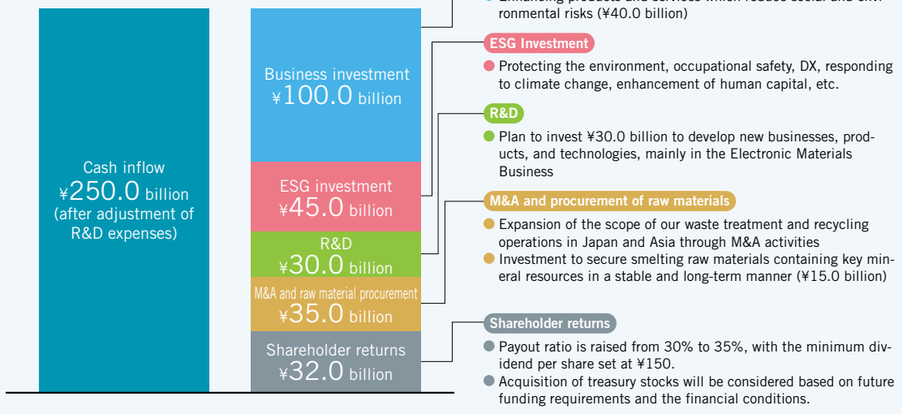
Under Medium-term Plan 2027, we aim to achieve ROE of 10% at the end of fiscal 2027. There are no shortcuts to improving ROE; we will need to steadily strengthen our recycling-oriented business model and achieve continuous growth. To do this, we will need to start by strengthening the earnings power of our five core businesses. We will carry out measures tailored to the attributes of each business. For example, our Environmental Management & Recycling Business, which aims to expand its business domain, will actively carry out measures for maximum utilization of the Company’s strengths. Our Electronic Materials Business will secure new orders to recover its market share for key products, and will optimize its allocation of development resources. Additionally, we will strengthen internal and external partnerships based on new customer needs that will arise with the transition to a circular economy, with the aim of creating innovative cycles.

We will also work to improve capital efficiency. Our capital policy in Medium-term Plan 2027 presumes a sound financial base. This is because the nonferrous metals handled by the Company come with unavoidable risks such as fluctuations in exchange rates and metal prices. It is essential that the Company’s financial base is resilient enough to continue our business activities smoothly even if major price fluctuations occur in a short time. For this reason, we set rating maintenance and an equity ratio of around 60% in Medium-term Plan 2027 to maintain a sound financial base. We will also continue decreasing cross-shareholdings with the aim of reducing listed shares held by the Company by 50% by fiscal 2030.

▶ P.40 Medium-term Plan 2027: Capital Policy and Capital Allocation

Capital Allocation in Medium-term Plan 2027

(Billions of yen)

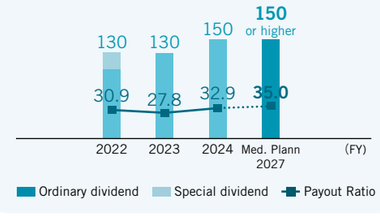


We anticipate that we will be able to obtain ¥250 billion in cash during the three-year period of Medium-term Plan 2027. Our first uses of this capital will be ¥100 billion in business investments and ¥45 billion in ESG investments, including environmental conservation and DX. Additionally, in preparation for the future, we will allocate ¥65 billion for purposes such as R&D for the development of new businesses, products, and technologies and M&A to expand the domain of our Environmental Management & Recycling Business.

Likewise, for shareholder returns, we decided to quantify our policies to further strengthen returns. In addition to increasing our payout ratio from 30% to 35%, we have set ¥150 as a minimum dividend per share so that we can continue to pay dividends steadily and flexibly. We expect to pay ¥159 per share for fiscal 2025. We also plan to flexibly acquire treasury stock.

Cash Dividends/Payout Ratio

(Yen/%)



Controlling Variability

Controlling variability includes investment in large-scale repair and rebuilding of our integrated smelting and recycling complex. This will be a large, long-term project in which we plan to invest over ¥100 billion between fiscal 2027 and fiscal 2030. In addition to drastic improvement of productivity to increase cost-competitiveness, we are deliberating on optimal facility allocation to broaden the scope of materials to be recycled. This investment will be essential in order for the Company to play a central role in establishing a stable profit base as the transition to a circular economy takes place in future. While it is a major investment, the capital to be invested will be raised by the sale of listed shares held by the Company that I mentioned earlier to ensure that we remain financially sound.

▶ P.40 Medium-term Plan 2027: Implementing Major Investments to Maintain Business Continuity

Cultivating Expectations

The Company emphasizes dialogue with shareholders, institutional investors, and other stakeholders. We believe that it is important to utilize that dialogue to provide an in-depth understanding of the Company and leave stakeholders with expectations for the future.

In fiscal 2024, we took around 130 opportunities for dialogue with shareholders and institutional investors. I myself took the opportunity to attend several of these meetings and hear these parties’ opinions directly. Outside directors made their first appearance at the venues for this dialogue in fiscal 2024, enabling more open discussion. Opinions that we receive in these meetings are regularly passed on to the Board of Directors, who discuss the feedback and apply it to the Company’s management where necessary.

Moving forward, we aim to further strengthen these activities so that we can continue to be a company for which everyone has high expectations.

Medium-term Plan

Review of Medium-term Plan 2024 (FY2022–2024)

Under Medium-term Plan 2024, which commenced in fiscal 2022, various measures were carried out to enhance our corporate value, according to the basic policies of “evolution of recycling-oriented business model” and “strengthening of sustainability management.”

Basic Strategy 1 Securing Opportunities for Evolution of Recycling-Oriented Business Model

Themes of focus	Achievements		Challenges
Enhancing metal recycling	• Establishment of a recycling business base in Kumamoto • Start of ruthenium recycling		• Expansion of metal recycling
Achieving both resource recycling and decarbonization	• 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		• Commercialization of decarbonization technologies • Reduction of Scope 1 emissions through an expanded scope of application
Enhancing products and services targeting growth markets	• Acquisition of customer certification for fuel cell materials • Expansion of the copper rolled products business in Asia		• Reaping the benefits of investments • Continuing with future-oriented investments
Reinforcing the structure for supporting the development of new businesses and technologies	• 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		• Launch of company-wide development project • Increase in the number of patents filed

Basic Strategy 2 Mitigation of Risks through Strengthening of Sustainability Management

Themes of focus	Achievements	Challenges
Building a sustainability promotion structure	• Holding Sustainability Committee and Sustainability Subcommittee meetings	• Streamlining activities
Enhancing risk management structure	• Commencing operation of the risk management plan • Reorganizing the quality management system	• Implementing effective risk countermeasures
Strengthening corporate governance	• Increasing the number of outside directors who are women • Increasing the percentage of independent directors on the Board of Directors	• Further strengthening of governance
Responding to climate change	• Establishment of FY2030 contribution targets and a roadmap for climate change action • Setting DOWA Green Action (DGA) targets	• Promotion of an implementation plan • Monitoring the results of activities
Enhancing human capital	• Extension of mandatory retirement • Improving the ratio of newly hired employees who are women	• Enhancing the pool of human resources who can succeed in a competitive environment • Developing an organization where people want to work
Driving DX	• Completing the development of a Group-wide cloud platform	• Organizational and workstyle reforms

Investment

- Business investments were made according to plan overall, and some measures contributed to profits.
- Our business portfolio was reviewed, primarily for our Nonferrous Metals Business, during the Medium-term Plan 2024 period to improve profitability and management efficiency.

	Key measures	Achievements	Evaluation	Challenges
Environmental Management & Recycling	Expanding treatment of hazardous waste	Introduction of new facilities for hazardous waste Increase in hazardous waste processing sales	○	Expanding profits by increasing collection of hazardous waste
	Launch of the second waste treatment site in East Java (DESI)	Launch of operation in January 2023	○	Improving profitability through expansion of collection and stable operations
Nonferrous Metals	Increasing the processing capacity of Nippon PGM	Completion of electric furnace upgrade in FY2023	△	Expanding profits through expansion of collection of raw materials
Electronic Materials	Strengthening revenue base of the semiconductor business	Securing large-scale project for ultraviolet LEDs in FY2023	△	Continuously securing new orders
	Establishing a system for mass-producing fuel cell materials	Acquiring customer certifications	×	Improving profitability by commencing mass production and sale
	Improving the performance and productivity for conductive atomized powder	Expanding sales of conductive atomized powder	△	Further expanding customers
Metal Processing	Expansion of the Asia business	Increase in sales volume in Asia Management streamlining due to the consolidation of Thai sites	○	Expanding profits by securing new customers
Heat Treatment	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	○	Expanding profits by securing new customers
Other	Launch of a Group-wide cloud platform	Entered operation in 2023 Building of data utilization infrastructure and accelerated use of AI	○	Effective operations for transformation of business practices

Business figures

As the new changes implemented from fiscal 2022 significantly impacted our business environment and profits, all of our financial targets were unmet.

	FY2022	FY2023	FY2024	Targets
Operating income	¥44.6 billion	¥30.0 billion	¥32.2 billion	¥60.0 billion
Ordinary income	¥55.5 billion	¥44.7 billion	¥43.5 billion	¥70.0 billion
ROA	8.46%	6.94%	6.67%	10% or higher
ROE	7.61%	7.76%	7.03%	12% or higher

Materiality in Midterm Plan 2024

Major Initiatives and Indicators (KPIs) for Materiality

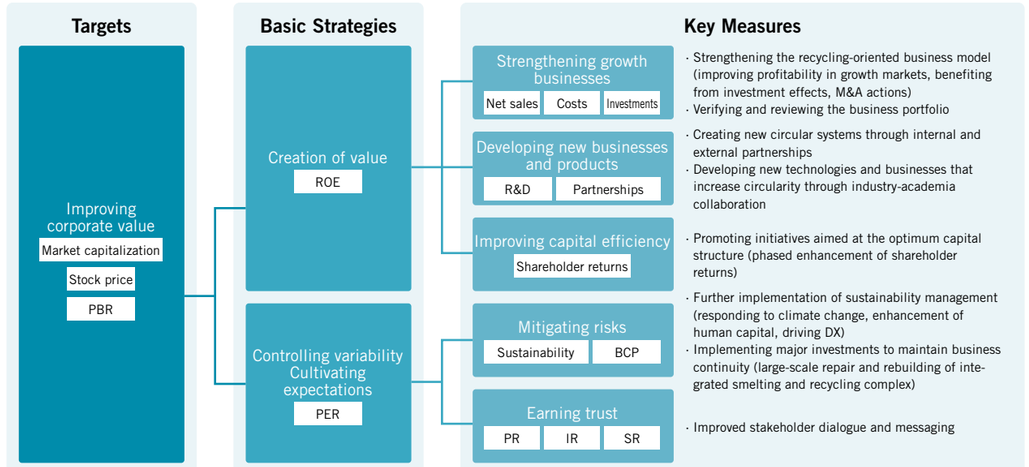
Materiality		Major Initiatives	Indicators (KPIs)	FY2021 results	FY2024 results	Targets
The Environment	Creating a resource-recycling society	Increase in collection of recycled raw materials	Volume of recycled raw materials collected by Kosaka Smelting & Refining (fiscal 2021 = 100)	100	116	110 (FY2024)
			Volume of spent catalysts from automobile exhaust purification collected (fiscal 2021 = 100)	100	68	140 (FY2024)
			Volume of spent lithium-ion batteries recycled and processed (fiscal 2021 = 100)	100	210	400 (FY2024)
		Increase in ratio of metals derived from recycled raw materials	Ratio of metals derived from recycling that are used in production (based on sales in the Nonferrous Metals Business) *1	55%	69%	70% (FY2024)
	Enhancing products and services that reduce social and environmental risks	Expansion of sales of key products and services based on customer needs	—	—	—	—
	Responding to climate change	Promotion of company-wide activities to combat climate change	Establishment of a system to promote climate change response	• Formulated Climate Change Policy • Established Climate Change Action Committee	• Created medium-term scenarios based on TCFD report and roadmap for climate change response • Created action plan toward the next Medium-term Plan	• Publish of TCFD Report • Create a roadmap for climate change response
			Establishment of company-wide policies and targets for climate change response			
			TCFD initiatives			
	Protecting the environment	Establishment of an environmental management system (Establish and maintain ISO 14001- or EA21-compliant systems)	Ratio of business locations operating under DOWA's EHS-MS that are compliant with ISO certification	—	99%	100% (by March 31, 2025)
		Improvement of risk management (Minimize risk of environmental accidents and improve response capabilities)	Number of environmental accidents	0	5	0
Social	Ensuring occupational safety and health	Improvement of management system	Ratio of business locations operating under DOWA's EHS-MS that are compliant with ISO certification	—	99%	100% (by March 31, 2025)
		Prevention of recurrence of work-related accidents	Frequency rate (including dispatch workers, excluding contractors)	1.23	1.28	0.7 (FY2024)
			Severity rate (including dispatch workers, excluding contractors)	0.02	0.01	0.01 (FY2024)
		Promoting Health Management	Ratio of employees who received regular medical examinations	—	99% (Group-wide)	100% (Group-wide)
	Increasing organizational power (including promotion of diversity, job security, and human resource development)	Reduction of resignation rate	Average retention rate three years after joining the Company (for new graduates at DOWA HOLDINGS*2)	94%	89%	Maintain 100% rate
			Implementation of job satisfaction surveys for employees	—	Continued survey implementation	Conduct surveys on a regular basis
		Disclosure of Policy for Human Resources Development	Formulation of a human resource development policy and publishing of the policy inside and outside the Company	—	Built educational environment for self-study based on Policy for Human Resources Development	Announce and disseminate policy
		Development of global human resources	Implementation of education before overseas assignments and expansion to include post-assignment education	—	Continued post-assignment online education	Continue implementation of educational programs
		Greater support for balancing childcare and nursing care with work	Increase in the ratio of men that take childcare leave	10%	89.1%	100% (fiscal 2024)
		Reduction of working hours	Increase in the ratio of annual paid leave days taken (DOWA HOLDINGS*2)	76.7%	82.9%	80% or higher
		Promotion of the participation and advancement of women	Increase in the ratio of new hires who are women (DOWA HOLDINGS*2)	19%	27%	30% or higher
		Promotion of the participation and advancement of employees up to the age of 65	Introduction of an option to postpone retirement	Built system	100%	Introduce at all subsidiaries
		Protection of human rights	Elimination of harassment	Formulated Human Rights Policy	Continued DEI training and harassment training	Continue to implement training
		Promotion of the participation and advancement of people with disabilities	Ratio of employment of people with disabilities	2.6% (DOWA HOLDINGS)	2.7% (DOWA HOLDINGS)	2.3% or higher (Group-wide)
Governance	Promoting risk management	Creation of an ISO 9001-compliant system	Compliance rate of business locations that create products	72%	87%	80% (fiscal 2024)
		Establishment of quality assurance education	Number of participants	—	Total of 546	350 total (FY2022 to FY2024)
	Strengthening corporate governance	Effective and efficient development and operation of internal control systems	—	—	—	—
	Driving DX (data utilization)	Building of IT infrastructure	Operation of a Group-wide cloud platform	Commenced development	Started operation August 2023	Start operation in the second half of fiscal 2023
		Development of DX-proficient human resources	Number of personnel trained	14	Total of 193	80 total (FY2022 to FY2024)

*1 "Recycled raw materials" in this item includes secondary smelting raw materials other than recycled raw materials for Kosaka Smelting and Refining Co., Ltd.
*2 "DOWA Holdings employees" includes employees seconded from DOWA Holdings to Group companies and excludes those seconded from Group companies to DOWA Holdings.

Medium-term Plan 2027 (FY2025-FY2027)

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, and the implementation of measures such as strengthening growth businesses, developing new businesses and products, improving capital efficiency, and mitigating risks.



Key Measure 1 Strengthening the Recycling-Oriented Business Model

Area	Business	Key Measures
Resource recycling	Environmental Management & Recycling Business	· Establishing comprehensive recycling sites in Japan · 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
Waste management	Environmental Management & Recycling Business	· Securing earnings through the acquisition of post-PCB waste · Promoting the treatment of highly profitable waste in Southeast Asia
Automotive	Metal Processing Business	· Shifting to high value-added products through optimization of the product portfolio · 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	· Expanded sales of fuel cell materials
	Metal Processing Business	· Expanded sales of metals and ceramic substrates for power modules
Telecommunications	Electronic Materials Business	· 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

Key Measure 2 Creating New Circular Systems through Internal and External Partnerships

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

Key Measure 3 Implementing Major Investments to Maintain Business Continuity

We will launch measures to fundamentally address the challenges faced by our smelting and recycling complex. We will build a sustainable business infrastructure and link the shift to a 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 (FY2027: ¥10.0 billion, FY2028–FY2030: ¥90.0 billion)
  → 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 by introducing renewable energy and driving DX (solving fundamental challenges)

Financial Targets

We aim to achieve ordinary income of ¥60.0 billion and an ROE of 10% in FY2027, the final year of Medium-term Plan 2027.

	Fiscal 2024 Results	Fiscal 2025 Targets	Fiscal 2027 Targets
Operating income	32.2 billion	24.0 billion	47.0 billion
Ordinary income	43.5 billion	34.0 billion	60.0 billion
ROA	6.6%	—	9% or higher
ROE	7.0%	—	10% or higher

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 ¥250.0 billion (3 years)

* After adjustments for research and development expenses

- 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 expense
- Ensure an equity ratio of approximately 60%
- Aim for 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	**Business investment: ¥100.0 billion** · Creating a resource-recycling society: ¥60.0 billion · Enhancing products and services which reduce social and environmental risks: ¥40.0 billion
ESG investment ¥45.0 billion	· Protecting the environment: ¥17.0 billion, occupational safety and health: ¥14.0 billion, digital transformation (DX): ¥4.0 billion, responding to climate change: ¥3.5 billion, enhancement of human capital: ¥2.0 billion
Laying the groundwork for the future ¥65.0 billion	**Research and development: ¥30.0 billion** · Plan to invest ¥30.0 billion 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** · Expansion of the scope of our waste treatment and recycling operations in Japan and Asia through M&A activities · Investment to secure smelting raw materials containing key mineral resources in a stable and long-term manner (¥15.0 billion)
Shareholder returns ¥32.0 billion or more	· Payout ratio is raised from 30% to 35%, with the minimum dividend per share set at 150 yen · Acquisition of treasury stocks will be considered based on future funding requirements and the financial conditions

Review of Materiality

We reviewed our materiality at the start of Medium-term Plan 2027. An issue with our previous materiality was that the direction and scope of specific activities were difficult to understand. To rectify this, we redefined our goal for 2030 for each materiality item and formulated a roadmap to accomplish each goal. Our materiality in Medium-term Plan 2027 was set based on this.

▶Materiality in Medium-term Plan 2027

Environment

Materiality	Key measures	Indicators (KPIs)	Targets
Creating a resource-recycling society Enhancing products and services that reduce social and environmental risks	Further strengthening the recycling-oriented business model	Number of themes for creating businesses combining arterial and venous elements	3 or more new orders (FY2027)
	Expansion of categories of recycled metals and metal products	Number of certified recycled metal categories (FY2024: 8 categories)	15 or more categories (FY2027)
	Promotion of recycling that contributes to green transformation (GX)	Volume of spent lithium-ion batteries recycled and processed (FY2024 = 100%)	400% (FY2027)
Responding to climate change	Management for GHG reduction	GHG emissions (Scope 1 and 2)	Reduction by 22% compared to FY2013 (FY2027)
	Creating and expanding products and services that contribute to society's measures to combat climate change	Number of DOWA Green Action categories (FY2024: 22 categories)	50 or more categories (FY2027)
Protecting the environment	Strengthening environmental management systems compliant with ISO14001 and EA21 certification	Ratio of business locations operating under DOWA's EHS-MS (environment, health, and safety management system)	100% (FY2027)
	Prevention of pollution and environmental accidents	Number of environmental accidents	0
	Conservation of biodiversity	Information disclosures based on TNFD	Establishment of a system to address biodiversity

Social

Ensuring occupational safety and health	Strengthening health and safety management systems compliant with ISO45001	Ratio of business locations operating under DOWA's EHS-MS (environment, health, and safety management system)	100% (FY2027)
	Prevention of recurrence of work-related accidents	Frequency rate (including dispatch workers and contractors)	0.7
		Severity rate (including dispatch workers and contractors)	0.01
	Permeation of health and productivity management	Ratio of employees who received regular medical examinations (Group-wide)	100%
		Strengthening the framework for promoting health and productivity management	Expansion of the quality and quantity of health and productivity management
Enhancing human capital	Reduction of resignation rate	Retention rate of new hires three years after employment (DOWA Holdings employees)*	100%
	Greater support for balancing childcare and nursing care with work	Ratio of male employees taking childcare leave (DOWA Holdings employees)*	100% (FY2027)
	Reduction of working hours (management of total working hours and taking annual paid leave days)	Ratio of paid leave days taken	80%
	Promotion of the participation and advancement of women	Ratio of new hires who are women (DOWA Holdings employees)*	30%
Respecting human rights	Strengthening the Group's human rights response	Identification of key human rights risks in the value chain	Identifying and addressing salient human rights issues
	Spreading awareness of human rights	Implementation of education on key human rights risks	Continuous implementation and expansion of material

* "DOWA Holdings employees" includes employees seconded from DOWA Holdings to Group companies and excludes those seconded from Group companies to DOWA Holdings.

Governance

Strengthening corporate governance Promoting risk management	Cultivating an internal control environment	Strengthening internal control education	Expansion of stratified education
Upgrading quality assurance	Strengthening quality assurance systems compliant with ISO 9001	Compliance rate of domestic business locations with products	100% (FY2027)
	Strengthening quality assurance education	Number of participants	500 total (fiscal 2025-2027)
Driving DX (data utilization)	Business transformation through the use of DX, AI, and the cloud	DX Promotion Indicators (management side) (FY2024: 3.0)*	3.3 (FY2027)
	Strengthening of IT governance	DX Promotion Indicators (IT side) (FY2024: 2.7)*	3.0 (FY2027)
	Training of DX personnel	Number of DX engineers trained	150 total (FY2025-FY2027)

* "DX promotion indicators" are tools provided by the Information-technology Promotion Agency, Japan (IPA). Evaluation points are calculated through self-grading using the format provided by IPA. Reference: https://www.ipa.go.jp/digital/dx-suishin/about.html

Set by backcasting

▶Goal for 2030 for each materiality item

Materiality	Measures	Overview of measures	Goal for 2030
Common items	Education, personnel development, and culture-building	Provide workers with the necessary knowledge and skills through training and seminars and create a culture for applying the knowledge and skills to operations and engaging in self-study	Workers acquire the necessary knowledge and skills autonomously and effectively, and continuously improve their performance
	Enhancing information disclosures and dialogue	Strengthen corporate governance code, climate change action (Scope 3, third-party guarantees), human rights response, and response to social needs such as biodiversity	The Company is highly regarded by stakeholders such as customers, relevant ministries and agencies, residents of local communities, and investors, and maximizes its corporate value
Creating a resource-recycling society Enhancing products and services that reduce social and environmental risks	Support for development of new technology	Develop new technology to drive business growth, promote commercialization, and create foundations for this technology	Development and commercialization of new technology creates highly competitive businesses that contribute to profits and to society
	Strengthening of development and planning capabilities	Develop personnel with the capability for planning of technology development beyond operating companies, and strengthen collaboration between operating companies	Advancement of personnel who can facilitate collaboration between operating companies and with outside parties enables effective technology development throughout the Group
Responding to climate change	Balancing decarbonization and business activities	Execute CO_2 reduction plans for climate change action and introduce Group-wide measures to improve effectiveness	There is a balance between resolution of environment-related social issues, such as climate change action, and resolution of business issues, enabling sustainable business activities
Protecting the environment	Strengthening capabilities for execution of business activities	Promote site improvement and risk countermeasures	Environmental, health, and safety risks are minimized at business locations
Ensuring occupational safety and health	Strengthening capabilities for execution of business activities	Promote site improvement and risk countermeasures	Environmental, health, and safety risks are minimized at business locations
Enhancing human capital	Strengthening of diversity in hiring and improvement of retention rate	Strengthen competitiveness in hiring throughout the DOWA Group, strengthen hiring of core personnel through career hiring, and improve engagement	The necessary personnel have been secured and a wide range of personnel, including women, people with disabilities, and seniors, are consistently working here
	Creation of comfortable environment to work in	Revise working practices and system for responding to changes in values, promote diversity, and create a comfortable environment to work in	Our hiring and working environments enable employees to show their individuality and capabilities to their fullest extent and employees want to continue working here
	Creation of motivation to work and sense of fulfillment	In addition to utilizing DX to put the right people in the right places, promote health management, ensure a work-life balance, and improve engagement	Employees are healthy, fulfilled in their daily lives, and work actively to contribute to the development of the Group
Respecting human rights	Full-scale human rights response	Create frameworks and systems for human rights responses and take appropriate measures based on human rights issues discovered among workers through monitoring	The human rights of every person involved in the DOWA Group's corporate activities are protected
Strengthening corporate governance Promoting risk management	Establishing an internal governance framework as a company	Under the Four Lines Model, build and operate systems for checking on each line	The roles of governance are fulfilled at every level from the first line to the fourth and governance is carried out at a high level
	Establishing workflows, digitalization, and saving of digital documents	In addition to building frameworks for fast and appropriate sharing of information through electronic workflows, build frameworks for reliable recording and storing of information through digitalization and digital document storage frameworks	The information necessary for internal governance is shared, recorded, and stored appropriately and effectively
Upgrading quality assurance	Rebuilding quality assurance framework	Build frameworks for monitoring through the establishment of various regulatory and quality management frameworks	Frameworks for monitoring of execution have been established and effective risk governance is taking place throughout all quality assurance activities
Driving DX (data utilization)	Promotion of innovation and strengthening of security for existing technology and operations	Implement IT and data utilization to transform manufacturing and strengthen security	Under safe security frameworks, data is being utilized through digital technology such as AI to save or eliminate labor and operations and tasks are being monitored at a high level

Creating a Resource-Recycling Society: Enhancing Products and Services that Reduce Social and Environmental Risks

The global transition to a circular economy has accelerated in recent years. The DOWA Group considers material recycling to be its raison d'être. Through our unique recycling-oriented business model, we aim to make effective use of limited resources to contribute to the realization of a circular economy.

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

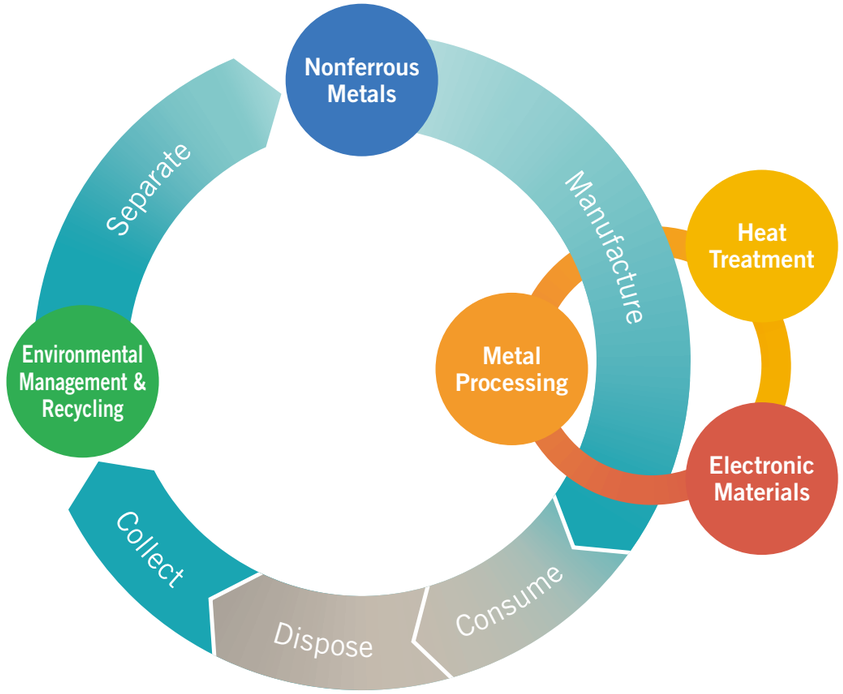
A Recycling-Oriented Business Model to Realize True Circularity

The DOWA Group has built a unique recycling-oriented business model, and makes integrated, multifaceted contributions through a resource cycle and recycling that comprises "Consume," "Dispose," "Collect," "Separate," and "Manufacture."

Specifically, our Environmental Management & Recycling Business collects products and other items that have reached the end of their lives and been disposed of. Working together with our Nonferrous Metals Business, they separate resources and regenerate them so that they can be used as materials. Through this process, they detoxify waste and recycle metal, reducing environmental impact. Once the materials are regenerated, our Electronic Materials Business, Metal Processing Business, and Heat Treatment Business use advanced technologies to further enhance the materials' value, contributing to more advanced, more functional products such as automobiles and electronic devices.

Fulfilling Japan's national strategy of realizing a circular economy will require true circularity that goes beyond simple recycling. We believe that the Company's recycling-oriented business model is an effective approach to achieve this goal.

Recycling-Oriented Business Model



Initiatives Under Medium-term Plan 2024

Our Group has built a recycling-oriented business model that realizes a cycle from the collection of recycled raw materials to the efficient production of metals and the enhancement of their value.

Status of Achievement of KPIs in Medium-term Plan 2024

Key Measures	Indicators	Targets	Fiscal 2024 Results
Increase collection of recycled raw materials	Volume of recycled raw materials collected for Kosaka Smelting & Refining (fiscal 2021 = 100)	110	116
	Volume of spent catalysts from automobile exhaust purification collected (fiscal 2021 = 100)	140	68
	Volume of spent lithium-ion batteries recycled and processed (fiscal 2021 = 100)	400	210
Increase ratio of metals derived from recycled raw materials*	Ratio of metals derived from recycling that are used in production (based on sales in the Nonferrous Metals Business)*	70%	69%

* "Recycled raw materials" in this item includes secondary smelting raw materials other than recycled raw materials for Kosaka Smelting and Refining Co., Ltd.

Increase in Collection of Recycled Raw Materials

Our Company has established a global raw material collection network spanning Japan, Asia, North America, and Europe. Through direct sales, flexible customer service, and accumulated know-how in material collection, we meet the diverse needs of our clients.

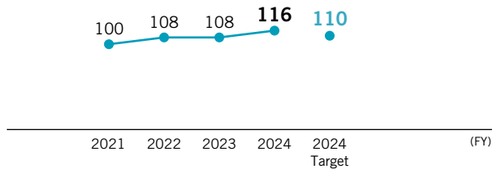
▶Volume of Recycled Raw Materials Collected for Kosaka Smelting & Refining

Competition for the collection of recycled raw materials is increasing globally. The quality of the metal being used in substrates is also decreasing as industries seek to conserve metal in substrate production.

We have responded to this by expanding our pretreatment functions to improve our handling of lower-quality materials and Increase in waste, as well as expanding our collection areas. As a result, our collection volume exceeded our Medium-term Plan 2024 target of 110 by 6 points.

Volume of Spent Lithium-ion Batteries Recycled and Processed

(fiscal 2021 = 100)

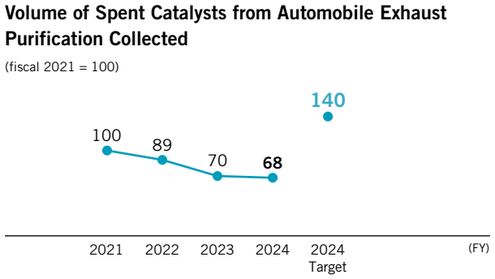


Creating a Resource-Recycling Society: Enhancing Products and Services that Reduce Social and Environmental Risks

▶Volume of Spent Catalysts from Automobile Exhaust Purification Collected

In terms of spent catalysts from automobile exhaust purification, platinum group metal prices have decreased since fiscal 2022. With prices continuing to stagnate since then, there have been fewer shipments from recyclers handling spent catalysts from automobile exhaust purification. The decrease in distribution caused the Company's own collection volume of spent catalysts from automobile exhaust purification to stagnate too. As a result, the volume of spent catalysts from automobile exhaust purification collected in fiscal 2024 was 68, far below the target of 140.

Volume of Spent Catalysts from Automobile Exhaust Purification Collected



TOPICS Opening of Sampling Base in the USA

Nippon PGM, a subsidiary of DOWA METALS & MINING, established NPGM USA INC. in Pennsylvania, USA in March 2024. This company is our flagship sampling base in North America, with multiple facilities for sampling of spent automobile exhaust catalysts. The base commenced commercial operations in July 2024, and an opening ceremony was held at the new office.

Platinum group metal prices have been recovering since fiscal 2025, and our collection volume of spent catalysts from automobile exhaust purification is recovering with it. We aim to utilize NPGM USA INC. to collect larger volumes than before.



▶Volume of Spent Lithium-ion Batteries Recycled and Processed

Spent lithium-ion batteries (LIBs) are recycled at ECO-SYSTEM AKITA (Odate City, Akita Prefecture) and ECO-SYSTEM SANYO (Kume District, Okayama Prefecture). Spent LIBs pose a risk of electric shock or fire when they are discarded or dismantled, but our existing waste treatment furnace can be used to treat LIBs, even large ones, without dismantling them. Heat treatment enables LIBs to be deactivated more safely.

During the three-year period of Medium-term Plan 2024, we implemented recycling treatment of spent LIBs, primarily scrap LIBs from the processes of parties such as battery manufacturers. While the treatment volume grew steadily, it fell short of the target of 400.

Volume of Spent Lithium-ion Batteries Recycled and Processed

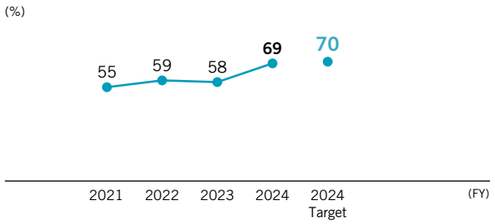


Increase in Ratio of Metals Derived from Recycled Raw Materials

▶Ratio of Metals Derived from Recycling that Are Used in Production

Under Medium-term Plan 2024, the Group has increased our ratio of metals derived from recycling that are used in production (based on sales in the Nonferrous Metals Business). The ratio of metals derived from recycled raw materials was 69% in fiscal 2024, an increase of 11 points from fiscal 2023 but short of the target of 70%. This was mainly due to the decrease in platinum group metal prices and the stagnation of our collection volume of spent catalysts from automobile exhaust purification from fiscal 2022.

Ratio of Metals Derived from Recycling that Are Used in Production (based on sales in the Nonferrous Metals Business)

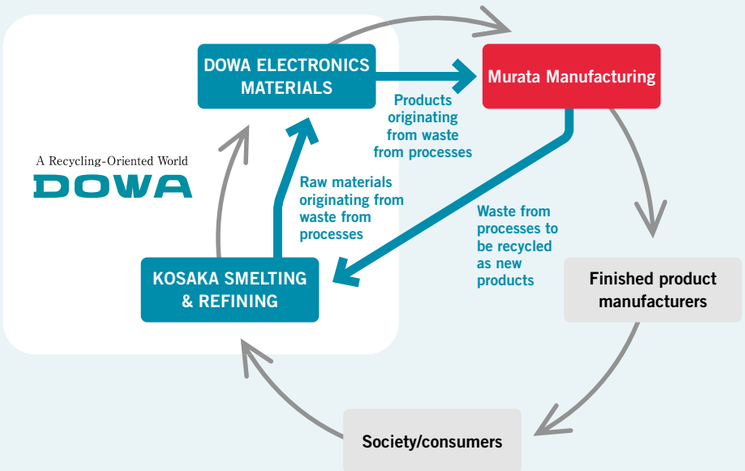


TOPICS Supplier Award from Murata Manufacturing Co., Ltd.

Two-Company Joint Creation of a Resource Circulation Scheme to Secure and Utilize Recycled Metals

DOWA ELECTRONICS MATERIALS CO., LTD. received a supplier award from its customer, Murata Manufacturing Co., Ltd. Murata Manufacturing annually selects and awards a number of suppliers for their contributions to and cooperation with its business development. This award recognized how the DOWA Group and Murata Manufacturing have jointly created a resource circulation scheme to secure and utilize recycled metals through the recycling of metal resources.

Resource Circulation by the DOWA Group and Murata Manufacturing



For more information, please see the press release.
https://hd.dowa.co.jp/ja/en/news/news20250613.html

Creating a Resource-Recycling Society: Enhancing Products and Services that Reduce Social and Environmental Risks

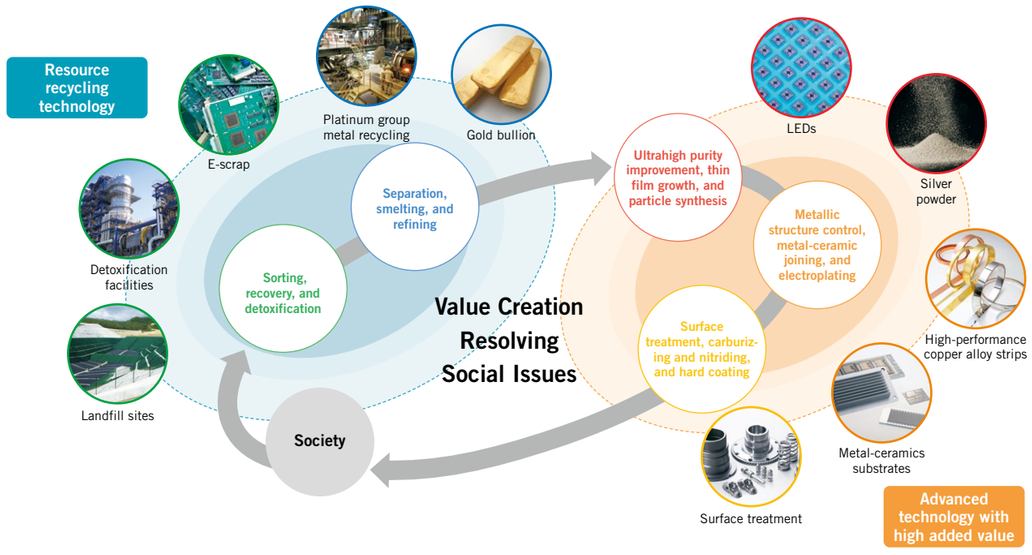
Research and Development

The DOWA Group selects markets that are expected to grow in future and focuses on research and development to create next-generation products and services that contribute to reducing social and environmental risks.

The DOWA Group's Core Technologies

As efforts to address various global social challenges, including carbon neutrality, accelerate, the demand for high-performance materials and advanced technologies used in next-generation automobiles and renewable energy sectors is increasing. Our Group is driving the resolution of social issues and the creation of new value by implementing the superior materials and technologies we have developed through our unique recycling-oriented business model.

Core Technologies That Support Our Recycling-Oriented Business Model



Focus Areas


Automobiles



Environment and energy

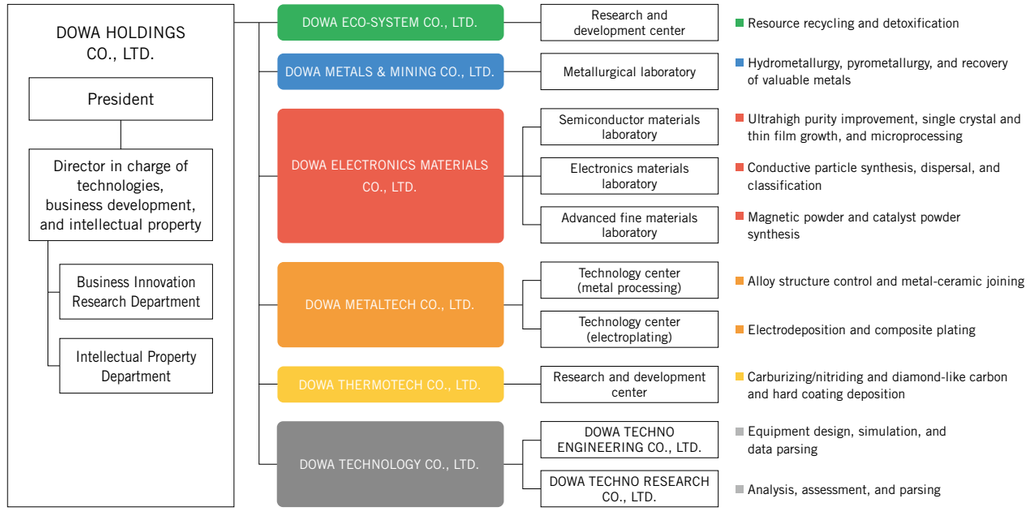

Information and communication


Healthcare

Research and Development System

Each operating company in our Group has its own divisional laboratory in addition to a technology development department at its respective manufacturing base to reform and improve current products and services. We are also developing new products and services that anticipate customer needs while improving and reforming technologies related to manufacturing processes and equipment—technologies that form the foundation of our business.

Research and Development Framework



Open Innovation

The DOWA Group has established strong collaborative relationships with universities and research institutions. In particular, in the area of basic research that will lead to new-concept products and services and innovative technologies that will open the way to the near future, we are conducting numerous joint research projects and creating promising development themes.

	Year commenced		
Co-creation Research Center	2022	• Tohoku University	Creation of cutting-edge technology for resource recycling and provision of excellent materials and technologies (from 2022)
Endowed Chairs	2004	• Tohoku University • Akita University	Graduate School of Environmental Studies (2004 onward) Graduate School of International Resource Sciences (from 2009)
Partnership Agreements	2006	• Tohoku University	Comprehensive joint research utilizing integrated strengths in mining, smelting, environmental, and electronic materials fields (from 2007)
		• Akita University	Further promotion of community-based joint research in mining, smelting, and environmental fields (from 2007)
		• Okayama University	Contribution to development and improvement to build a recycling-oriented world (from 2006)
		• Gunma University	Practical educational research on fusion technology centered on diverse processing in the field of surface treatment (from 2008)
		• Kumamoto University	Advanced research and development in the field of electronic materials and metal processing (from 2007)
DOWA Techno Fund	2003	• Mainly supports the development of technological seeds that have the potential for commercialization within the DOWA Group in the future, through joint research with universities and research institutions	

Creating a Resource-Recycling Society: Enhancing Products and Services that Reduce Social and Environmental Risks

Initiatives Under Medium-term Plan 2024

Medium-term Plan 2024 designated four key markets: automotive & EVs, energy & environment, telecommunications, and healthcare & life sciences. We introduced technological seeds through collaborations with universities and research institutions, focusing on development of new technologies and products. Particular focuses were carbon-neutral technology and AI, IoT, and MI technology. We also worked to strengthen our training of technical talent.

DOWA × Tohoku University Co-creation Research Center

In April 2022, DOWA and National University Corporation Tohoku University (hereinafter Tohoku University) established the DOWA x Tohoku University Co-creation Research Center (hereinafter DOWA Co-creation Research Center) with the objective of promoting and strengthening research activities. The Co-creation Research Center aims to develop innovative technologies by combining Tohoku University's advanced technological seeds with our proprietary technologies, with the goal of addressing sustainability-related issues such as carbon neutrality and the declining labor force.

During phase 1, from fiscal 2022 to fiscal 2024, we explored specific research topics and commenced research on (1) carbon-neutral technology, (2) innovative AI/IoT/MI-based technology, and (3) new materials in the automotive (EVs), telecommunications, environment and energy, and medical and healthcare fields.



Support System for Doctoral Degree Acquisition by Working Adults

Starting from fiscal 2023, we have established a new support system for obtaining doctoral degrees for employees, aiming to enhance the expertise of our technical staff and systematically develop talent capable of leading the Group with a broad perspective. This program is targeted at technical employees both fresh and well-seasoned, who are expected to become core members of the Group in the future. Employees who pass the internal selection process receive support from the Company, including pre-admission education programs, educational expenses, entrance fees, and tuition fees. In the two years since fiscal 2023, five technical staff members have entered graduate school through the program.

Endowed Chairs

The DOWA Group has established endowed chairs at Tohoku University and Akita University and regularly holds events for technical exchange. In fiscal 2024, we held a technical exchange event at KOSAKA SMELTING & REFINING for students at Tohoku University's Graduate School of Environmental Studies and Graduate School of Engineering. One professor and 20 students attended and enjoyed on-site experience of our recycling-oriented business model through active discussion with employees from KOSAKA SMELTING & REFINING and the Technical Research Center.



TOPICS Symposium Held to Commemorate the 20th Anniversary of DOWA HOLDINGS Endowed Chair at Tohoku University Graduate School of Environmental Studies

In September 2024, DOWA HOLDINGS CO., LTD. and National University Corporation Tohoku University held a symposium to commemorate the 20th anniversary of the DOWA HOLDINGS Endowed Chair that was established at the Tohoku University Graduate School of Environmental Studies (official name: Endowed Division of Environmental Resource Cycle Course; hereafter, the "DOWA Endowed Chair"). During this symposium, people from the Ministry of Economy, Trade and Industry, the Ministry of the Environment, and universities engaged in leading-edge research were invited to speak mainly about the circular economy of today and the future.



DOWA Techno Fund

The DOWA Techno Fund is a unique program that provides financial support to technologies, businesses, and markets closely related to our Company. Currently, we support the development of technology seeds that have the potential for commercialization within our Group in the future, mainly through joint research with universities and research institutions.

TOPICS DOWA ECO-SYSTEM Establishes First Integrated System for Development, Production, and Evaluation of Bio-coke in the Private-Sector

(Joint research with Professor IDA Tamio of the Bio-Coke Research Institute at Kindai University supported by the DOWA Techno Fund)

DOWA ECO-SYSTEM CO., LTD. has introduced production and fuel evaluation equipment for Bio-coke ("BIC"), biomass solid fuels expected to replace fossil fuels in the future, at its Research and Development Center. This makes DOWA ECO-SYSTEM the first private-sector company to build a system that can handle all processes from development to production and quality evaluation for BIC.

Since BIC can utilize raw materials such as waste plastics in addition to biomass raw materials, it is expected that further effective use of waste resources will be achieved by linking it with existing waste treatment businesses of DOWA ECO-SYSTEM.

With a view to expanding the production and sales business of BIC at domestic and overseas bases under DOWA ECO-SYSTEM in the future, DOWA ECO-SYSTEM will work to expand the use of BIC, by building relationships with various raw material suppliers and BIC users, engaging in stable procurement of raw materials, and developing products that meet customer needs.



Production equipment for Bio-coke



Bio-coke

For more information, please see the press release.
https://hd.dowa.co.jp/en/news/news20241106.html

Responding to Climate Change

Climate change is a serious social challenge facing all industries and people around the world. By addressing climate change through both the reduction of our GHG emissions and the creation and expansion of products and services that contribute to society's efforts to combat climate change, we aim to achieve a carbon-neutral society by 2050, leading to the sustainable growth of the DOWA Group.

For more information on our Climate Change Policy, please see the link below.
https://hd.dowa.co.jp/en/csr/esg/policy/biodiversity.html

Initiatives Under Medium-term Plan 2024

Under Medium-term Plan 2024, we established a framework for implementation of climate change action throughout the Group, and published a TCFD report and a roadmap for achieving carbon neutrality in 2050. We are using the name DOWA Green Action for products and services that contribute to society's response to climate change, and have rolled out activities in line with TCFD, such as setting new goals for fiscal 2030.

Preparation for climate change action, building of frameworks, goal-setting → Climate change action, formulation of plans

FY2021	FY2022	FY2023	FY2024
Climate Change Policy **Long-term goal for 2050** • Declaration of aim to become carbon-neutral by 2050 • Announcement of interim goals to reduce GHGs • Endorsement of TCFD	**Interim goals for FY2030** • Announcement of TCFD report	• Formulation of roadmap to become carbon-neutral by 2050 • Setting of second interim target for 2030	• Formulation of climate change response execution plan for Medium-term Plan 2027
Climate Change Committee • Launch of company-wide organizational structure • TCFD deliberations, scenario analysis Organization of risks and opportunities, etc.	**Climate Change Response Working Group** • Deliberation of social contribution goals • Selection of DOWA Green Actions	• Commencement of Scope 3 calculations and announcements • Climate disaster response/location risk survey	• Creation of scenarios for medium-term outlook

Status of achievement of KPIs in Medium-term Plan 2024

Key measures	Indicators	Targets	FY2024 results
Promotion of company-wide activities to combat climate change	Establishment of a system to promote climate change response Establishment of Company-wide policies and targets for climate change response TCFD initiatives	• Publication of TCFD Report • Create a roadmap for climate change response	• Revised medium-term scenarios based on TCFD report and roadmap for climate change response (the report and roadmap were announced by fiscal 2023) • Created climate change response execution plan

Governance

In order to enhance sustainability-related activities, including those targeting climate change, the Group established the Sustainability Committee, which is chaired by the President and Representative Director, and under it the Sustainability Subcommittee, which is chaired by the director in charge of corporate strategy.

Sustainability Committee	Deliberates on managing risks and opportunities related to climate change issues, and important matters related to management risks and opportunities are brought to the Board of Directors for discussion and reporting. Upon receiving the agenda and reports from the committee, the Board of Directors shares issues related to climate change and discusses target management and solutions to these issues.
Sustainability Subcommittee	Identifies and assesses risks and opportunities presented by climate change, looking at the issue from a Group-wide perspective, and then investigates and formulates action plans, goals, and countermeasures, which it then reports to the Sustainability Committee along with any important risks and opportunities.
Climate Change Response Working Group	Consists primarily of members from operating companies and members of the Technologies Department. Shares information related to climate change internally and externally while engaging in activities to implement specific measures against climate change, such as promoting initiatives that include reduction plans for GHG emissions and climate change monitoring systems.

For more information on our Climate Change Policy, please see the link below.
https://hd.dowa.co.jp/en/csr/esg/policy/biodiversity.html

Strategies

To identify risks and opportunities that climate change could pose for the Group's business, we deliberated based on multiple scenarios from 1.5°C to 4°C, identified risks and opportunities related to climate change in short (by 2025), medium (by 2030), and long (by 2050) time frames, and summarized our analysis and evaluation in a TCFD report that we published in 2022. In fiscal 2024, with the establishment of Medium-term Plan 2027, we updated our short- and medium-term outlooks, created common prediction scenarios for the whole of the Company, and organized current issues in each business, after which we reviewed our risks and opportunities and established a three-year execution plan.

Risk Management

The DOWA Group strives to enhance risk management by establishing a system to appropriately manage and mitigate various risks arising through our business activities. Risk management related to climate change is integrated into the Group's overall risk management.

▶Climate Change-related Location Risk Management

To address physical risks associated with climate change, we conducted a location risk survey on vulnerability to natural disasters at all of our domestic production bases. We conducted risk assessments covering a wide range of disasters, including floods, inundation, high tides, and landslides, as well as earthquakes and tsunamis. We are incorporating particularly high-priority disasters and regions into our BCP and disaster prevention plans and taking measures for these. We also regularly review our evaluations as public data is updated.

Metrics and Targets

To achieve carbon neutrality by 2050 and to link our efforts to address climate change to the sustainable growth of the Group, we have set contribution targets through products and services and GHG emissions reduction targets as interim targets for fiscal 2030.

▶Targets for Contribution through Our Products and Services

The DOWA Group provides many products and services that contribute to GHG emission reduction in our supply chain, including silver powder for solar panels, an essential element of renewable energy, as well as metal material products for fuel cells and EVs and recycling of used lithium ion batteries and solar panels. We also provide society with non-ferrous metals as recycled resources, which are indispensable for the decarbonized society of the future, through our recycling-oriented business model. We refer to contributions through businesses like these as "DOWA Green Action (DGA)," and are working to expand them.

Applicable Fields

- Provision of materials that contribute to the realization of a decarbonized society through resource recycling
- Products and services that contribute to climate change responses by customers and society

DGA Selection and Evaluation Method

STEP 1 Deliberation of which of each business's products and services constitute DGA

STEP 2 Organization of what kind of contribution and effect each applicable product and service has at which stage of the supply chain

STEP 3 Evaluation on two axes: degree of contribution to society and degree of contribution to the Company's profits

STEP 4 Selection, taking into account potential for growth by fiscal 2030

With the formulation of Medium-term Plan 2027, we reviewed the contribution and effect achieved by each of the Group's products and services in fiscal 2024 based on market trends and situational changes in the Company. Based on the results, we set a target for 50 or more DGA categories by fiscal 2027 (there are 22 categories as of the end of fiscal 2024).

GHG Emissions Reduction Targets

The Group aims to be carbon-neutral by 2050 and, as a milestone, has set an interim goal of reducing Scope 1 and Scope 2 GHG emissions in Japan compared to fiscal 2013 levels by fiscal 2030, as shown in the table below.

GHG Emissions Reduction Targets for Fiscal 2030

CO_2 derived from electricity and fossil fuels	Manufacturing sites	At least 38% reduction (from FY2013 levels)
	Transportation sites	At least 35% reduction (from FY2013 levels)
	Waste management sites and offices	At least 51% reduction (from FY2013 levels)
CO_2 derived from incinerated waste	At least 15% reduction (from FY2013 levels)	

Note: This target includes reductions through the use of credits and other means that represent Scope 1 and Scope 2 GHG emissions (CO_2 equivalent) emitted by the DOWA Group in Japan.

Results

In fiscal 2024, the Group's GHG emissions (Scope 1 and 2) were 1,387 thousand tons of CO_2, a decrease of 15.7% from the previous fiscal year. This decrease was mainly due to energy saving activities such as process improvement, decreases in GHG emissions through measures such as expansion of renewable energy usage, improvement of our electricity-derived emission factor*, and revision of our waste emission factor.

(Thousand t-CO_2)

Item		2020	2021	2022	2023	2024
Scope 1	Fossil fuel-derived	312	324	311	322	324
	Waste-derived	762	737	709	700	518
Scope 2	Electricity-derived	681	638	659	624	545
	Total	1,756	1,699	1,679	1,646	1,387

Category		Coverage	2023	2024
Scope 3	1. Purchased goods and services	Domestic Group	767	846
	2. Capital goods	Consolidated total (including overseas)	139	164
	3. Fuel- and energy-related activities not included in Scope 1 and 2	Domestic Group	119	120
	4. Upstream transportation and distribution	Domestic Group	304	304
	5. Waste generated in operations	Domestic Group	5	6
	6. Business travel	Domestic Group	1	1
	7. Employee commuting	Domestic Group	3	3
	Total		1,338	1,443

Note: With regard to the electricity-derived emission factor used to calculate GHG emissions, the CO_2 emission factor that has been used for domestic electricity thus far was the unadjusted provider-specific factor for the greenhouse gas calculation, reporting, and announcement system in accordance with the Act on Promotion of Global Warming Countermeasures (formerly the basic emissions factor). However, with the change in the system, this was changed to the provider-specific basic emissions factor (formerly the adjusted emissions factor). In line with this, we have recalculated emissions using the adjusted emissions factor, backdating to fiscal 2013, the baseline year for our reduction targets.

Initiatives Under Medium-term Plan 2027

Formulation of Climate Change Response Execution Plan 2027

With the formulation of Medium-term Plan 2027, we formulated an execution plan for fiscal 2025 to 2027. When formulating the plan, we set common scenarios regarding social trends to form the basis of our deliberation, based on situational changes related to climate change in recent years, and reviewed the risks and opportunities for each business. We also considered measures to focus on during the three-year period until fiscal 2027 in order to meet our GHG emission reduction targets and DGA targets for fiscal 2030, based on the business environment and issues of each business.

Climate Change Measures Balanced with Making Our Businesses More Competitive

- Decisively implement climate change response execution plan with a view to fiscal 2030
- Confirm overall progress through annual monitoring
- Review measures and plans flexibly in response to social trends

Examples of Challenges Recognized: Role of WasteTreatment in Society

Premises
- The Company will focus on both metal recycling and our waste treatment business
- Incineration of waste is essential social infrastructure for public sanitation and safety, as well as waste reduction and recycling
- It is difficult to build new domestic sites for final disposal, so extending the life of existing treatment sites is a key social challenge

Challenges
- GHG emissions from incineration are difficult to control as they come from waste from external sources
- Promotion of understanding of the social value played by treatment of hazardous waste, which supports resource recycling systems
- Reduction of GHG emissions will require comprehensive perspectives and initiatives for interconnected challenges such as environmental protection and circular economies

Our approach
- Promotion of lower-carbon waste treatment by introducing effective technology and processes
- Strengthening of dissemination of information on the need for waste treatment and external costs
- Expansion of GHG emission reduction in society through measures such as destruction of fluorocarbons
- Comprehensive promotion of decarbonization, environmental protection, and resource recycling to build a sustainable society

Key Measures Under Medium-term Plan 2027

Areas of Initiatives to Realize a Decarbonized Society		Initiatives
Reduction of the Company's GHG emissions	Promotion of energy saving	• Energy saving through facility improvement • Switching to energy-efficient devices
	Expansion of renewable energy	• Purchasing of electricity from renewable energy • Installation of solar power facilities • Introduction of small hydroelectric power facilities
	Transition to low-carbon fuel	• Development of solid biomass fuel and replacement of coal coke • Transition from heavy oil and LPG to city gas and electricity
	Other	• Offsets through purchase of credits
Contribution to reduction of GHGs in society (contributions through DOWA Green Actions)	Contribution to climate change action	• Compound oxide powder for fuel cell materials • Non-fossil energy (biogas power generation) • Metal-ceramic substrates for power modules • Highly functional copper alloys for EVs • Zero-CO_2 industrial furnaces
	Promotion of circular economy	• Recycled metals and metal products with third-party certification • PV recycling, dismantling and treatment of wind power facilities • Recycling of spent lithium-ion batteries (LIB)
Adaptation to climate risks	Reduction of impact on business activities	• Reviews of disaster prevention plans and BCPs based on risk assessments • Introduction of system for management of natural disaster risks in supply chain • Measures against heat at production sites

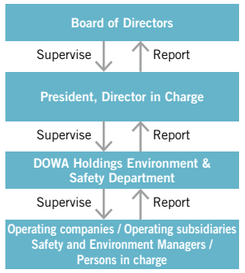
Protecting the Environment

For more information on protecting the environment, please see the link below.
https://hd.dowa.co.jp/ja/csr/environment/protection.html

The DOWA Group recognizes the impact of its business activities on the environment. We are working throughout the entire Group to implement initiatives for the environment and society through our core businesses and by positioning a reduction in the environmental impact of our business activities as an important issue for management.

Promotion System

Environment management activities are promoted in accordance with our Four Lines Model, which is our risk management system, in cooperation with the DOWA Holdings Environment & Safety Department, and operating companies and operating subsidiaries that carry out environmental conservation activities. Additionally, the Sustainability Subcommittee, which discusses important sustainability issues for the entire Group, holds Group-wide discussions on environmental conservation. Furthermore, matters that the Sustainability Subcommittee considers important are reported to the Sustainability Committee, which is above the Sustainability Subcommittee, and more important matters are reported to the Board of Directors.



Initiatives under Medium-term Plan 2024

Under Medium-term Plan 2024, we carried out various activities, including interviews on progress toward providing support for the building of management systems, commencing operation of workflow systems for incident reports, and conducting location risk surveys for natural disasters at domestic offices.

Accomplishment of KPIs in Medium-term Plan 2024

Key Measures	Indicator	Targets	Result for FY2024
Establishment of an environmental management system (Establish and maintain ISO 14001- or EA21-compliant systems)	Ratio of business locations operating under DOWA's EHS-MS that are compliant with ISO certification	100%	99%
Improvement of risk management (Minimize risk of environmental accidents and improve response capabilities)	Number of environmental accidents	0	5

Material Balance

INPUT

	FY2023	FY2024	Versus previous FY
Total energy input (PJ)	17.4	**17.3**	–0.6%
Fossil fuel consumption (Thousand kL)	114.6	**117.5**	
Biomass fuel consumption (kL)	35.4	**137.6**	
Purchased electric power (GWh)	1,278.8	**1,263.9**	
Thermal power generation (GWh)	1.1	**0.9**	
Biomass power generation (MWh)	241.0	**287.0**	
Hydroelectric power generation (GWh)	61.9	**41.8**	
Solar power generation (MWh)	2,675.0	**3,780.0**	

	FY2023	FY2024	Versus previous FY
Water resources (Million m³)	99.7	**94.9**	–4.8%
Seawater (Million m³)	87.0	**83.0**	
Besides seawater (Million m³)	12.8	**11.9**	
Purchased water (Million m³)	5.4	**5.2**	
Company water intake – river water (Million m³)	4.5	**4.0**	
Company water intake – ground water (Million m³)	2.8	**2.7**	
Company water intake – other (Million m³)	0.04	**0.05**	
Waste water received (Million m³)	0.8	**0.9**	
Waste water from processes (Million m³)	0.1	**0.1**	
Mine water (total of waste water from collection stations and mine water) (Million m³)	0.7	**0.8**	

	FY2023	FY2024	Versus previous FY
Raw material use (Thousand tons)	952.2	**939.3**	–1.4%
Raw materials (Thousand tons)	698.1	**707.2**	
Sub-materials (Thousand tons)	152.6	**142.2**	
Heat treatment of items received (Thousand tons)	100.1	**88.5**	
Packaging materials (Thousand tons)	1.4	**1.5**	

	FY2023	FY2024	Versus previous FY
Amount of waste received (Thousand tons)	1,720.2	**1,726.0**	+0.3%
Waste (Thousand tons)	1,613.3	**1,613.5**	
Statutory recycled items received (Thousand tons)	92.1	**88.2**	
Contaminated soil (Thousand tons)	13.8	**23.4**	
Fluorocarbon throughput (Tons)	953.7	**913.5**	

The DOWA Group's Business Activities

Manufacturing Businesses


Nonferrous Metals Business


Electronic Materials Business


Metal Processing Business


Heat Treatment Business


Environmental Management & Recycling Business

Research and development

Raw material procurement

Logistics

Within Business Areas

	FY2023	FY2024	Versus previous FY
Waste heat power generation (GWh)	76.7	**69.8**	–9.1%
Waste heat utilization (TJ)	2,218.9	**2,123.2**	–4.3%
Recycled water (Thousand m³)	852.2	**777.9**	–8.7%

OUTPUT

	FY2023	FY2024	Versus previous FY
Total greenhouse gas emissions (Thousand tons (CO_2 equivalent))	1,645.9	**1,386.8**	–15.7%
Electricity-derived (Thousand tons (CO_2 equivalent))	623.6	**544.8**	
Fossil fuel-derived (Thousand tons (CO_2 equivalent))	322.0	**324.1**	
Waste-derived (Thousand tons (CO_2 equivalent))	700.3	**517.9**	

	FY2023	FY2024	Versus previous FY
Amount of electric energy sold (GWh)	3.9	**5.1**	+30.8%

	FY2023	FY2024	Versus previous FY
Product quantity (Thousand tons)	902.6	**917.0**	+1.6%

	FY2023	FY2024	Versus previous FY
Chemical substance emissions (Tons)	2,160.2	**1,399.3**	–35.2%

	FY2023	FY2024	Versus previous FY
Drainage water discharge (Million m³)	98.2	**93.3**	–5.0%
Excluding seawater (Million m³)	11.2	**10.3**	

	FY2023	FY2024	Versus previous FY
Treatment amount (mine water) (Million m³)	0.7	**0.7**	+4.3%

	FY2023	FY2024	Versus previous FY
Recycling and waste amount (Thousand tons)	1,336.3	**1,354.7**	+4.1%
Recycled amount (Thousand tons)	932.9	**971.1**	
Thermal recycling (Thousand tons)	656.1	**675.2**	
Treatment amount (inside the Group)	476.3	**474.7**	
Treatment amount (outside the Group)	179.8	**200.5**	
Material recycling (Thousand tons)	276.8	**295.9**	
Treatment amount (inside the Group)	163.0	**203.3**	
Treatment amount (outside the Group)	113.8	**92.5**	
Waste generated (Thousand tons)	403.4	**383.6**	–4.9%

Use and disposal → End users → Manufacturing and sales → Process discharge → Clients → In-house treatment and recycling

Note: With regard to GHG emissions, in principle, the DOWA Group seeks to multiply amounts of electricity purchased, fossil fuel consumed, and waste received by the emission factor put forth in the Act on Promotion of Global Warming Countermeasures.
Regarding GHG emissions derived from waste received, because the calculation terms are as of the time this report was prepared, numbers may not necessarily match those reported to government agencies, which are calculated at a different time.

Due to differences in the classification of waste in Japan and overseas and to the difficulty in setting an appropriate emission factor for waste received at overseas business sites, only the portion of GHG emissions originating from waste from domestic business locations is given.
The CO_2 emission factor that has been used for domestic electricity thus far was the unadjusted provider-specific factor for the greenhouse gas calculation, reporting, and announcement system in accordance with the Act on Promotion of Global Warming Countermeasures (formerly the basic emissions factor). However, with the change in the system, this was changed to the provider-specific basic emissions factor (formerly the adjusted emissions factor). In line with this, we have recalculated emissions using the adjusted emissions factor, backdating to fiscal 2013, the baseline year for our reduction targets.

For more information on biodiversity, please see the link below.
https://hd.dowa.co.jp/ja/csr/environment/biodiversity.html

Biodiversity

The DOWA Group draws from its Biodiversity Policy to minimize the impact that its business activities have on biodiversity, and it is promoting the conservation of biodiversity through social action programs.

For more information on biodiversity, please see the link below.
https://hd.dowa.co.jp/ja/csr/esg/policy/biodiversity.html

Taskforce on Nature-related Financial Disclosures (TNFD) Initiatives

It is recognized that companies' economic activities are dependent on natural capital such as air, water, forests, and minerals, that companies are at risk of impacting the natural world in various ways, and that maintaining biodiversity is essential not only for its own sake but for the continuation of business. In preparation for disclosure based on the TNFD framework, we have adopted the LEAP approach advocated by the TNFD and have begun assessing the environmental risks and nature-related impacts of our business. In fiscal 2024, we carried out scoping, considered various factors (interfaces) in our business's environmental management and land use that affect natural capital, and identified items that are particularly relevant to our Company.

Locate Identify key natural capital and risks > **Evaluate** Evaluate the Company's level of impact and dependency > **Assess** Assess risks and opportunities > **Prepare** Make preparations for information disclosure

Locate Phase

In fiscal 2024, we conducted the following two surveys of 90 domestic and overseas sites, primarily production sites, to consider various factors and interfaces by which our business could impact natural capital. Going forward, we intend to identify regions and sites that are likely to be impacted or are otherwise critical based on the results of these surveys, and determine the level of dependency and impact by our businesses.

● Water Risk Survey

We organized information on water usage at each site and water environments around each site, identified high-risk regions, and assessed the level of potential water risks. We utilized Aqueduct, a tool developed by the WRI (World Resources Institute) and combined two elements—the environment at project sites and the situation of water usage by our businesses—to conduct the assessment.

● Survey to Assess the State of Biodiversity

To assess potential risks related to biodiversity, we identified critical locations based on the state of biodiversity in areas around our sites. We used IBAT and Global Forest Watch, biodiversity assessment tools that are widely used around the world, to ensure that our assessments would be conducted from a common perspective at a global level.

Initiatives in Fiscal 2024

In our scoping through the LEAP approach, we selected mines, forests, and water as biodiversity topics that are highly relevant to the Company's businesses, and we are carrying out initiatives accordingly.

▶ Mines

Conserving Biodiversity during Mine Development

Mine development and operations have a large impact on the natural environment and local communities. With this in mind, even at overseas mines currently under development, we are taking appropriate measures that begin from the mineral exploration stage onward in order to minimize the impact on the environment, such as regular environmental monitoring and environmental assessments that include ecosystem surveys and water quality assessments.

Managing Suspended or Closed Mines and Tailings Dams

The DOWA Group currently operates and manages more than 20 suspended or closed mines and more than 30 tailings dams. We are working to maintain a healthy water cycle and a sustainable water usage environment. As even closed mines can have a significant impact on the natural environment, including ecosystems and water, and on local communities, we have established voluntary management standards that are stricter than the mining laws and regulations, and monitor mine water and wastewater generated from mine tunnels and tailings dams 24 hours a day, 365 days a year, treating the water appropriately according to its properties.

▶ Forests

Preserving Communities' Natural Ecosystems Through Local Forest Planting

Since 2006, we have worked on "making a local forest with local trees" to restore the region's native vegetation on our smelter grounds in Kosaka, Akita Prefecture. It is difficult to grow plants on former mine sites, so we began planting trees under the guidance of the Institute for Global Environmental Strategies Japanese Center for International Studies in Ecology, with the cooperation of local forestry associations and seedling companies. Since 2007, local residents have been involved in our ongoing planting activities. In June 2024, we held the 14th Kosaka Local Forest Planting Festival, with approximately 250 participants, including local children and residents, as well as our Group employees. We planted 1,200 seedlings of 15 local broadleaf species, including Mizunara oak, beech, zelkova, and katsura.



Conserving Biodiversity during Procurement

The supply of paper, a resource originating from forests, is a critical ecosystem-based service. The DOWA Group uses large amounts of paper every year and benefits from this. In an effort to use this biological resource sustainably, we use paper made from a mixture of old paper and forest-certified wood pulp for photocopy paper and pamphlets. When selecting paper suppliers, the Group not only confirms that the paper itself is environmentally friendly but also verifies that said suppliers carry out responsible paper procurement based on its CSR Procurement Policy.

Confirmation Items for Responsible Paper Procurement

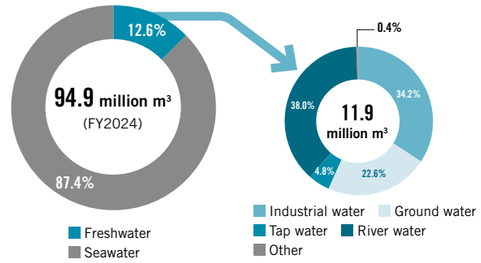
- Establishment of a procurement policy for wood feedstock
- Establishment and operation of a management system that confirms the legality of the wood feedstock
- Ability to provide information about the supplier of raw material pulp

▶ Water

Management of Water Resources

Every year, the DOWA Group confirms the status of water intake sources and drainage destinations in addition to water usage at production sites in Japan and overseas. We are working to improve facilities and recycle water within processes at each site to reduce the amount of water we withdraw and make effective use of water resources.

Usage of Water Resources in Fiscal 2024



Initiatives to Reduce Water Intake	Reduction in Fiscal 2024 (m³)
Improvement of process efficiency through introduction of facilities, etc. and reduction through revision of operations	49,500
Reduction through use of water cascades in production processes and use of recycled water	22,500

Ensuring Occupational Safety and Health

For more information on occupational safety and health, please see the link below.
https://hd.dowa.co.jp/en/csr/society/safety-health.htm

Occupational safety and health is one of the most important themes in the DOWA Group's efforts to leverage its business toward sustainability. Therefore, the Company conducts safety activities based on the basic philosophy of "safety takes priority over everything" grounded on annual plans created from risk management planning for all businesses domestic and overseas. The Group's safety and health activities cover all workers involved, including subcontractors and contractors.

Safety and Health Policy

- All people connected to the Group will voluntarily take action to improve safety and health and will aim to prevent accidents, occupational injuries, and illness.
- To prevent accidents and occupational injuries, we will actively remove hazards and reduce risks.
- We will help employees improve their physical and mental health, aiming to create safe and comfortable workplaces.

Promotion System

Under the Group's system for promoting safety management, the Dowa Holdings Environment & Safety Department selects safety and environment personnel from each operating company who work together to conduct safety management activities. The officer in charge of the Human Resources Department at DOWA Holdings is responsible for the safety and health management activities. They promote these activities throughout the Group while developing and building a system to promote them in the human resources departments, safety departments, occupational health physicians, and health insurance associations of each Group company, while holding regular exchanges of opinions with labor unions.

The Sustainability Subcommittee holds Group-wide discussions on occupational safety and health. Matters recognized as important by the Sustainability Subcommittee are reported to the Sustainability Committee, which is above the Sustainability Subcommittee, and more important matters are reported to the Board of Directors. The Board of Directors provides oversight on safety and health.

Initiatives Under Medium-term Plan 2024

Status of Achievement of KPIs in Medium-term Plan 2024

Key Measures	Indicators	Targets	FY2024 Results
Establishment of management system	Ratio of business locations operating under DOWA's EHS-MS that are compliant with ISO certification	100% (by March 31, 2025)	99%
Prevention of recurrence of work-related accidents	Frequency rate (including dispatch workers, excluding contractors)	0.7 (fiscal 2024)	1.28
	Severity rate (including dispatch workers, excluding contractors)	0.01 (fiscal 2024)	0.01
Promotion of health management	Ratio of employees who received regular medical examinations	100% (Group-wide)	99% (Group-wide)

Establishment of Management System

Under Medium-term Plan 2024, we implemented various activities, with the rebuilding of the Group's EHS-MS (Environment, Health, and Safety Management System) as a key measure to ensure the operation of the system at all of our locations, with the aim of operating, maintaining, and improving our occupational health and safety systems based on risk management. We deployed our EHS-MS Manual, which clarifies roles, responsibilities, and authority of DOWA Holdings and operating companies, throughout the Group, and achieved a ratio of 99% of business locations operating under EHS-MS in fiscal 2024.

Prevention of Recurrence of Work-related Accidents

Regarding work-related accidents at the Group, when compared with the figures for business establishments of the same size in the Ministry of Health, Labour and Welfare's occupational accident statistics, the frequency rate was 1.20 for DOWA (including contract and dispatch work) compared to an average of 1.30, and the severity rate was 0.01 (including contract and dispatch work) for DOWA compared to an average of 0.06, meaning DOWA came in with a below average frequency rate and severity rate compared to business sites of the same size covered by the occupational accident statistics. We will continue to implement a variety of safety measures and strengthen our safety management system.

▶Work-Related Accidents

Change in the Frequency Rate of Accidents at Work

		FY2022	FY2023	FY2024
DOWA Group	Not including contract or dispatch work	1.19	1.56	1.24
	Including dispatch workers, excluding contractors	1.22	1.63	1.28
	Including contract and dispatch work	1.14	1.58	1.20
Same-sized business site average*		1.25	1.29	1.30

* Statistics from the Ministry of Health, Labour and Welfare (manufacturing companies with 100 or more employees)
Frequency rate: Indicator showing the frequency of accidents by the number of dead and injured people due to accidents at work per one million total working hours
Note: Totals have been calculated for accidents requiring one or more days of leave.

Change in the Severity Rate of Accidents at Work

		FY2022	FY2023	FY2024
DOWA Group	Not including contract or dispatch work	0.87	0.02	0.01
	Including dispatch workers, excluding contractors	1.16	0.03	0.01
	Including contract and dispatch work	1.09	0.03	0.01
Same-sized business site average*		0.08	0.08	0.06

* Statistics from the Ministry of Health, Labour and Welfare (manufacturing companies with 100 or more employees)
Severity rate: Indicator showing the degree of accident severity by the number of working days lost per 1,000 total working hours
Note: Totals have been calculated for accidents requiring one or more days of leave.

Change in Fatalities from Work-Related Accidents (Persons)

Classification	FY2020	FY2021	FY2022	FY2023	FY2024
Full-time employee	0	0	2	0	0
Contract employee	0	0	0	0	0
On-site contractor	0	0	1	0	0
Total	0	0	3	0	0

▶Promoting Safety Education

We provide training on safety and health at each of the Group's production sites. DOWA Holdings provides training to promote knowledge and understanding of safety and health issues common to the entire Group. Per the Group's policy on the establishment and operation of the EHS-MS (Environment, Health, and Safety Management System), we conducted various training programs to promote understanding of the EHS-MS. We also worked to promote understanding and entrenchment of the management system that the Group aims to follow. In addition to occupational safety and health compliance evaluator training, in fiscal 2024, we conducted risk assessment trainer training, with a total of 194 participants completing the course.

Status of Safety and Health Related Training (FY2024)

(Persons)

Classification	Training Name	Target Group	Participants
Safety Training	Occupational safety and health compliance evaluator training (Intermediate)	Safety and Environment Officers	63
Safety Training	Risk Assessment Trainer Training	Risk Assessment Assessor Trainers	131

Ensuring Occupational Safety and Health

Initiatives to Prevent Work-related Accidents

Technical Standards for Introduction of Equipment

Issues with equipment, such as defective safety equipment, causing excessive strain during work, and failure to account for human error, must be resolved at the time the equipment is introduced.

The DOWA Group has been using the DOWA Technical & Manufacturing Standard (DTMS) since fiscal 2019 as a manual to provide standards for processes from equipment planning to introduction and commencement of use. This standards manual comprises points to be considered such as workflows, technical standards, and risk assessments, as well as check sheets for each stage. Before introducing equipment, sufficient discussion and deliberation is conducted between the relevant personnel to ensure that safe and effective equipment will be introduced.

DTMS

Items for consideration, workflows, and checklists for the processes up to introduction	Methods for conducting design reviews and risk assessments	Specifications for disaster-proof equipment design

Intrinsic safety design
Ensuring failproof equipment that anyone can use safely

Experience-Based Hazard Education Facility

It is important to be conscious of various risks in the workplace, including moving parts, heavy objects, high temperatures, and electric currents, fully comply with the correct procedures and rules, and prevent injury to oneself and others. Experience of hazardous situations motivates people to act in a manner that ensures safety, so in fiscal 2024 we began conducting experience-based hazard education in the Okayama area ahead of our establishment of an experience-based hazard education facility. There are plans to introduce it elsewhere too, and measures are underway to that end, including introducing the necessary equipment and conducting the necessary education (training the instructors).







Designation of Designated and Semi-Designated Sites and Provision of Support and Guidance

Businesses where serious accidents occur may be designated as “Special Guidance Workplaces for Safety Management (designated sites)” under the Industrial Safety and Health Act. As a system similar to that of a “designated site,” the Group has established its own “semi-designated site” system, which actively supports improvements to the safety systems of each workplace. Safety personnel from DOWA Holdings and the applicable operating companies support and guide the “semi-designated sites” in improving their safety systems. Additionally, we aim to improve the safety level of the entire Group by appropriately addressing issues within our own Company through discussions from various perspectives at the Safety and Environment Personnel Council.

Initiatives for Accident Sites

Inspections of Sites with Serious Incidents	• Deep dive into factor analysis • Validation of measures • Safety audit
Semi-designated Sites	• Targets sites that the operating company considers particularly in need of accident countermeasures • Selection of improvement themes according to the target company • Promotion and support of improvement

Promoting Health Management (Kenkokeiei)

Note: *Kenkokeiei* is a registered trademark of the Nonprofit Organization Kenkokeiei.

The DOWA Group has formulated the DOWA Group Health Management Declaration and promotes a variety of health-related measures.

The DOWA Group Health Management Declaration

- The DOWA Group will strive to maintain and improve the health of all people employed within the Group, including their families, and create a workplace where employees can work actively and with a healthy body and mind.

Safety and Health Policy

- Measures to understand the health status of employees and their families and offer health guidance, aimed at detecting illnesses early and preventing exacerbation
- Measures to improve the workplace environment and promote diverse workstyles, aimed at establishing a health friendly infrastructure
- Measures to promote lifestyle improvements, aimed at promoting individual health

Certified Health & Productivity Management Outstanding Organization

DOWA and some Group companies were named Certified Health & Productivity Management Outstanding Organizations (Large Enterprise Category) and Certified Health & Productivity Management Outstanding Organizations (Small and Medium-sized Enterprise Category) under the Certified Health & Productivity Management Outstanding Organization system operated by the Ministry of Economy, Trade and Industry and the Nippon Kenko Kaigi.

2025 健康経営優良法人 KENKO Investment for Health 大規模法人部門	Certified Companies (Large Enterprise Category) • DOWA HOLDINGS CO., LTD. • DOWA ECO-SYSTEM CO., LTD. • DOWA METALS & MINING CO., LTD. • DOWA ELECTRONICS MATERIALS CO., LTD. • DOWA METALTECH CO., LTD. • DOWA THERMOTECH CO., LTD. • ECO-SYSTEM CHIBA CO., LTD. • ECO-SYSTEM SANYO CO., LTD. • ECO-SYSTEM JAPAN CO., LTD. • KOWA SEIKO CO., LTD. • KOSAKA SMELTING & REFINING CO., LTD. • DOWA METAL CO., LTD.
2025 健康経営優良法人 KENKO Investment for Health 中小規模法人部門	Certified Companies (Small and Medium-sized Enterprise Category) • ECO-SYSTEM AKITA CO., LTD.* • ECO-SYSTEM OKAYAMA CO., LTD.* • GEOTECHNOS CO., LTD.* • AKITA ZINC CO., LTD. • DOWA SEMICONDUCTOR AKITA CO., LTD.* • DOWA METANIX CO., LTD.*

* Newly certified in fiscal 2025

For more information on our health management, please see the link below.
https://hd.dowa.co.jp/en/csr/society/safety-health.html#safety-health_16

Increasing Organizational Power

For more information on our human resource development, please see the link below.
https://hd.dowa.co.jp/en/csr/society/human-resource.html

At the DOWA Group, we believe that human resources are at the core of all of our business activities. We have overcome challenges in our long history by mobilizing each individual person working on the front line of development, manufacturing, marketing, management, etc., in the DOWA Group and by squarely facing and addressing problems that have emerged at different times. To achieve the sustainable development of the DOWA Group and to continue to be a corporate group that is truly needed by society, we aim to maintain corporate growth by combining the efforts of each member who shares our Corporate Mission.

Initiatives Under Medium-term Plan 2024

Under Medium-term Plan 2024, we set a goal for 2030 related to human capital—to be an organization that continues to grow as it strives to create economic and social value—and promoted various initiatives related to the key themes aimed at realizing that goal.

Our Goal for 2030 Related to Human Capital

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

Definition of an Organization that Continues to Grow

- A collection of people that sympathize with the value and role our business has in helping resolve wide-ranging social issues
- An organization that emphasizes teamwork and communication and can demonstrate results Group-wide
- An organization that is open to diverse workstyles and utilizes diverse human resources to accept changes and challenges

Accomplishment of KPIs in Medium-term Plan 2024

Key Measures	Indicator	Targets	Result for FY2024
Securing human resources and developing core human resources	Average retention rate three years after joining the Company (for new graduates at DOWA HOLDINGS*)	Maintain 100% rate	89%
	Implementation of job satisfaction surveys for employees	Conduct surveys on a regular basis	Continued survey implementation
Developing human resources and promoting organization building that will create change	Formulation of a human resource development policy and publishing of the policy inside and outside the Company	Announce and disseminate policy	Built educational environment for self-study based on Policy for Human Resources Development
	Implementation of education before overseas assignments and expansion to include postassignment education	Continue implementation of educational programs	Continued post-assignment online education
Establishing diverse workstyles	Increase in the ratio of men that take childcare leave	100% (fiscal 2024)	89.1%
	Increase in the ratio of annual paid leave days taken	80% or higher	82.9%
Promoting diversity and spreading awareness of human rights	Increase in the ratio of new hires who are women (DOWA HOLDINGS)	30% or higher	27%
	Introduction of an option to postpone retirement	Introduce at all subsidiaries	100%
	Elimination of harassment	Continue to implement training	Continued DEI training and harassment training
	Ratio of employment of people with disabilities	2.3% or higher (Group-wide)	2.7% (DOWA HOLDINGS)

* "DOWA Holdings employees" includes employees seconded from DOWA Holdings to Group companies and excludes those seconded from Group companies to DOWA Holdings.

Securing Human Resources and Developing Core Human Resources

Average Retention Rate Three Years after Joining the Company (for New Graduates at DOWA Holdings)

The retention rate for fiscal 2024 is 89%, falling short of the target of 100%. One of the reasons for employees leaving their jobs is a mismatch between their desired workplace, what they actually do in their work, and working environment after joining the Company. To prevent such mismatches, we are taking measures to provide prospective employees with specific information about the actual job details, work environment, corporate culture, living environment, and other aspects so that they are satisfied with the job. In addition, after joining the Company, we conduct interviews before assignment and in the second year. In addition to the second-year interview, we follow up with individual employees based on their specific situation to improve the retention rate.

Implementation of Job Satisfaction Surveys for Employees

Starting in fiscal 2022, we have started conducting a job satisfaction survey to collect employee opinions. The fiscal 2024 survey was conducted from January to February 2025 by collecting responses via the Internet, achieving a high response rate of 94%.

The responses showed that while satisfaction with items related to personnel evaluation was high, satisfaction with items related to career development was relatively low. In light of these results, we will consider measures such as the introduction of career education programs in hierarchical training.

Developing Human Resources and Promoting Organization Building That Will Create Change

Formulation of a Human Resource Development Policy and Announcement Inside and Outside the Company

We established our Policy for Human Resources Development in October 2022 and announced it inside and outside the Company. We are developing employee education and training plans based on this policy. We will ensure that all employees know and familiarize themselves with this policy through various training programs.

Policy for Human Resources Development

We, the DOWA Group, motivate each employee to strive for opportunities to better themselves.
To do that, we offer fair opportunities to study to those who are willing to learn, regardless of their position, age, gender, and work location.
Our Policy for Human Resources Development is based on further developing strengths, not correcting weaknesses.

Reform of Our Internal Education System

From new employees to managers, the DOWA Group has established stratified education according to job classification and have set up an educational system of selective education in order to nurture the next generation of leaders at each level of the organization. In fiscal 2022, we reformed our internal education system, shifting from focusing on group training to selective training. Specifically, we launched a selective education system with a high degree of freedom, to emphasize employees' motivation to learn and create a culture of self-directed learning.

In fiscal 2024, we created education guidelines to encourage employees to take classes through our selective education system. We have created a system that organizes the knowledge and skills that employees need at every stage, so that each employee can consider and actively learn the knowledge they need to gain, or have the option of gaining, at each stage.

Increasing Organizational Power

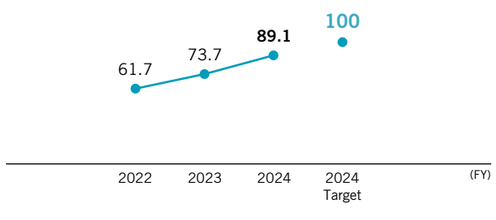
For more information on employment, labor, and diversity, please see the link below.
https://hd.dowa.co.jp/en/csr/society/employment-diversity.html

Establishing Diverse Workstyles

Increase in the Ratio of Men that Take Childcare Leave

We are promoting flexibility in working hours and working conditions by establishing a flextime system with no core hours, shorter working hours for childcare, and the regional work system (limiting the areas to which employees are transferred). Furthermore, we are strengthening internal awareness of the need to increase the percentage of men taking childcare leave. As a result, the rate of men taking childcare leave in fiscal 2024 was 89.1%, an increase of 15.4 percentage points from the previous fiscal year.

Ratio of Men that Take Childcare Leave

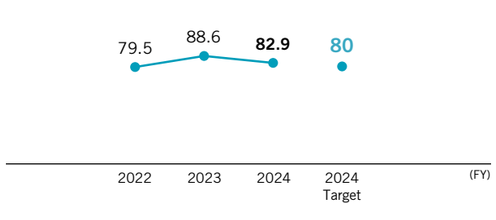


Increase in the Ratio of Annual Paid Leave Days Taken

We are working to prevent long working hours and encourage employees to take paid leave so they can work vigorously and in good health, both mentally and physically, and fulfill both their work and personal lives. As part of our efforts in work-style reform, we have set a Group policy of reducing total annual actual working hours to less than 2,000.

As a result, the paid leave utilization rate for fiscal 2024 was 82.9%, above the target of 80% set in Medium-term Plan 2024.

Increase in the Ratio of Annual Paid Leave Days Taken



Promoting Diversity and Spreading Awareness of Human Rights

Increase in the Ratio of New Hires Who Are Women (DOWA Holdings)

The nonferrous metal industry, where DOWA operates, has historically had a low ratio of female employees due to prohibiting women from working in underground mines. To address this, the Company set a target in Medium-term Plan 2024 to increase the ratio of new hires who are women to 30% or higher, and we aim to increase the ratio of women among employees promoted to management roles to 30% in 2030.

In fiscal 2024, we enhanced the company information we publish and expanded our internships with the aim of attracting more female candidates, but the ratio of new hires who were women was 27%.

Another issue we are facing is lower retention among female employees than among male employees, so in addition to our initiatives to attract new hires who are women, we are working to improve retention by holding regular information exchange sessions by female employees, helping to make our workplaces easier for women to work in, and establishing systems for balancing work and family responsibilities, including a flextime system, childcare subsidies, and expansion of eligibility for shorter working hours for childcare.

Introduction of an Option to Postpone Retirement

DOWA decided to increase the retirement age to 65 throughout all Group companies, and implementation of this policy in Group companies was completed by fiscal 2024. We also regularly hold life plan seminars for employees who have reached a particular age to provide them with information on a second career after retirement.

Elimination of Harassment

The Company has established the Rules for Harassment Prevention, a series of rules that all employees must follow in order to prevent different types of harassment. We also believe it is important to prevent the occurrence of such incidents and respond to them if they do occur. To this end, we conduct harassment training for managers throughout the Group and hold lectures delivered by outside lawyers in charge of handling reports made to the DOWA Consultation Desk. In addition, we strive to prevent workplace harassment by putting up posters in our offices and disseminating information through the Company intranet. In fiscal 2023, we started conducting DEI training for management, and we conducted similar training in fiscal 2024.

TOPICS Kurumin and Eruboshi (3 stars, the highest level) Certification

In September 2024, we received Kurumin certification as a Childcare Support Company. In November of the same year, we received three stars, the highest level, for Eruboshi as a company that excels in promoting women's participation in the workplace. The certification was given in recognition of the measures to support childcare and initiatives to promote women's participation in the workplace that the Company has carried out thus far. DOWA is the first nonferrous metal company listed on the TSE Prime Market to receive three-star Eruboshi certification.



Kurumin certification



Eruboshi certification (3 stars)

Ratio of Employment of People with Disabilities

We are working to increase the ratio of employment of people with disabilities throughout the Group. Our employment rate for DOWA Holdings was 2.7% in fiscal 2024, a 0.2 point increase from the previous fiscal year. However, initiatives throughout Group companies vary, and we are therefore working to further improve the employment rate by expanding our provision of information on points such as hiring methods.

Respect for Human Rights

Under Medium-term Plan 2024 (fiscal 2022–2024), we began building a management framework for all of our companies to strengthen human rights measures throughout the Group. We also formulated a specific action plan according to the DOWA Group Human Rights Response Roadmap and the United Nations Guiding Principles on Business and Human Rights in fiscal 2023, and are working to spread awareness of human rights and prevent human rights violations. Under Medium-term Plan 2027, we have set respect for human rights as a materiality item, and will further strengthen human rights measures throughout the Group, centering on our sectional meeting on human rights, to fulfill the Group's responsibility to respect human rights.

For more information on human rights, please see the link below.
https://hd.dowa.co.jp/en/csr/society/human-rights.html

Promoting Risk Management

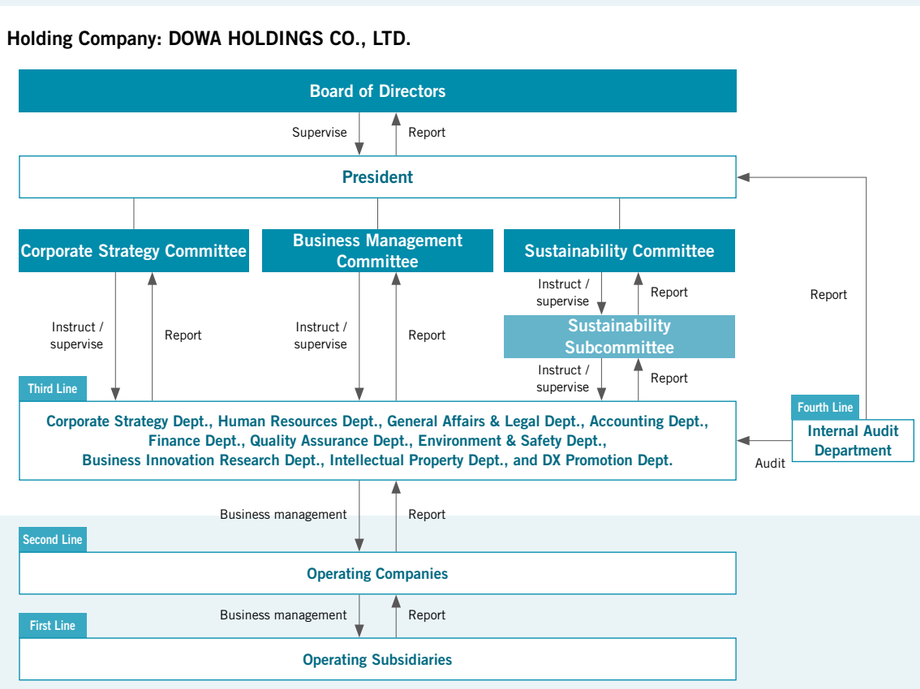
For more information on our risk management, please see the link below.
https://hd.dowa.co.jp/en/csr/governance/risk-management.html

The DOWA Group engages in making its risk management more sophisticated to prevent situations that could have a major impact on its business and to prevent or mitigate damage in the unlikely event such a situation comes to pass. In addition, we will continue efforts to enhance and perfect our risk management workflow, which involves identifying apparent and potential risks at each operating company, implementing countermeasures, reviewing them, and conducting audits.

System for Risk Management

The Group has established a risk management system based on the Four Lines Model for internal control, modeled on three lines of defense. The operating subsidiaries responsible for production and other operations (first line) and the operating companies that oversee them (second line) develop a risk management cycle that includes periodic risk assessments. In contrast, each DOWA Holdings division (third line), as the holding company, provides necessary instructions, supervision, and support. Furthermore, the Internal Audit Department of DOWA Holdings (fourth line) conducts internal audits to evaluate the effectiveness of these measures.

Four Lines Model Structure



Risks to Businesses, etc.

We identify key risks that will or may have a critical impact on the Group's business results, share price, financial situation, etc. For more information on risks to our businesses, etc., please see the link below.

For more information on risks to our businesses, etc., please see the link below.
https://hd.dowa.co.jp/ja/ir/strategy/risk.html

Initiatives Under Medium-term Plan 2024

Under Medium-term Plan 2024, we established elements required for internal governance as follows and carried out measures to enhance each of these elements.

Elements Required for Internal Governance

1. Governance Environment	Corporate governance regarding matters such as corporate culture, management policies, and organizational systems
2. Risk Assessment and Response	Identification of and response to risks that will impede us from achieving organizational targets
3. Governance Activities	Activities to mitigate identified risks
4. Information and Communication	Building of processes to provide, share, and acquire information needed by organizations
5. Monitoring	Supervision (by management and committees) and third-party audits

1. Governance Environment

Establishment of Basic Policy on Internal Control

We established a Basic Policy on Internal Control in fiscal 2022 to clarify the direction to be taken by the Group with regard to internal governance.

Elements Required for Internal Governance
Corporate governance regarding matters such as corporate culture, management policies, and organizational systems

Establishment of Basic Policy on Internal Control

Starting from fiscal 2022, we have begun holding presentations and internal education on internal governance and risk management, centering on the management of each Group company and internal governance managers. We have added internal control education to our training for new employees and newly appointed managers starting from fiscal 2023, and in fiscal 2024 we deliberated on expanding the scope of education to directors of Group companies and enhanced training at critical points of Group employees' careers.

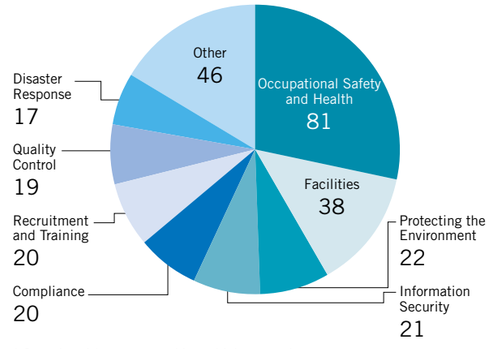
2. Risk Assessment and Response

Risk Management Plan

Starting from fiscal 2022, we have begun implementing a Risk Management Plan to identify and evaluate business risks in accordance with the business environment. In accordance with this plan, each Group company identifies and evaluates its business risks once a year and selects priority risks. Additionally, we develop countermeasures for the selected priority risks and incorporate them into the next fiscal year's budget. A risk assessment conducted in fiscal 2024 identified 241 measures to address significant risks, which were included in the fiscal 2025 budget.

These measures are shared throughout the Group, and are executed with support from each DOWA Holdings department, operating company, and business support company. Furthermore, the Internal Audit Department of DOWA Holdings regularly visits business sites to provide individual feedback, ensuring the continuity of risk management efforts.

Breakdown of Major Risks (Based on FY2025 Budget)



* Some key risks are counted in multiple categories.

3. Governance Activities

Definition of DOWA Standard Processes

We established DOWA Standard Processes to document appropriate operational procedures and judgment standards for handling various apparent and potential risks in our business operations, and have begun activities to standardize and clarify our governance activities. As the Group's activities span a wide range of operations, we balance the effect of creating definitions with operational workload as we carry out our activities.

4. Information and Communication

Rebuilding of Document and Information Management

We revamped our operational standards regarding key documents including consultation documents and reports on incidents such as environmental, safety, and quality assurance incidents and cyberattacks (issues arising at a stage prior to the occurrence of a serious accident or disaster). To establish operational procedures for these, we introduced an e-workflow system in fiscal 2024 to mitigate the risk of leaks of confidential information and improve the efficiency of these operations.

5. Monitoring

Audits by Our Fourth Line (Internal Audit Department of DOWA Holdings)

Working together with the Internal Audit Department of DOWA Holdings, we established a new auditing scheme that incorporates elements such as reviews of the Risk Management Plan in addition to the existing perspectives of J-SOX and legal audits.

Compliance

The directors and employees of the Group utilize the DOWA Group Mission, Vision, Values, and Code to guide them in their day-to-day business activities. In addition, our continued efforts to spread awareness of our whistleblower system, combined with the implementation of internal audits, helps with the prevention and early detection of any fraud or misconduct in the Company or at Group companies, and accordingly we take appropriate measures whenever the need should arise.

Internal Reporting System

The Company has established the DOWA Consultation Desk where all Group executives and employees can anonymously report and consult directly with outside attorneys about harassment, misconduct, and other work-related issues. This hotline guarantees that any reports made will be kept confidential and that whistleblowers will not be treated unfairly. In addition, it is available to all stakeholders, including business partners and collaborating companies. The consultation desk will maintain strict confidentiality of all inquiries and opinions received and will respond promptly and appropriately. In fiscal 2024, the DOWA Consultation Desk received 22 consultations, and of the cases that were deemed to require corrective measures, two are still under investigation. All remaining cases have been completed.

Number of Consultations Made through the DOWA Consultation Desk

FY2020	FY2021	FY2022	FY2023	FY2024
21	19	18	22	22

Quality Management

We place quality at the core of our management, and are committed to improving the quality of our products and services at our major manufacturing plants, which have obtained quality management systems certifications such as ISO 9001. We also focus on ensuring the quality of procured items and work with our suppliers to guarantee the quality of raw materials and auxiliary materials through regular investigations and audits.

Initiatives Under Medium-term Plan 2024

Under Medium-term Plan 2024, we carried out various measures with the aim of building a quality assurance framework at or above industry standards. Through these measures, we exceeded the targets set for the indicators "Creation of an ISO 9001 compliant system" and "Establishment of quality assurance education."

Accomplishment of KPIs in Medium-term Plan 2024

Key Measures	Indicator	Targets	Result for FY2024
Creation of an ISO 9001 compliant system	Compliance rate of business locations that create products	80% (FY2024)	87%
Establishment of quality assurance education	Number of participants	350 total (FY2022 to FY2024)	546 total (FY2022 to FY2024)

Quality Assurance Managers Meeting, Quality Assurance District Meetings

Each of the Group's manufacturing bases oversees quality assurance for its products and services. However, since there is only one quality assurance department at each base, it was difficult to share information. With this in mind, we have held a Quality Assurance Managers Meeting and Quality Assurance District Meetings since fiscal 2022 for Group-wide discussion and sharing of issues and initiatives related to quality assurance.

Quality Assurance Managers Meeting	• Quality Assurance Department of DOWA HOLDINGS • Quality assurance managers at each operating company and support company	Four times each year (quarterly)
Quality Assurance District Meetings	• Quality assurance department personnel from each base	Akita, Kanto, Chukyo, and Okayama regions

Establishment of Quality Assurance Education

We are building a system for Company-wide education on quality assurance, including governance and compliance, centering on the Quality Assurance Department of DOWA Holdings. Specific education includes quality education relevant to all of our businesses for managers and personnel in the quality assurance and manufacturing departments of each site and education on quality and compliance for new employees. Starting from fiscal 2024, we introduced a quality assurance and compliance program to our Company-wide e-learning programs.

The education programs have been enhanced since fiscal 2022, with education given to a total of 389 employees in quality assurance-related departments, from managers to leaders, during the three-year period of Medium-term Plan 2024.

Introduction of Best Practices at Quality Assurance Results Presentation

Starting from fiscal 2022, the Company has held a Quality Assurance Results Presentation, which recognizes outstanding quality assurance activities, every November. At the presentation, the Group companies that were selected introduce best practices used in their daily quality assurance activities and share initiatives by personnel involved in each of those activities. The aim of this is to share knowledge and know-how about quality assurance throughout the Group and further improve quality.

Strengthening Corporate Governance

For more information on corporate governance, please see the link below.
https://hd.dowa.co.jp/en/company/governance/c_governance.html

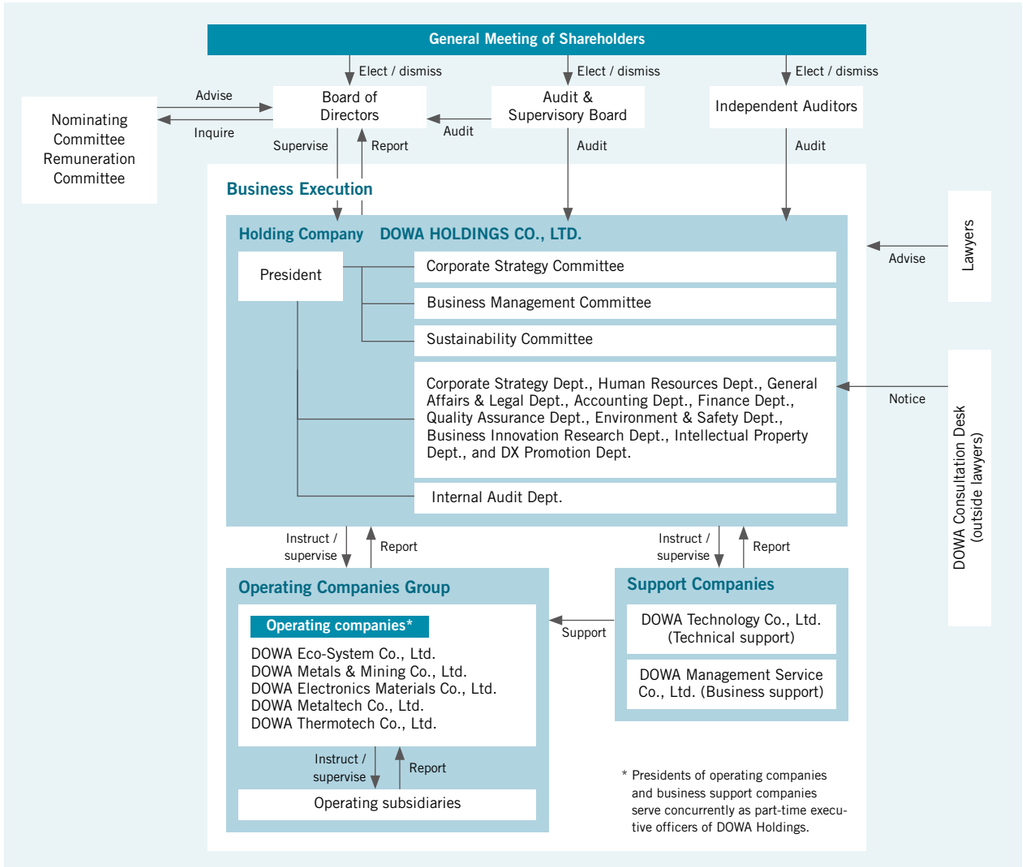
As the Group contributes to society, strengthening corporate governance is one of its priorities, thus it is making Group-wide efforts to establish effective internal control systems that are appropriately composed and managed, based on the DOWA Group's Mission, Vision, Values, and Code.

Corporate Governance Promotion System

The Company employs a holding company structure that enables it to have a deeper grasp of customer needs at the ground level of the market and enables swift decisions to be made with authority. This structure also allows us to separate our core businesses into subsidiaries, which in turn facilitates more flexible and bolder management in accordance with the characteristics of each core business, and to allocate management resources to Group companies in an optimal manner, thereby working to maximize corporate value by realizing the sustainable growth of the Group.

The Company ensures sound management through the establishment of the Audit & Supervisory Board and the appointment of outside directors. Additionally, to accelerate decision-making and improve management efficiency, we have adopted an executive officer system and a holding company structure, separating business units into subsidiaries. To enhance the supervisory function of the Board of Directors, we have set the number of directors at a maximum of 13 and limited their term to one year, thereby clarifying management accountability.

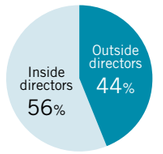
The DOWA Group's Corporate Governance Structure



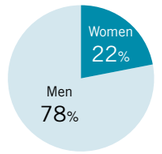
Composition of the Board of Directors

9 directors (including 4 outside directors)	Board of Directors' meetings held	Attendance by outside directors
	17 times (FY2024)	100% (FY2024)

Percentage of Outside Directors



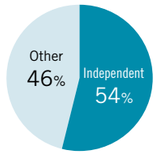
Percentage of Women among Directors



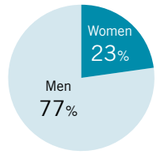
Composition of the Audit & Supervisory Board

4 auditors (including 3 outside auditors)	Audit & Supervisory Board meetings held	Attendance by outside auditors
	14 times (FY2024)	98% (FY2024)

Percentage of Independent Directors and Auditors



Percentage of Women among Directors and Auditors



Inside Officers Outside Officers

Details of Meetings

			Main agenda items in FY2024
Board of Directors	Number of meetings held	17 times (FY2024)	• Mergers, dissolutions, and sales of interests of subsidiaries • Valuation and sale of cross-shareholdings • Assessing board effectiveness • Status of dialogue with shareholders • Results of voting rights exercised at the General Meeting of Shareholders
	Chair	Representative Director **SEKIGUCHI Akira**	
	Members	9 directors (incldlng 4 outside directors)	
	Associates	4 auditors, 7 executive officers	
Audit & Supervisory Board	Number of meetings held	14 times (FY2024)	• Matters decided: Annual auditing plan, reappointment of independent auditors • Matters reported: Report of audit summary, contact and reporting to part-time auditors • Matters discussed and deliberated: Exchange of opinions about Board of Directors' agenda, confirmation of content of audit report from independent auditors
	Chair	Auditor **TSUTSUMI Azusa**	
	Members	4 auditors (including 3 outside auditors)	
Nominating Committee	Number of meetings held	5 times (FY2024)	• Changes in directors and new management structure • Interviews with current directors (particularly about issues with initiatives) • Reflection on status of committee activities, activities for the next year onward
	Chair	Outside Director **SATO Kimio**	
	Members	6 directors (including 4 outside directors)	
Remuneration Committee	Number of meetings held	4 times (FY2024)	• Calculation of officer remuneration • Evaluation of the appropriateness of the Company's officer remuneration in light of general executive remuneration standards • Deliberation of details to be disclosed regarding disclosure policy on determination of officer remuneration • Reflection on status of committee activities, activities for the next year onward
	Chair	Outside Director **SATO Kimio**	
	Members	6 directors (including 4 outside directors)	

Board of Directors and Officers (As of June 25, 2025)

Directors



SEKIGUCHI Akira
Representative Director
President and Executive Officer
CEO*1



TOBITA Minoru
Director
Vice President and Executive Officer
CIRO*2



SUGAWARA Akira
Director
Managing Executive Officer
CTO*3
Responsible for Business Innovation Research Dept.



SATO Kimio
Outside Director
Honorary Senior Corporate Adviser
of Nittetsu Mining Co., Ltd.



SHIBAYAMA Atsushi
Outside Director
Dean of Faculty of International Resource Sciences, Akita University
Dean of Graduate School of International Resource Sciences,
Akita University



YAMAGUCHI Junko
Outside Director



KATAGIRI Atsushi
Director
Managing Executive Officer
CHRO*4



HOSONO Hiroyuki
Director
Managing Executive Officer
CFO*5



KOIZUMI Yoshiko
Outside Director
Attorney
Partner of City-Yuwa Partners

*1 CEO: Chief Executive Officer *2 CIRO: Chief Innovation & Risk Officer *3 CTO: Chief Technical Officer *4 CHRO: Chief Human Resources Officer *5 CFO: Chief Financial Officer

Audit & Supervisory Board Members



KIMURA Ei
Corporate Auditor (Full-Time)



TSUTSUMI Azusa
Corporate Auditor (Full-Time)
Certified Public Accountant



OBA Koichiro
Corporate Auditor (Part-Time)
Attorney
Partner of Marunouchi Sogo Law Office



KOMURO Shingo
Corporate Auditor (Part-Time)
Auditor of FUJITA KANKO INC.

Summary of Directors

Category	Name	Inaugurated	Number of Shares Owned	Attendance at Board of Directors Meetings (Attendance / Number of Meetings)	Nominating Committee	Remuneration Committee	Expertise and Experience of Directors: Corporate Management, Business Strategy, and Sustainability	Global Mindset	Sales and Marketing	Research & Development, Production, and DX	Safety & Health and Environment	Financial Affairs, Accounting, and Finance	Human Resources, Organization, and Human Resources Development	Legal Affairs and Risk Management
Director	**SEKIGUCHI Akira**	June 2018	8,376	17/17	●	●	●	●	●			●	●	●
	TOBITA Minoru	June 2021	4,909	17/17			●		●	●	●			●
	SUGAWARA Akira	June 2021	6,196	17/17			●		●	●	●			
	KATAGIRI Atsushi	June 2022	5,533	17/17	●	●	●		●		●	●	●	●
	HOSONO Hiroyuki	June 2022	4,395	17/17			●	●	●			●		
Outside Director	**KOIZUMI Yoshiko**	June 2015	0	17/17	●	●		●					●	●
	SATO Kimio	June 2021	0	17/17	● Chair	● Chair	●	●	●			●	●	
	SHIBAYAMA Atsushi	June 2023	0	17/17	●	●		●		●	●			
	YAMAGUCHI Junko	June 2024	0	13/13	●	●		●	●				●	

Definitions of Skills in Skill Matrix and Reasons for Selection

Item	Definition	Reason for selection
Corporate Management, Business Strategy, and Sustainability	• Experience as representative director of Group company or listed company outside of Group • Abundant experience in business planning or promotion of sustainability	The Company aims to balance both enhancement of its corporate value and contribution to development of a sustainable society, and in order to realize them, the Company sets out evolution of our recycling-oriented business model and further implementation of sustainability management in Medium-term Plan 2027. For the implementation of the abovementioned matters, both in-depth understanding and ability in all aspects of corporate management are necessary, including ability to formulate and promote business strategy and knowledge on sustainability management.
Global Mindset	• Experience as representative or executive of overseas office such as overseas affiliated company • Abundant experience in overseas business • High-level global knowledge such as overseas academic experience and international legal practice	Medium-term Plan 2027 prescribes a policy to develop a global strategy in each business. In a business environment that is becoming globalized, it is necessary to have a deep understanding on international activities in order for the Company to increase its competitiveness and to further grow and expand its business.
Sales and Marketing	• Abundant experience in work relating to sales and marketing in the business departments	In order to achieve the evolution of our recycling-oriented business model in a business environment that is rapidly changing, it is necessary to have abundant experience in all aspects of sales activities in order to accurately grasp market trends and to be able to make proposals for product development and to devise sales strategies based on those market trends.
Research & Development, Production, and DX	• Abundant experience in research & development • Abundant experience in manufacturing departments • Abundant experience in use of digital transformation	In order to promote the business plan set out in Medium-term Plan 2027, it is necessary to streamline and re-engineer business processes and to develop new products and processes that have not existed in the past by using digital tools, AI, and IoT. To do so, in-depth knowledge on businesses such as research, production, and systems are indispensable.
Safety & Health and Environment	• Abundant experience in health & safety work • Abundant experience in environmental conservation work or in-depth academic experience in environmental policy	The Company sets out “environmental conservation” and “ensuring occupational safety and health” as a part of our materiality. In order to improve our work environment by preventing the occurrence of any accidents or disasters while reducing environmental impact relating to operations, it is necessary to have expert knowledge and abundant experience in safety & health and environmental conservation.
Financial Affairs, Accounting, and Finance	• In-depth experience in financial affairs and accounting	Knowledge and experience in financial affairs and accounting are indispensable elements for our supervisory function to supervise business execution. Furthermore, in order to enhance sustainable corporate value, it is important to conduct management by paying attention to appropriate capital allocation and capital efficiency, and in-depth knowledge based on experience in financial affairs and accounting is required.
Human Resources, Organization, and Human Resources Development	• Extensive experience relating to human resources, organization, and human resource development • High-level expertise on labor law	The Company views “development of an organization that continues to grow” as indispensable to achieve the mission and vision of the Company, and the Company designated “enhancing human capital” as a materiality item in Medium-term Plan 2027. In order to resolve this issue, it is indispensable to have expert knowledge on labor law and knowledge on human resource-related work.
Legal Affairs and Risk Management	• Extensive knowledge relating to legal affairs and risk management • High-level expertise on legal practice, etc.	Medium-term Plan 2027 sets out “strengthening corporate governance” and “promoting risk management” as materiality. To promote these, it is necessary to have abundant experience at an organization responsible for legal affairs and risk management and high-level expert knowledge on relevant laws.

Reasons for Selection and Roles Expected of Outside Officers

Category	Name	Reason for Selection
Outside directors	**KOIZUMI Yoshiko**	As a lawyer, Ms. KOIZUMI Yoshiko has been deeply involved in corporate legal matters and overseas transactions for many years and has also been active as an executive officer and Chair of the Women Business Lawyers Committee of the Inter-Pacific Bar Association. We judge that her knowledge and experience cultivated through such a wide range of activities can be expected to make a significant contribution to the promotion of our business, including compliance.
	SATO Kimio	Mr. SATO Kimio has demonstrated his skills at Nittetsu Mining Co., Ltd. in the sales sector for a number of years and served as Representative Director and President of Nittetsu Mining Co., Ltd. after serving in important positions. We judge that he can be expected to make a significant contribution by providing useful opinions and guidance on our future business operations based on his experience as a representative of a company outside the Group.
	SHIBAYAMA Atsushi	Mr. SHIBAYAMA Atsushi has continuously been studying international resource sciences including resources processing and recycling at Akita University. He also has extensive experience engaging in activities overseas including onsite study of local research laboratories and mines/smelters in resource-rich countries. We judge that we can expect him to make a significant contribution to the management of the Company by providing opinions and advice on the entire business of the Company, both domestic and overseas, including recycling and smelting, based on his career as described above.
	YAMAGUCHI Junko	Ms. YAMAGUCHI Junko served as an Audit & Supervisory Board Member of NTT EAST-MINAMIKANTO CORPORATION and Outside Director of Nippon Soda Co., Ltd. after being active in various types of positions at Nippon Telegraph and Telephone Corporation including HR, public relations, and sales. We judge that we can expect her to realize further innovations by bringing in a new set of values to the management of the Company through her opinions and advice based on her wide range of experience gained from various types of business.
Outside auditors	**TSUTSUMI Azusa**	Ms. TSUTSUMI Azusa has been engaged in accounting audits and accounting consulting at KPMG AZSA LLC for many years and has a high level of expertise in finance/accounting and internal controls. We judge that based on such experience, we can expect her to further strengthen the governance and compliance of the Company by taking important roles, especially in auditing from an accounting perspective.
	OBA Koichiro	Mr. OBA Koichiro has deep knowledge on compliance and governance due to his involvement in corporate legal affairs for many years as a lawyer. He also has experience as an outside director of other companies. We believe that he is suitable as an Outside Audit & Supervisory Board member because the ability to audit from the viewpoints of both law and management is very important in terms of business management of the Company.
	KOMURO Shingo	Mr. KOMURO Shingo has a wide range of experience, including engaging in finance/accounting work and business planning for many years, working in overseas offices, and being representative director of companies. He is able to audit the Company from various aspects based on the knowledge that he gained through such experience and we can expect him to play a very large role in the promotion of Company’s future business.

Strengthening Corporate Governance

Dialogue Between Outside Directors

Our outside directors told us about the effectiveness of DOWA's Board of Directors and their evaluation of Medium-term Plan 2027



SATO Kimio
Outside Director
Honorary Senior Corporate Adviser of Nittetsu Mining Co., Ltd.



YAMAGUCHI Junko
Outside Director



KOIZUMI Yoshiko
Outside Director
Attorney Partner of City-Yuwa Partners



SHIBAYAMA Atsushi
Outside Director
Professor, Akita University Faculty of International Resource Sciences
Professor, Akita University Graduate School of International Resource Sciences

What would you say are the merits of DOWA's Board of Directors?

SATO There are free and easy exchanges where each member of the Board brings their own perspective from their different career history and experience. From fiscal 2024, Ms. YAMAGUCHI Junko joined us, bringing the number of outside directors from three to four. This has added even more diversity to the Board of Directors and broadened our range of viewpoints. The Chairman always asks whether the outside directors have any questions about each topic, which creates an environment where it is very easy to state our views, and, like the others, I give my frank opinions.

YAMAGUCHI A major merit of the Company's Board of Directors is that auditors attend the meetings, as do the presidents of our operating companies. Including outside auditors, the majority of Board members are outside directors. Since we get opinions from so many different backgrounds, I think that leads to a high caliber of decision-making based on both insider and outsider knowledge.

KOIZUMI The questions asked by the presidents of our operating companies at Board of Directors' meetings reflect opinions from the business side, and then the Chairman of the Board and the President give additional explanations, so we hear both specific views from our sites and a big-picture view from our management.

As a result, there's a strong sense that everyone is on board as we discuss each topic. Preliminary explanations are also given before we discuss any critical topics. I think that system, where we have a proper, in-depth discussion before the final deliberation at the Board of Directors' meeting, is an extremely effective way to conduct Board of Directors' meetings efficiently in a limited time frame.

SHIBAYAMA President SEKIGUCHI Akira became the Chairman of the Board at the Board of Directors' meeting after the General Meeting of Shareholders. He gives outside directors an understanding of matters and summarizes our opinions, and I think his leadership keeps discussions on track.

Looking back on discussions at Board of Directors' meetings, what are your thoughts on evaluations and issues?

YAMAGUCHI I have been on both the side of the holding company and the side of an operating company, so I focus on the role that the Board of Directors of our holdings should play in efforts to enhance the corporate value of the Group as a whole. The most important and time-consuming discussions during the past year have been about the establishment of Medium-term Plan 2027. Those discussions, including both the preliminary explanations and the discussions themselves, have covered topics such as pursuing synergy between our businesses, judgments about major



investments, and concentration of resources in highly competitive fields, and I feel that results were achieved to a certain extent.

However, establishing a Medium-term Plan is not the goal. I think that going forward, the results we are seeking to achieve need to be further clarified and it will be important to hold ongoing discussions at Board of Directors' meetings about revisions and deliberations in response to changes in our business environment.

SATO The previous plan, Medium-term Plan 2024, was created internally and explained at a Board of Directors' meeting after it was completed, but for the current plan, Medium-term Plan 2027, the opinions of outside directors and auditors were sought from an early stage in the formulation process and the plan was refined through exchanges of opinion with the departments and officers involved. I would like to acknowledge the way the formulation process has evolved.

Much time has also been dedicated to discussions about policies for our five businesses going forward. Sufficient explanations were given before discussing critical topics like our business portfolio, and in cases where it was judged that there were issues pertaining to this, those issues were pointed out and resolved. I, too, have striven to give advice from both the perspective of management and the perspective of an outside director. With that said, I am also conscious that the results of each business ebb and flow, which raises concerns about the current state of our portfolio. I think that while a certain degree of impact on our business due to our external environment can be accepted, we need to have proper management

Dialogue Between Outside Directors

discussions about it from both a short-term perspective and a long-term one.

SHIBAYAMA I agree with the opinion that a long-term view needs to be taken. Times and society are rapidly changing, and the Board of Directors' discussions need to reflect those changes. For example, the necessary discussions need to be held at each stage about what direction to take in our businesses and what kinds of measures need to be taken. It is also important, for the purpose of management and supervision, to check on our business situation each month instead of just discussing specific topics.

In one respect, people look to me for opinions from an academic perspective, but I am also very conscious of management policies and strategies and how to utilize the Company's strengths and technologies when I engage in discussions.

KOIZUMI We also had a series of discussions about the Palmer (Zinc-Copper) Exploration Project. I think the decision about the transfer of interests was difficult, but I am pleased with the results that were reached through discussions from various angles. Our ownership of overseas mines is a strength, but it could be a risk too. Going forward, I intend to continue giving advice on measures related to international business based on my experience of being involved in Japanese companies' international trading as a lawyer.

I think that in order to facilitate more in-depth discussion at Board of Directors' meetings in future, it will probably also be important to consider the perspective of how the discussions held by the Board of Directors will be received by society.





What is your assessment of the Nominating Committee and Remuneration Committee?

SATO The Nominating Committee and Remuneration Committee comprise four outside directors and two inside directors (including the President), a total of six members. In the past these committees consisted only of outside directors, but inside directors were added from fiscal 2023 and I think that has enabled more in-depth discussions about the Company's strategies and remuneration system and significantly improved effectiveness. Additionally, in response to a proposal from an outside director, the committees began holding interviews with each director from fiscal 2024 so that the committees can gain a more in-depth understanding of the character and skills of candidates for succession.

With that said, there are issues too. While the Nominating Committee and Remuneration Committee have discussed various topics, I think that better measures need to be taken to share those details with non-members at Board of Directors' meetings and communicate with outside parties and investors. There are similar issues regarding our remuneration system; remuneration exceeding ¥100 million per year is disclosed in our securities reports, but elements such as the deliberation process at Remuneration Committee meetings and the rationale for decisions on remuneration amounts have not been adequately shared. In light of this, in fiscal 2025 I have begun sharing summaries of the two committees' discussions at Board of Directors' meetings in an effort to improve transparency.

YAMAGUCHI If I may give my opinion as a member, another point that I am pleased with is the use of external data to increase transparency and objectivity. The Company's measures to strengthen communication, such as holding committee meetings when a plant observation is conducted, are also good. I think that getting information from the front lines of our businesses will provide the Nominating Committee with material to make appropriate judgments.

What is your assessment of Medium-term Plan 2027, which begins in fiscal 2025? And what are your expectations?

SATO While the theme of "Pursue quality in circularity" is very abstract and difficult to pin down, I think that it expresses the essence of the Company well. Our Nonferrous Metals Business and Environmental Management & Recycling Business are our two wheels and our main engine. Whether these two businesses can really achieve growth will be the deciding factor in increasing quality in circularity, and I expect that their growth will have a ripple effect on the other three businesses. Large-scale repair is planned for our Nonferrous Metals Business in particular, which will have important implications about how to build our next main engine. This initiative will lead to growth of the whole Company, including our Environmental Management & Recycling Business, and I am paying close attention to it.

Solid implementation of various initiatives, including capital investment, will be essential in order for the Company to contribute to the realization of a recycling-oriented society.

KOIZUMI There is immense value in the Company's utilization of urban mines instead of limited natural resources. This balances profit creation with social contribution, enabling the Company to drive the building of a recycling-oriented society.

Looking at the global situation, there are many countries in need of DOWA's metal recycling technology due to the state of resource supplies, and I think that increasing the quality of this circular business model could further development in developing countries. I expect that DOWA will build those systems and become a leader in the building of a recycling-oriented society.

SHIBAYAMA With the Japanese government setting a major goal to make the country carbon neutral by 2050, we are treating Medium-term Plan 2027 as part of a series of efforts toward that future. I am conscious that a crucial element of our business going forward will be to consider how we should handle the direction that society and the world want to take and making steady progress to that end.



Strengthening Corporate Governance

Dialogue Between Outside Directors

The key question here is how DOWA should contribute to the creation of a recycling-oriented society, and I think we need to properly develop key businesses and continuously work to solve social issues. In addition to achieving our targets for 2027, it will be essential to build long-term business strategies with a view further into the future. We will probably also need to establish frameworks for the necessary corporate culture and personnel.

YAMAGUCHI "Pursue quality in circularity" expresses the Company's aim to not only pursue growth of individual businesses but also facilitate collaboration between businesses and grow our entire portfolio. I was struck by how much that aim reflects the Company's nature. References are also made to strengthening profitability and establishing capital policy, and I am very pleased with the content of the plan.

With regard to our Environmental Management & Recycling Business's collaboration with our Nonferrous Metals Business and our Electronic Materials Business, I think that we will be more persuasive to our stakeholders if we can provide specifics such as a road map, targets, or projected business results.

I also think that it is important to concentrate resources in competitive fields and express a positive view for the future that is grounded in strategies. At the same time, creating an environment where management and employees are on board with our management policies and can approach our initiatives with a high level of motivation will be essential in order to achieve our Medium-term Plan.



What kind of systems are the key to involving society in resource recycling?

KOIZUMI As Mr. SHIBAYAMA Atsushi and Ms. YAMAGUCHI Junko said, it will hinge on development of human resources. The Company has many capable personnel. However, as we work on further international expansion of our businesses in future, we may find that we have a shortage of project managers who can take the lead at overseas sites. This problem is faced by all Japanese companies, not just this one, but I think we need to steadily work on development of human resources, even if it takes time.

SATO I agree. I think the Company will spearhead many overseas projects in future in areas such as mine operation, waste treatment, and recycling. When that time comes, it will be essential to have personnel who are prepared to take the lead, both in Japan and overseas. It might take a decade or more, but we will develop personnel over the years. I think that this will lead to new developments and the creation of new value.

SHIBAYAMA The Company is a trailblazer in the recycling of nonferrous metals. I want everyone to be confident in DOWA's technology and maintain DOWA's status as a top player with a high caliber of technical capabilities. The young generation will be responsible for the next generation, and we have a responsibility to make the necessary investments in their growth and the necessary judgments. I want to make this a company where our young generation can look back after a long career and be glad that they got a job here.

YAMAGUCHI In the Company's history of over 140 years, we have built relationships of trust with customers and communities. Going forward, I want the Company to involve the whole of society in world-leading efforts to build a recycling-oriented society. Since our businesses are so socially significant, making that widely known will directly enhance our corporate value. I expect to see further refining of communication methods and the details that are communicated.

Initiatives to Strengthen Corporate Governance

The Company designated "Strengthening corporate governance" as a materiality item in Medium-term Plan 2024 and has been carrying out initiatives centering on building, maintaining, and enhancing a high level of corporate governance. Below are the initiatives we carried out.

	FY2021	FY2022	FY2023	FY2024	FY2025
Management system		• Established Sustainability Committee and Sustainability Subcommittee			
Board of Directors	• Increased number of outside directors to three (outside directors accounting for 33% of directors)	• Expanded reporting content at Board of Directors' meetings (e.g., status of dialogue with shareholders)		• Increased number of outside directors to four (outside directors accounting for 40% of directors, women accounting for 20% of all directors)	• Transitioned to nine-director system (outside directors accounting for 44% of directors, women accounting for 22% of all directors)
Nominating Committee Remuneration Committee		• Introduced restricted stock remuneration • Disclosed skill matrix	• Changed member composition of both committees (inside directors accounting for two members)	• Disclosed independence standards for outside directors	• Disclosed reasons for selection of skills in skill matrix

Evaluation of the Effectiveness of the Board of Directors

The Company conducts annual self-assessments and analyses of the effectiveness of its Board of Directors every year to improve its functioning and, ultimately, its corporate value.

In fiscal 2024, we conducted a survey of all directors and auditors in the Board of Directors. Respondents replied directly to an outside organization to ensure anonymity.

Overview of Effectiveness Assessment

Evaluation Period	March 2025
Target Group	All directors and auditors who are members of the Board of Directors
Evaluation Method	Unsigned questionnaire method by an external organization

Evaluation Results

Positive Evaluation	• Availability of time required for duties • Appropriate management of conflicts of interest • Board of Directors, composition (diversity) • Framework for cooperation between directors/auditors and the Internal Audit Department	Assessment found that the overall Board's effectiveness has been ensured
Status of Measures to Address Issues Identified in the Previous Effectiveness Assessment	• Deliberation of framework for dialogue with shareholders	Improvements have been seen as a result of measures such as participation of outside directors in SR interviews and increasing the frequency of reporting to the Board of Directors.
	• Active involvement in formulation and execution of succession plans upon receiving appropriate information from the voluntary Nominating Committee and Remuneration Committee • Regular revisions of the overall Group's business portfolio	A certain degree of improvement was seen, but there were calls for further sharing of information and facilitation of more active discussion.

Remuneration for Directors and Audit & Supervisory Board Members

The remuneration system for directors comprises basic remuneration, which is a fixed amount; performance-based remuneration, which considers the Group's consolidated performance; and restricted stock remuneration. This system does not apply to outside directors, however, as they take on a supervisory role from an independent and objective perspective. Therefore, they are ineligible for any remuneration based on individual performance. As each auditor is independent from the execution of business operations, only fixed remuneration is paid to each auditor. The amount of remuneration is determined through discussions among the auditors within the total amount of remuneration approved at the General Meeting of Shareholders.

Basic Remuneration

Basic remuneration for directors is fixed remuneration paid monthly according to each director's position and results. It is determined after a comprehensive examination that accounts for company performance remuneration levels at other companies, and employee salary levels.

Performance-based Remuneration

Performance-based remuneration is paid at a certain time every year. The amount paid as performance-based remuneration is determined using ordinary income as a baseline, adjusted to reflect individual performance. The aim of adopting ordinary income as the index on which performance-based remuneration is calculated is to increase the motivation to contribute to business growth by linking remuneration to corporate profits.

(Formula for Determining Performance-based Remuneration)

Base pay amount by position

① Linked to absolute ordinary income: (Actual ordinary income ÷ Standard ordinary income amount*1) × Fixed amount

\+

② Linked to ordinary income target achievement ratio*3: (Actual ordinary income ÷ Ordinary income target*2) × Fixed amount

× Pay rate by position × Individual performance

*1 Ordinary income amount predetermined in conjunction with the Medium-term Plan
*2 Published ordinary income forecast
*3 The upper and lower limits of the target achievement rate are 50% to 150%.

Remuneration Determination Process

① Calculation of the portion linked to the absolute amount of ordinary income
- The standard amount is calculated by multiplying the rate of increase or decrease in the actual ordinary income against the standard ordinary income amount, which is predetermined in alignment with the Medium-term Plan.

② Calculation of the portion linked to the ordinary income target achievement rate
- The standard amount is calculated by multiplying the target achievement rate, derived by dividing the actual ordinary income by the target amount (the announced ordinary income forecast), by a fixed amount.
- Taking into account potential extreme fluctuations in metal prices, exchange rates, global pandemics, and other unforeseen social and economic changes, the target achievement rate is capped at a range of 50% to 150%.

③ Determination of remuneration amount
- The standard amount for each position is calculated by applying the position-based payment rate to the sum of the standard amounts from ① and ②.
- The final remuneration amount is determined by multiplying the position-based standard amount by individual performance.

Restricted Stock Remuneration

Restricted stock remuneration shall be provided by granting monetary remuneration claims to eligible directors based on a Board of Directors' resolution. The directors will then pay these claims to the Company as a contribution in kind to issue (or dispose of) the Company's common stock with restrictions on the transfer of these shares until retirement or resignation. The amount of the monetary remuneration claims is determined based on the director's position, and the per-share price is set at the closing price of the Company's stock on the Tokyo Stock Exchange on the business day preceding the date of the Board of Directors, resolution regarding the issuance (or disposal) of shares. This system aims to provide the directors with incentive to sustainably enhance the Company's corporate value while promoting greater value-sharing with shareholders.

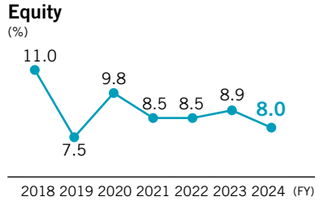
Reduction of Cross-shareholdings

The Company positions its cross-shareholdings as those that will enhance the Company's corporate value to maintain and strengthen relationships with business partners and other parties and form a strong relationship of trust with the issuing company. Regarding cross-shareholdings, the Board of Directors regularly makes a comprehensive judgment as to whether or not to continue to hold stocks. If it is judged that continuing to hold a stock will not contribute to the improvement of the Company's corporate value, the stock is successively sold, taking into account impacts on the market.

In fiscal 2024, the Company sold a portion of one listed stock held by the Company. Additionally, on December 10, 2024, the Board of Directors evaluated whether to continue holding cross-shareholdings. As a result, for fiscal 2024, apart from the aforementioned stock, the decision was made to continue holding the remaining stocks.

	Reduction of Cross-shareholdings
Fiscal 2020	Sold a portion of shares of one stock held by the Company
Fiscal 2021	Sold all shares of one stock and a portion of shares of one stock held by the Company
Fiscal 2022	Sold all shares of two stocks held by the Company (among which was the rest of the shares of the stock the Company sold a portion of in fiscal 2020)
Fiscal 2023	Sold all shares of one stock held by the Company
Fiscal 2024	Sold a portion of shares of one stock held by the Company

Percentage of Shares in Cross-shareholdings in Consolidated Equity



Chief Executive Officer Succession Planning

The CEO succession plan at the Company is discussed within the Nominating Committee, an advisory committee, and is appropriately implemented based on our management philosophy and strategy. Regarding the selection of a specific CEO successor, the Company President selects candidates from among directors, executive officers, and Group company officers based on their skills, qualifications, and experience (including the items listed in the skill matrix) and consults the Nominating Committee for advice. Based on the discussions in the Nominating Committee, the President proposes the succession plan to the Board of Directors, which deliberates and makes the final decision.

Support Framework for Outside Directors/ Outside Auditors

Our four outside directors gather information through means such as attending critical meetings, reading necessary materials, and meeting with other directors and employees. Our part-time outside auditors (two of our three outside auditors) visit the Company for two or three days of each month, attending meetings with the other auditor to facilitate sharing of information. The part-time auditors are included in on-site inspections and consultations of our business sites, subsidiaries, etc.

Driving Digital Transformation (Data Utilization)

For more information on DX, please see the link below.
https://hd.dowa.co.jp/en/csr/governance/dx.html

The DOWA Group recognizes that it is essential to promote data utilization through the use of digital technologies, including artificial intelligence (AI) and the Internet of Things (IoT), to transform manufacturing, the foundation of the DOWA Group's business, and to evolve its operations and business activities. Based on this recognition, we have established a DX Basic Policy called Manufacturing Transformation (DOWA Transformation). We will promote DX by building IT infrastructure, strengthening information security, and developing DX-proficient human resources.

Initiatives Under Medium-term Plan 2024

To transform operations, organizations, and processes across the Group by leveraging data and digital technology, it is essential to use a secure IT infrastructure managed by personnel with specialized knowledge and skills to advance business strategies. Therefore, under Medium-term Plan 2024, we mainly focused on IT infrastructure development and DX human resource development as key initiatives to promote various activities.

Requirements to Achieve DX

DX = IT Infrastructure × Human Resources

Status of Achievement of KPIs in Medium-term Plan 2024

Key Measures	Indicators	Targets	Results in FY2024
Build IT infrastructure	Operation of a Group-wide cloud platform	Start operation in the second half of FY2023	Started operation in August 2023
Develop DX-proficient human resources	Number of personnel trained	80 in total (FY2022 to FY2024)	193 in total

Building IT Infrastructure

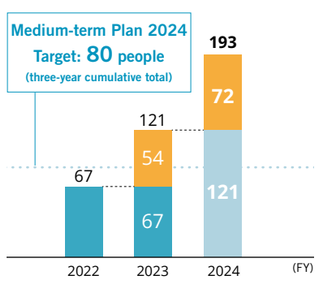
In fiscal 2021, we began building new IT infrastructure (a Group-wide cloud platform) to be used by the whole of the Group. As the project was carried out during the COVID-19 pandemic, we faced delays in progress due to decentralized work and people suddenly falling ill, but despite these roadblocks, we were able to commence operation of the platform from August 2023, ahead of schedule. This has enabled us to build systems for full-scale deployment of DX.

Developing DX-Proficient Human Resources

In Medium-term Plan 2024, to strengthen our development of DX-proficient human resources, we set a target to train a total of 80 DX-proficient human resources in the three-year period from fiscal 2022 to fiscal 2024.

In fiscal 2024, due to high expectations for DX at sites, we were able to train 72 people, more people than planned. This brought the total number of trainees for the three-year period from fiscal 2022 to 193, far above the target of 80 people set in Medium-term Plan 2024.

Number of Students in DX Training



Examples of Improvements through DX

As a result of the increase in personnel with knowledge of DX in the Group, we were able to carry out full-scale DX at various Group companies.

In the three-year period from fiscal 2022, we made over 100 improvements to sites through the use of AI.

Examples of Initiatives	Results
Utilization of data science in refining of tin to improve grade and yield	Eliminated quality problems
Utilization of AI to increase efficiency of precious metal plating production planning	Reduced duration of 1 day task by 5 hours
Utilization of AI to detect surface defects of copper rolled products	Reduced number of manual inspections by more than 90%
Improvement of equipment safety through AI-powered human detection system	Achieved detection accuracy of more than 98%
Operation of DOWA Generative AI System	Increased efficiency of administrative tasks

Initiatives under Medium-term Plan 2027

Through initiatives carried out over the three-year period of Medium-term Plan 2024, we completed preparations for full-scale DX. Going forward, to tie our DX to our business results (business growth), we will need to further strengthen our implementation frameworks, improve efficiency through appropriate allocation of resources, and establish a system for evaluation. To accomplish this, we set a goal for 2030 for each initiative to drive DX under Medium-term Plan 2027, and organized the gaps between the ideal situation and our current situation. We also created a roadmap summarizing initiatives to close those gaps by 2030. The following key measures and indicators are based on this roadmap.

	Key Measures	Summary of Measures	Goal for 2030
Drive data utilization	Drive innovation and strengthen security for existing technologies and operations	Drive IT technology and data utilization to transform manufacturing and strengthen security	Under a safe security framework, we will be utilizing data through digital technology such as AI to save or eliminate labor and achieve advanced operations and task management

KPIs in Medium-term Plan 2027

Key Measures	Indicators	Standards (FY2024)	Targets
Business transformation through DX, AI, and cloud utilization	DX Promotion Indicators* (management side)	3.0	3.3 (FY2027)
Strengthening IT governance	DX Promotion Indicators* (IT side)	2.7	3.0 (FY2027)
Development of DX-proficient human resources	Number of DX engineers trained	—	150 total (FY2025-FY2027)

* "DX promotion indicator self-diagnosis formats" are tools provided by the Information-technology Promotion Agency, Japan (IPA). Evaluation points are calculated through self-grading using the format provided by IPA.
Reference: https://www.ipa.go.jp/digital/dx-suishin/about.html (in Japanese only)

Environmental Management & Recycling Business

Environmental Management & Recycling Business

DOWA ECO-SYSTEM CO., LTD.

Waste Treatment | Soil Remediation | Recycling | Southeast Asia

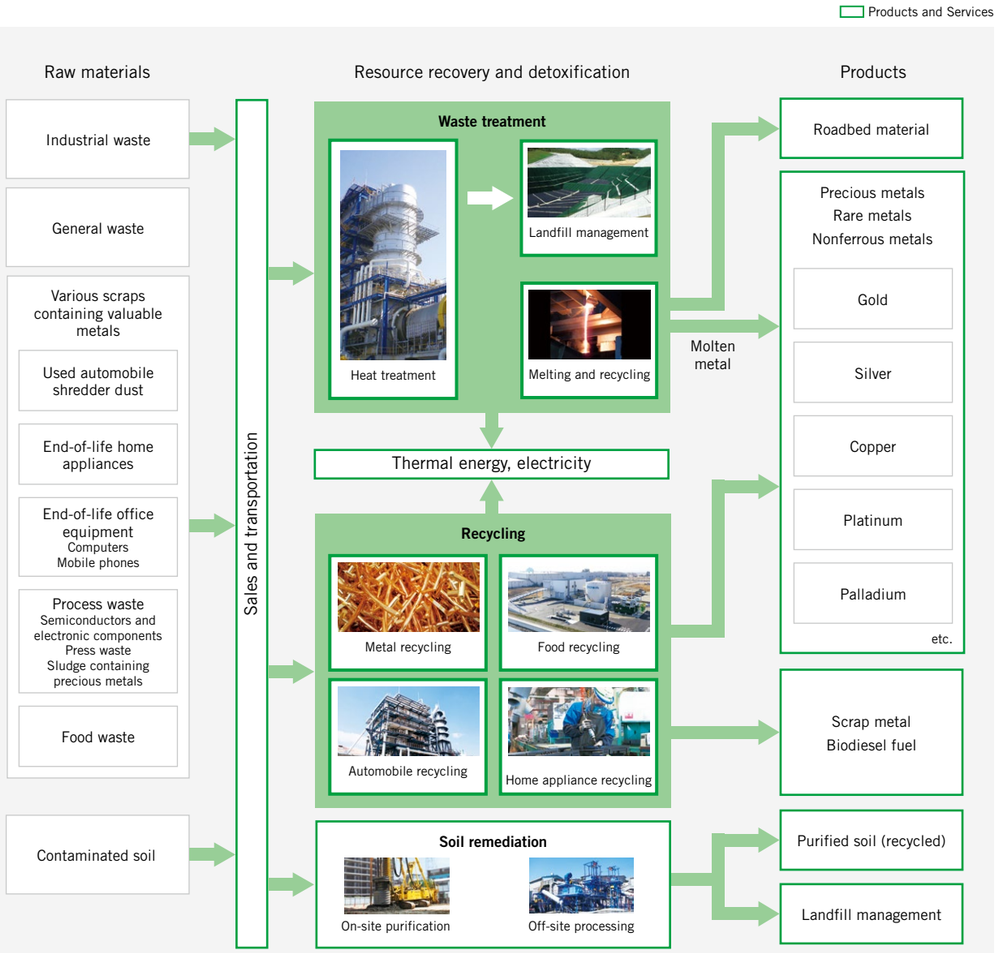
VISION

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



YANAI Yasuharu
Executive Officer
President and Representative Director,
DOWA ECO-SYSTEM CO., LTD.

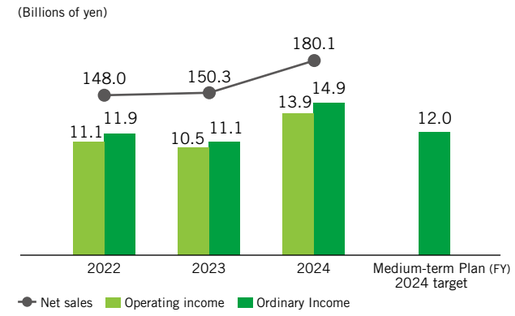
Business Model



Medium-term Plan 2024 (FY2022-FY2024) in Review

▶ Status of Businesses

In our waste treatment business, we expanded the volume of hazardous waste that we handle. Cost reductions and price adjustments were carried out in response to surging prices of resources such as sub-materials due to rising costs of goods. In our soil remediation business, the business for recycling of noncombustible waste drove income. In our recycling business, factors such as the weak yen and increases in gold and silver prices contributed to results. In our Southeast Asia business, orders for hazardous waste stagnated. As a result of these factors, ordinary income for fiscal 2024 exceeded the target set in the Medium-term Plan.



▶ Results and Status of Measures

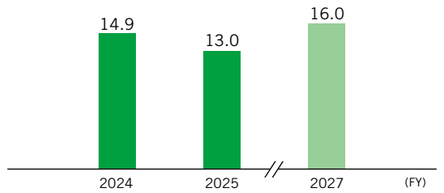
The expansion of hazardous waste being treated increased our income base. Additionally, decisive investments were made in areas where growth is expected, including establishing a second treatment facility in Indonesia and building a new recycling business hub in Kumamoto, to lay the foundations for further growth.

Business	Measures	Results
Waste Treatment	● Introducing new equipment for treatment of hazardous waste	● Increased orders for hazardous waste (increased both volume and unit price)
Soil Remediation	● Expanding the dismantling, shredding, and sorting business	● Maintained high level of operation in business for recycling of noncombustible waste
Recycling	● Increasing the collection of materials for recycling ● Opening a new base for the recycling business in Kumamoto Prefecture	● Expanded collection area of materials for recycling ● Established new recycling business hub in Kumamoto
Southeast Asia	● Expanding treatment of hazardous waste ● Establishing a second treatment facility in Indonesia	● Expanded incineration and detoxification treatment in Indonesia ● Commenced operation in fiscal 2022, now achieving monthly profits through expansion of collection

Summary of Medium-term Plan 2027 (FY2025-FY2027)

Demand for recycling is expected to further increase as the transition to a circular economy accelerates. At the same time, we can also expect growing needs for proper treatment of hazardous waste that cannot be recycled, so we will advance measures on both fronts. We will also focus on expanding our business in Southeast Asia.

Numerical Targets	Key Measures
Ordinary Income (Billions of yen)	● 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



Nonferrous Metals Business

Nonferrous Metals Business

DOWA METALS & MINING CO., LTD.

Precious Metals and Copper Smelting
Platinum Group Metals Smelting　Zinc Smelting
Resource Development and Raw Material Procurement

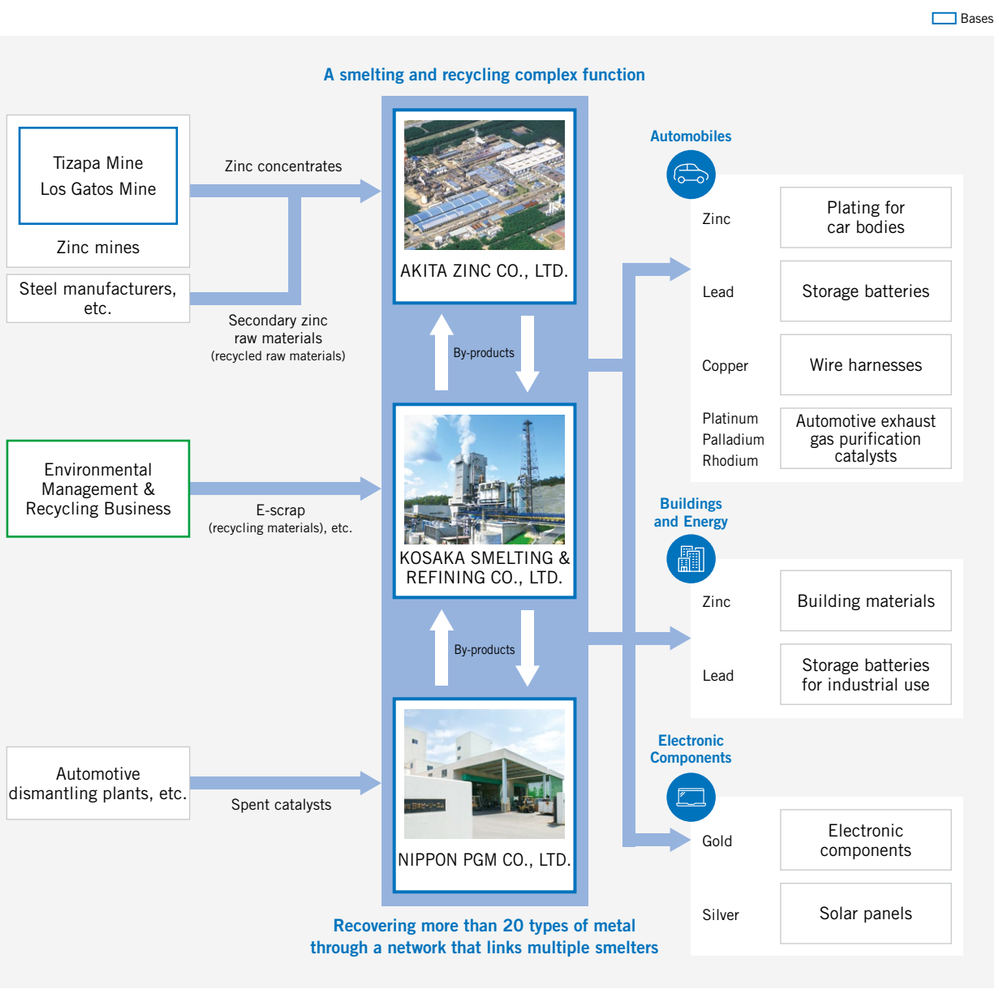
VISION

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



FUKUDA Kensaku
Executive Officer
President and Representative Director,
DOWA METALS & MINING CO., LTD.

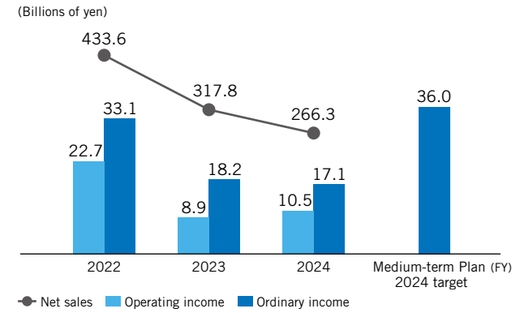
Business Model



Medium-term Plan 2024 (FY2022-FY2024) in Review

▶ Status of Businesses

A weaker yen than presumed in Medium-term Plan 2024 and sound operation of overseas mines underpinned income. With that said, income for our platinum group metals business was impacted by significant cost increases due to factors such as the decrease in collection volume of spent exhaust gas purification catalysts and resultant decrease in metal production caused by the drop in platinum group metal prices, the surge in electricity prices in our zinc business, and worsening purchase conditions of raw materials. As a result of these factors, ordinary income for fiscal 2024 fell short of the target set in the Medium-term Plan.



▶ Results and Status of Measures

Measures were steadily carried out in each business, but due to major changes in our business environment, additional measures were taken to improve profitability and management efficiency. As a result, our review of our business portfolio was mostly completed during the Medium-term Plan 2024 period.

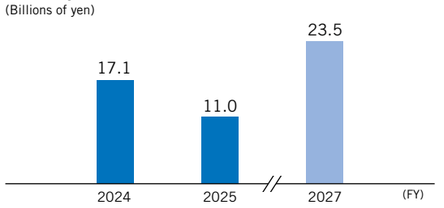
Business	Measures	Results
Precious Metals and Copper Smelting	• Concentration of management resources in the metal recycling business	• Terminated tolling contract with Onahama Smelting and Refining Co., Ltd.
Platinum Group Metals Smelting	• Increasing collection of spent NIPPON catalysts overseas • Increasing the processing capacity of Nippon PGM	• Established new sampling base in North America • Completed electric furnace upgrade in FY2023
Zinc Smelting	• Improvement of management efficiency • Establishing a structure for annual production of 220,000 tons	• Turned AKITA ZINC into a wholly owned subsidiary, carried out absorption merger of related subsidiaries • Changed policies to create optimal production structure in response to increase in electricity prices
Resource Development and Raw Material Procurement	• Increasing production at Los Gatos Mine (Mexico)	• Expanded production by realizing stable operation

Summary of Medium-term Plan 2027 (FY2025-FY2027)

We will expand collection of raw materials and increase production of various metals to meet growing needs for recycled metals. We will also carry out large-scale repair and rebuilding of our integrated smelting and recycling complex to support sustainable resource recycling by DOWA.

Numerical Targets	Key Measures

Ordinary Income
(Billions of yen)



- 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

Electronic Materials Business

Electronic Materials Business

DOWA ELECTRONICS MATERIALS CO., LTD.

Semiconductors | Electronic Materials | Advanced Fine Materials

VISION

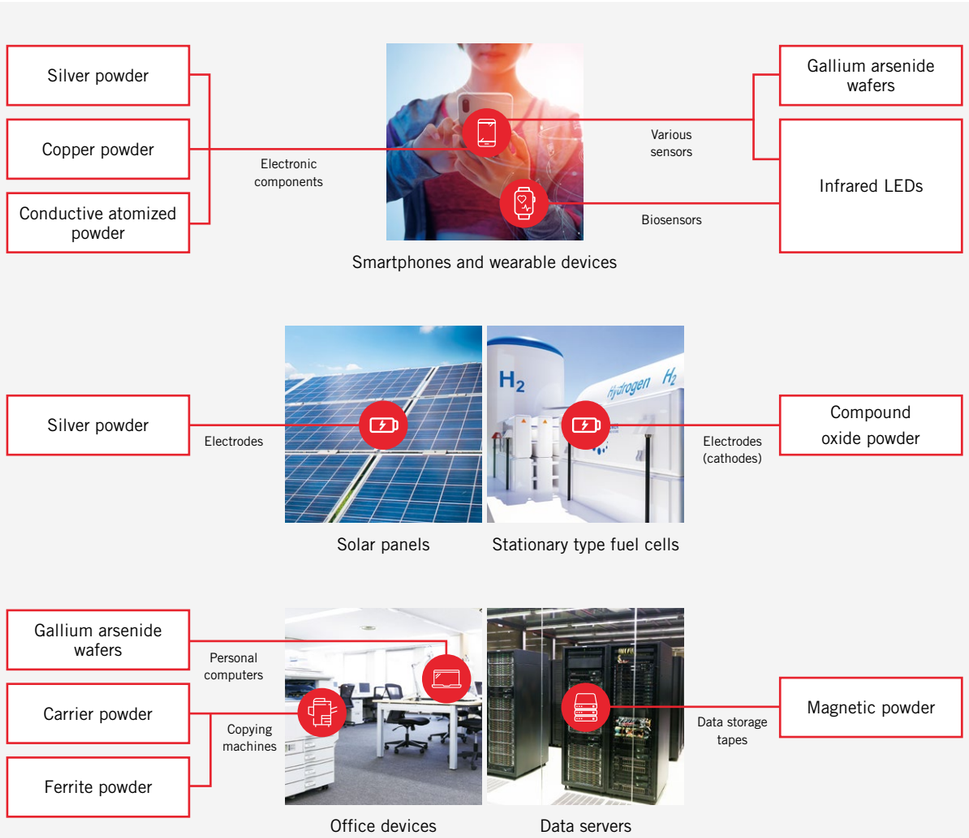
We will become one of the world's leading material manufacturers, offering niche-leading products in highly profitable markets.



SUZUKI Takehiko
Executive Officer
President and Representative Director,
DOWA ELECTRONICS MATERIALS CO., LTD.

Business Model

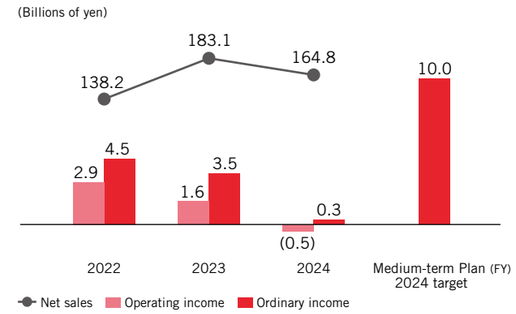
Products



Medium-term Plan 2024 (FY2022-FY2024) in Review

▶Status of Businesses

In our semiconductors business, demand for short-wavelength infrared LEDs and photo diodes (PDs) for wearable devices did not grow as expected, resulting in low sales. In our electronic materials business, demand for silver powder for solar panels was adjusted and competition with our competitors intensified. In our advanced fine materials business, sales of magnetic powder were low. The commencement of mass production of new products was also delayed. As a result of these factors, ordinary income for fiscal 2024 was far below the target set in the Medium-term Plan.



▶Results and Status of Measures

While we succeeded in securing large orders and obtaining certification for new products, we fell short of our targets for releases and commercialization. As an additional measure based on our income situation, we strengthened criteria for the continuation of new development themes and narrowed down the number of themes

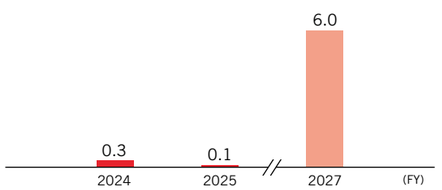
Business	Measures	Results
Semiconductors	● Strengthening of income base of semiconductors business	● Secured a large order for ultraviolet LEDs in fiscal 2023 ● Demand decreased for short-wavelength infrared LEDs and PDs for wearable devices
Electronic Materials	● Developing silver powder in line with the progress in the development of solar panels	● Succeeded in developing silver powder for new technologies ● Sales volume decreased due to intensifying competition with Chinese silver powder manufacturers
	● Improving the performance and increasing the production of conductive atomized powder	● Achieved an increase in sales but the market recovered at a slower pace than expected
Advanced Fine Materials	● Establishing a structure for the mass production of fuel cell materials	● Delays in obtaining certification from customers and establishing markets

Summary of Medium-term Plan 2027 (FY2025-FY2027)

To improve profitability, we will secure new orders to recover our market share for key products such as silver powder, short-wavelength infrared LEDs, and PDs. Together with this measure, we will make a series of raw cost reductions through measures such as optimization of development resource allocation.

Numerical Targets	Key Measures

Ordinary Income
(Billions of yen)



- Securing next-generation projects involving high-performance LEDs and PDs designed for sensors, and shifting 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 of sales of fuel cell materials
- Expansion of sales of conductive atomized powder for MLCCs

Metal Processing Business

Metal Processing Business

DOWA METALTECH CO., LTD.

Metal Processing　Electroplating　Metal-ceramics Substrates

VISION

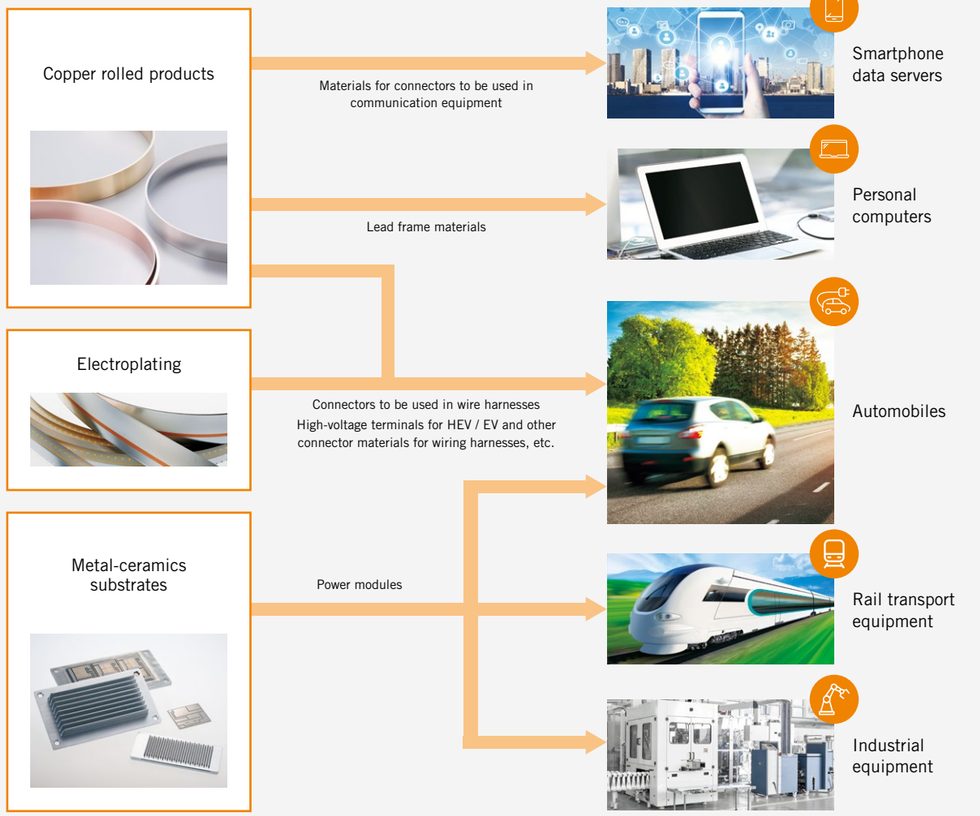
We will provide services and products that exceed expectations with a customer-centric approach, while continuing to take on the challenge of creating new value which is of significance to society.



ONIOH Takashi
Executive Officer
President and Representative Director,
DOWA METALTECH CO., LTD.

Business Model

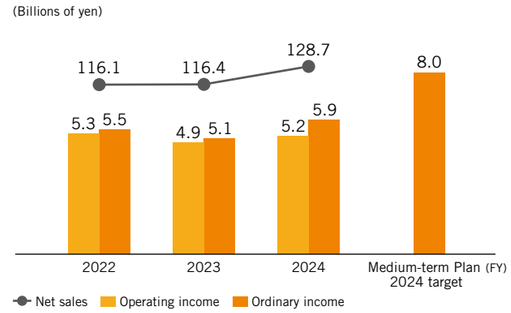
Products and Services



Medium-term Plan 2024 (FY2022-FY2024) in Review

▶Status of Businesses

In our copper rolled products business, demand for in-vehicle products was lower than planned due to a loss of demand for Japanese automobiles in China and certification fraud in Japan. Demand for information and communication-related products also stagnated. Demand in our electroplating business was likewise low. In our metal-ceramics substrates business, demand decreased for products for EVs but grew for renewable energy products. Due to these factors and increases in costs such as electricity prices, ordinary income for fiscal 2024 fell short of the target set in the Medium-term Plan.



▶Results and Status of Measures

Measures were taken to expand sales of various products for EVs and information and communication-related products, which were designated as growth sectors, and most targets were met.

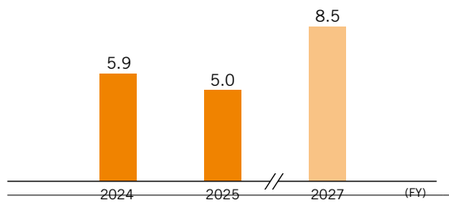
Business	Measures	Results
Copper Rolled Products	● Developing new products and expanding sales in the automotive sector ● Strengthening sales to the telecommunications sector ● Expanding the Asia business	● Expanded sales, particularly of products for EVs ● Steadily expanded sales volume of products for smartphones ● Expanded sales to non-Japanese parts manufacturers, met increase in demand in Thailand
Electroplating	● Expanding sales of products such as electroplated products for high-voltage terminals	● Secured demand for products for electric vehicles
Metal-ceramics Substrates	● Expanding sales for industrial machinery and railways	● Expanded sales of renewable energy products

Summary of Medium-term Plan 2027 (FY2025-FY2027)

The major patterns of electrification of vehicles and expansion of demand in Asia are not expected to change in the near future, so we will continue focusing on expanding sales of products such as those for EVs. We will also work to expand sales of copper rolled products for data servers to secure the vigorous demand for AI-related products.

Numerical Targets　Key Measures

Ordinary Income
(Billions of yen)



- 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 of sales volume of copper alloys in Asia
- Tapping into new metal plating demand, such as plating for xEV high-voltage terminals
- Stepping up production capacity of metal and ceramic substrates for power modules

Heat Treatment Business

Heat Treatment Business

DOWA THERMOTECH CO., LTD.

Heat Treatment Processing　Industrial Furnaces

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.



KAGAWA Koki
Executive Officer
President and Representative Director,
DOWA THERMOTECH CO., LTD.

Business Model

Products and Services

Component manufacturers



Gears, shafts, and other components

Procurement of raw materials → Machining → Heat treatment → Postprocessing

Automotive and machinery manufacturers

Automobiles

Industrial machinery

Construction machinery

Sales

Contracting

In-house processing
Design, manufacture, marketing, and maintenance of heat treatment facilities





Outsourced processing
Heat treatment and surface treatment

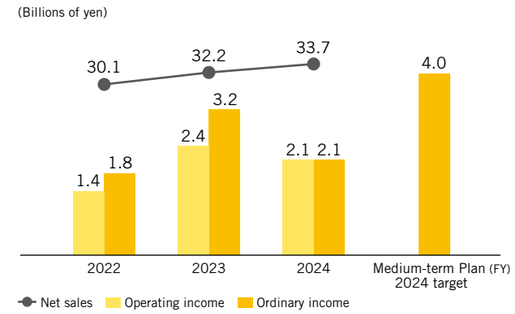




Medium-term Plan 2024 (FY2022-FY2024) in Review

▶Status of Businesses

Production volume for Japanese automotive manufacturers stagnated due to factors such as a loss of demand for Japanese automobiles in China and certification fraud in Japan. As a result, in our heat treatment processing business, orders for heat treatment processing fell short of plans. Our industrial furnaces business was impacted by revisions of investment plans for decarbonization. Energy costs and labor costs increased, but this was offset by measures such as receiving lump-sum payments from customers. As a result of these factors, ordinary income for fiscal 2024 fell short of the target set in the Medium-term Plan.



▶Results and Status of Measures

Key measures were decisively executed, including completion of development of Z-TKM and commencing facility sales and mass production of heat treatment processing. We also explored application markets, including facility development for applications other than the automotive industry.

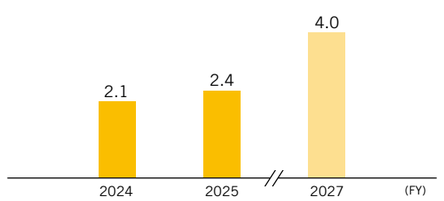
Business	Measures	Results
Heat Treatment Processing	● Winning orders from customers other than those in the automotive industry	● Advanced and expanded trades with non-Japanese companies in India and Mexico
	● Developing and expanding sales of heat treatment facilities which achieve carbon neutrality (Z-TKM)	● Commenced mass production of heat treatment processing using Z-TKM at Hamamatsu Plant
		● Secured order for one facility from major automotive parts manufacturer
Industrial Furnaces	● Developing and expanding sales of new equipment for applications other than automobiles	● Manufactured mass produced furnaces for electronic materials manufacturing facilities

Summary of Medium-term Plan 2027 (FY2025-FY2027)

We will address new needs based on the transition to a carbon-neutral society and utilize Z-TKM and V-TKM as strategic products to expand sales. We will also work to expand sales to fields other than the automotive industry and non-Japanese companies.

Numerical Targets	Key Measures

Ordinary Income
(Billions of yen)



- Promoting decarbonization through the expanded adoption of Z-TKM at our own plants
- Expansion of 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

Stakeholder Communication

To achieve sustainable growth and enhance corporate value, the DOWA Group is committed to transparent information disclosure and promoting dialogue with our stakeholders, including shareholders, investors, customers, suppliers, employees, government agencies, and local communities.

Responsibilities and Opportunities for Dialogue with Key Stakeholders

Maximizing corporate value in the medium to long term
- General Meeting of Shareholders
- IR interviews and SR interviews
- IR events
- Integrated Report
- Disclosure of information on our website

Stable supply of products and services, fair trade
- Meetings with customers and suppliers
- Joint business operations and R&D
- Trade shows and events
- Disclosure of information on our website



Appropriate evaluation and treatment
- Labor and management receptions
- Education for employees
- Group newsletters
- Internal portal site
- Workplace tours for families

Contribution to regional development
- Community events
- Environmental conservation activities
- Environmental education for students, etc.
- Plant tours for locals
- Disclosure of information on our website

Dialogue Implementation Status (FY2024)

Customers and Suppliers

The DOWA Group has appeared at AKITA ECO FES, held in Akita Prefecture, every year since it was first held in 2001. Our booth in 2024 included an exhibit outlining the Group's resource recycling initiatives through a Plarail set with a specially designed train called the DOWA Express and an event where visitors could look at a dismantlable model of a smartphone through a microscope.

More than 600 people visited our booth over the two-day period of the festival.



Employees

ECO-SYSTEM CHIBA CO., LTD. (Sodegaura City, Chiba Prefecture) held its first tour for families in November 2024. Seven employees' families, a total of 28 people, participated in the event, which featured a lesson on the environment for children, including a quiz using DOWA x Unko Drills: Garbage and Resources, followed by a tour of the site.



Shareholders and Investors

Main IR Events

Event	Overview
Corporate strategy briefings	Held in May 2024 with 41 participants
Sustainability briefings	Held in November 2024 with 42 participants
Earnings calls	Held 4 times with a total of 140 participants
Individual interviews	129 interviews (124 IR interviews, 5 SR interviews)
Plant tours	Held in September 2024 (Environmental Management & Recycling sites) with 15 participants

Main Correspondents for Dialogue with Shareholders and Investors (FY2024)

- Representative Director/President and Executive Officer/CEO
- Director/Managing Executive Officer/CFO, Director/Managing Executive Officer/CHRO
- Outside director*
- Executive officers
- Those responsible for IR, Sustainability, Governance, and Human Resources

* In fiscal 2024, SATO Kimio, an outside director who is the chair of the Nominating Committee and Remuneration Committee, participated in SR interviews, discussing education for management successors and officer remuneration, as well as strengthening dialogue with shareholders and investors.

Main Themes and Concerns of Dialogue

- Future business strategy (growth drivers, efforts to monetize prior investments, etc.)
- Progress of key measures in Medium-term Plan 2024
- Capital policy (dividend level, share buybacks, etc.)
- Cross-shareholdings, etc.

Status of Feedback to the Board of Directors

Opinions and concerns identified through dialogue with shareholders are promptly fed back to the CEO and other relevant internal departments, and are reported at Board of Directors' meetings. A total of three reports were made in fiscal 2024.

Governments / Local Communities

Seven DOWA Group companies in the Okayama area jointly served as a main sponsor for a mini basketball tournament held to invigorate the whole of the north of Okayama Prefecture and promote sports. A total of 217 boys and girls on 17 teams from northern Okayama's elementary schools battled it out in a gym in the Kume District of Okayama Prefecture.



Financial Review

Financial Performance

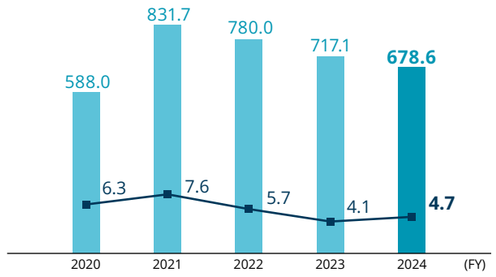
In fiscal 2024, our Group's business situation saw a decrease in orders for automotive-related products and services due to low automobile production. Sales of information and communication-related products were steady. Additionally, adjustments in sales of new energy-related products have been made continuously since the second quarter. Orders for environmental and recycling-related services were solid for waste treatment. In terms of market conditions, the dollar was stronger against the yen on average compared to the previous fiscal year. The average prices of gold, silver, copper, and zinc also increased. Energy costs such as electricity decreased compared to the previous fiscal year.

Under these circumstances, the Company remains committed to enhancing corporate value and contributing to the realization of a sustainable world by focusing on the evolution of the recycling-oriented business model and the strengthening of sustainability management as the basic strategies of our Medium-term Plan 2024. We steadily advanced various measures to further strengthen our five core businesses and solidify our management foundation.

As a result of these measures, consolidated net sales decreased 5.4% to ¥678,672 million, consolidated operating income increased 7.4% to ¥32,226 million, and consolidated ordinary income decreased 2.6% to ¥43,598 million. Additionally, net income attributable to owners of parent decreased 2.6% to ¥27,128 million.

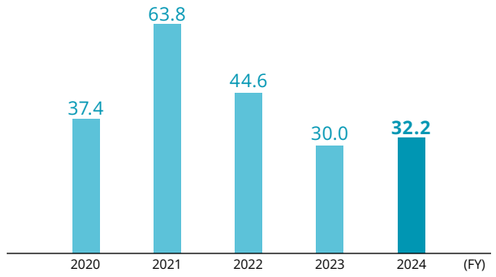
Net Sales / Operating Income to Net Sales

(Billions of yen / %)



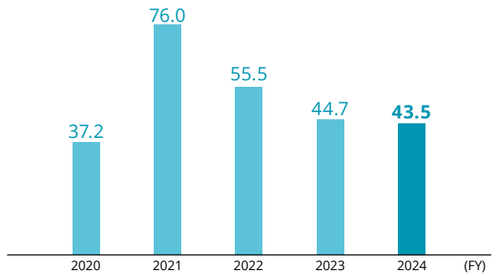
Operating Income

(Billions of yen)



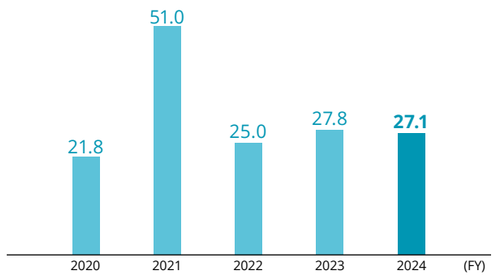
Ordinary Income

(Billions of yen)



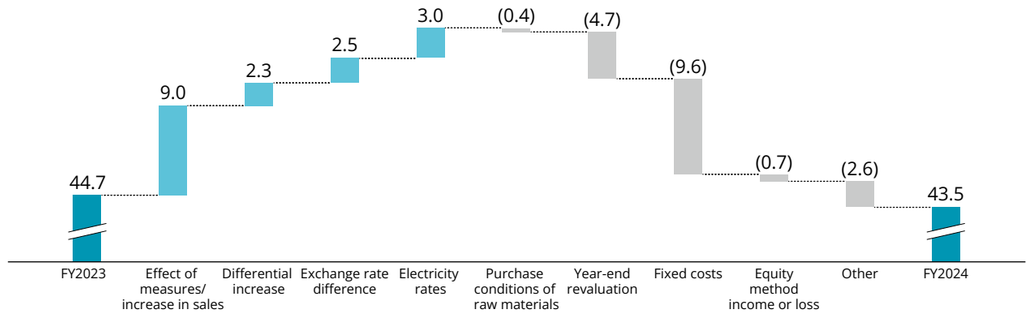
Net Income Attributable to Owners of Parent

(Billions of yen)



Factor Analysis of Ordinary Income

(Billions of yen)



Results by Segment

(Billions of yen)

	FY2023			FY2024			YoY Changes		
	Net Sales	Operating Income	Ordinary Income	**Net Sales**	**Operating Income**	**Ordinary Income**	Net Sales	Operating Income	Ordinary Income
Environmental Management & Recycling	150.3	10.5	11.1	**180.1**	**13.9**	**14.9**	29.7	3.3	3.7
Nonferrous Metals	317.8	8.9	18.2	**266.3**	**10.5**	**17.1**	(51.4)	1.6	(1.0)
Electronic Materials	183.1	1.6	3.5	**164.8**	**(0.5)**	**0.3**	(18.3)	(2.2)	(3.1)
Metal Processing	116.4	4.9	5.1	**128.7**	**5.2**	**5.9**	12.3	0.3	0.7
Heat Treatment	32.2	2.4	3.2	**33.7**	**2.1**	**2.1**	1.5	(0.3)	(1.0)
Others / Elimination	(82.8)	1.5	3.4	**(95.2)**	**0.9**	**3.0**	(12.3)	(0.5)	(0.4)
Total	717.1	30.0	44.7	**678.6**	**32.2**	**43.5**	(38.5)	2.2	(1.1)

Foreign-Exchange Rate and Metal Prices

	FY2023*	**FY2024***
Exchange rate: (¥/$)	144.6	**152.6**
Copper: ($/t)	8,362	**9,370**
Zinc: ($/t)	2,479	**2,874**
Indium: ($/kg)	227	**347**

* Figures are the average for the fiscal year.

Analysis of Financial Position

Assets

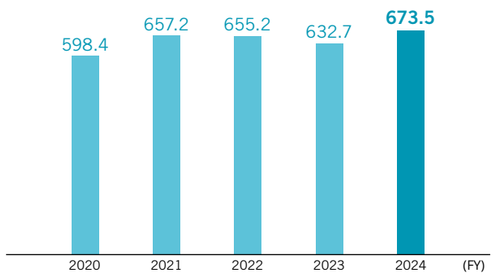
Total assets at the end of fiscal 2024 increased by ¥40,766 million from the end of the previous fiscal year, to ¥673,537 million. Current assets increased by ¥25,187 million and non-current assets increased by ¥15,578 million.

The increase in current assets was mainly due to an increase in inventories of ¥53,437 million, an increase in notes and accounts receivable-trade, and contract assets of ¥6,695 million, and a decrease in cash and deposits of ¥31,488 million.

The increase in non-current assets was mainly due to an increase in property, plant, and equipment of ¥14,516 million, and an increase in deferred tax assets of ¥1,912 million.

Total Assets

(Billions of yen)

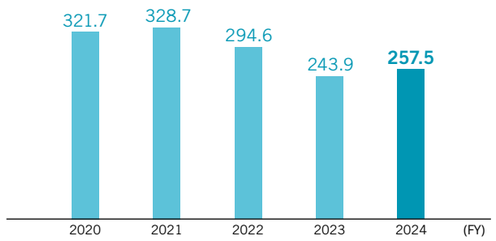


Liabilities

Liabilities increased by ¥13,520 million compared to the end of the previous fiscal year. This was mainly due to an increase in commercial paper of ¥20,000 million, an increase in borrowed bullion of ¥14,666 million, a decrease in corporate bonds redeemable within one year of ¥10,000 million, and a decrease in long-term borrowings of ¥8,247 million.

Liabilities

(Billions of yen)

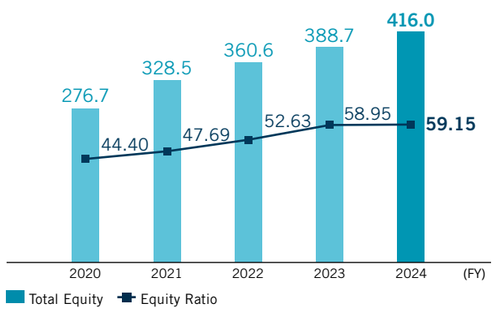


Equity

In terms of total equity, shareholders' equity increased by ¥18,402 million and net income attributable to owners of parent increased by ¥27,128 million due to factors such as dividends paid. In addition, due to factors such as an increase in foreign currency translation adjustments, total accumulated other comprehensive income increased by ¥7,008 million, and total net assets increased by ¥27,245 million compared to the end of the previous fiscal year. As a result, the equity ratio was 59.15%.

Total Equity / Equity Ratio

(Billions of yen / %)



Analysis of Cash Flows

Consolidated cash and cash equivalents (hereinafter, "net cash") at the end of fiscal 2024 amounted to ¥41,249 million, down ¥31,800 million compared with the previous fiscal year-end.

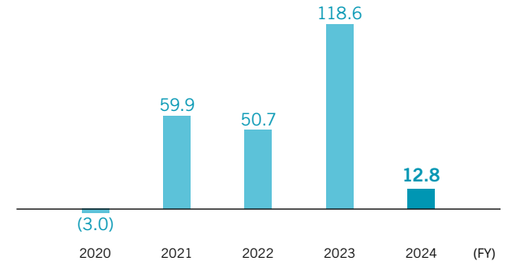
Net cash provided by operating activities came to ¥12,827 million, up ¥105,802 million compared with the previous fiscal year. This was mainly attributable to profit before income taxes of ¥38,604 million, an increase in inventories of ¥52,658 million, and depreciation expenses of ¥28,787 million.

Net cash used in investing activities was ¥41,418 million (an increase of ¥15,156 million from the previous fiscal year). This was mainly due to expenditures of ¥45,855 million for the acquisition of property, plant, and equipment, proceeds of ¥4,847 million from capital reduction of affiliated companies, and ¥3,138 million from the sale of investment securities.

Net cash used in financing activities was ¥4,120 million (an increase of ¥55,084 million from the previous fiscal year). This was mainly due to an increase in interest-bearing liabilities of ¥14,736 million, expenditures for the redemption of bonds of ¥10,000 million, and dividend payments of ¥7,976 million.

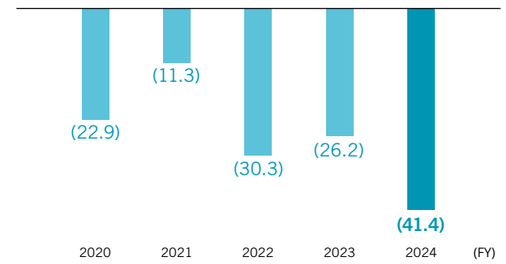
Cash Flows from Operating Activities

(Billions of yen)



Cash Flows from Investing Activities

(Billions of yen)



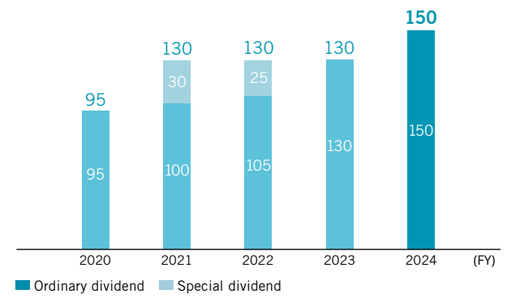
Basic Dividend Policy and Dividends Paid for the Fiscal Year Under Review

The Company aims to enhance its corporate value through the implementation of Medium-term Plan 2024, and the payment of dividends for shareholders has been designated as one of our most critical management issues.

We have set the annual dividend for fiscal 2024 at ¥150 per share, based on this policy, which is premised on stable dividends and increased shareholder returns.

Cash Dividends

(Yen)



Consolidated Performance Trends

(Millions of yen)

(For the years ended March 31)	2014	2015	2016	2017	Medium-term Plan 2020 2018	2019	2020	2021	Medium-term Plan 2024 2022	2023	2024
Financial Performance											
Net Sales	¥464,219	¥406,598	¥410,503	¥ 454,754	¥ 452,928	¥ 485,130	¥ 588,003	¥ 831,794	¥ 780,060	¥ 717,194	**¥ 678,672**
Cost of Sales	391,509	337,314	341,177	387,831	396,495	421,630	512,155	725,368	689,241	635,748	**592,043**
Selling, General, and Administrative Expenses	33,616	34,216	35,335	35,975	37,761	37,544	38,393	42,601	46,208	51,443	**54,403**
Operating Income	39,094	35,067	33,990	30,948	18,671	25,955	37,454	63,824	44,610	30,003	**32,226**
Operating Income by Segment											
Environmental Management & Recycling (%)	18.80	18.01	19.50	16.06	30.46	27.76	22.58	19.85	24.95	35.12	**43.16**
Nonferrous Metals (%)	34.69	38.00	29.58	29.74	3.17	38.54	54.31	56.67	51.06	29.80	**32.77**
Electronic Materials (%)	22.55	22.89	19.36	18.17	11.66	4.09	6.60	8.23	6.66	5.51	**(1.84)**
Metal Processing (%)	14.85	14.01	20.49	23.54	33.74	19.71	11.72	9.97	11.90	16.47	**16.41**
Heat Treatment (%)	6.02	3.86	7.00	8.47	13.05	4.63	1.97	4.13	3.31	8.09	**6.54**
Others and Elimination (%)	3.09	3.24	4.06	4.01	7.92	5.27	2.82	1.15	2.12	5.00	**2.93**
Ordinary Income	¥ 42,037	¥ 35,056	¥ 36,504	¥ 36,355	¥ 24,309	¥ 28,996	¥ 37,200	¥ 76,073	¥ 55,501	¥ 44,745	**¥ 43,598**
EBITDA*1	54,667	50,212	49,786	48,160	37,300	45,244	57,505	86,407	68,566	55,302	**61,013**
Net Income Attributable to Owners of Parent	26,543	21,826	26,169	24,693	14,986	17,395	21,824	51,012	25,041	27,853	**27,128**
Capital Expenditures	17,247	22,936	26,526	24,608	24,087	37,723	37,338	32,546	34,153	39,805	**46,719**
Depreciation	15,572	15,145	15,796	17,212	18,628	19,288	20,050	22,582	23,955	25,298	**28,787**
R&D Expenses	5,320	5,594	5,670	5,380	5,888	6,076	6,177	7,035	8,569	10,493	**8,967**
Exchange Rate and Metal Prices											
Copper (Price Quoted, Average)	¥765,775	¥675,483	¥603,917	¥ 756,683	¥ 746,608	¥ 681,592	¥ 769,500	¥1,136,175	¥1,209,150	¥1,261,692	**¥1,478,383**
Zinc (Price Quoted, Average)	285,983	269,383	305,633	386,733	353,725	313,308	309,400	419,725	503,817	417,900	**498,017**
U.S. Dollar (Average)	109.93	120.14	108.38	110.85	110.91	108.74	106.06	112.38	135.47	144.62	**152.58**
Financial Position											
Equity	¥195,649	¥203,370	¥227,821	¥ 247,762	¥ 246,158	¥ 258,241	¥ 276,715	¥ 328,574	¥ 360,603	¥ 388,790	**¥ 416,035**
Non-Controlling Interests	8,528	8,449	8,518	8,946	8,944	10,194	11,010	15,119	15,710	15,800	**17,634**
Total Assets*2	379,193	364,420	404,604	456,530	494,683	512,495	598,471	657,283	655,282	632,770	**673,537**
Interest-Bearing Debt	86,668	81,135	79,883	109,827	135,241	134,086	153,951	131,625	124,768	75,911	**81,266**
Per Share*3 (Yen)											
Basic Net Income	¥ 89.69	¥ 73.75	¥ 88.43	¥ 417.21	¥ 253.22	¥ 293.92	¥ 368.45	¥ 857.32	¥ 420.76	¥ 467.90	**¥ 455.60**
Fully Diluted Equity	632.30	658.66	741.06	4,035.06	4,008.03	4,191.09	4,465.44	5,267.94	5,794.63	6,264.96	**6,690.29**
Cash Dividends	18.00	18.00	18.00	90.00	90.00	90.00	95.00	130.00	130.00	130.00	**150.00**
Cash Flows											
Cash Flows from Operating Activities	¥ 38,345	¥ 45,751	¥ 29,389	¥ 11,125	¥ 37,555	¥ 55,113	¥ (3,088)	¥ 59,911	¥ 50,725	¥ 118,630	**¥ 12,827**
Cash Flows from Investing Activities	(20,321)	(23,486)	(25,954)	(34,010)	(51,025)	(37,812)	(22,943)	(11,339)	(30,343)	(26,261)	**(41,418)**
Cash Flows from Financing Activities	(16,905)	(11,159)	(7,155)	24,087	15,944	(6,569)	11,585	(31,190)	(19,758)	(59,204)	**(4,120)**
Free Cash Flow	18,024	22,265	3,434	(22,884)	(13,470)	17,301	(26,032)	48,571	20,382	92,369	**(28,590)**
Cash and Cash Equivalents at End of Year	8,044	18,902	15,126	16,472	19,002	30,232	17,320	35,740	37,760	73,049	**41,249**
Ratios											
Return on Assets (ROA)*4 (%)	11.39	9.43	9.49	8.44	5.11	5.76	6.70	12.12	8.46	6.94	**6.67**
Return on Equity (ROE)*5 (%)	15.37	11.43	12.64	10.78	6.30	7.17	8.50	17.62	7.61	7.76	**7.03**
Operating Income to Net Sales (%)	8.42	8.62	8.28	6.81	4.12	5.35	6.37	7.67	5.72	4.18	**4.74**
Equity Ratio*6 (%)	49.35	53.49	54.20	52.31	47.95	48.40	44.40	47.69	52.63	58.95	**59.15**
Operating Income Growth (%)	22.96	(10.30)	(3.07)	(8.95)	(39.67)	39.01	44.31	70.40	(30.10)	(32.74)	**7.40**
Interest Coverage (Times)	34.23	39.04	43.12	55.47	20.71	21.69	43.03	97.83	88.46	65.36	**41.28**
Debt / Equity Ratio*6 (Times)	0.46	0.42	0.36	0.46	0.57	0.54	0.58	0.42	0.36	0.20	**0.20**
Debt / Capacity Ratio (Times)	1.06	1.00	0.83	1.05	1.29	1.26	1.50	0.97	0.97	0.47	**0.59**
Return on Invested Capital (ROIC)*6 (%)	9.12	8.68	8.19	6.41	3.22	4.41	5.79	10.57	6.10	4.51	**4.88**

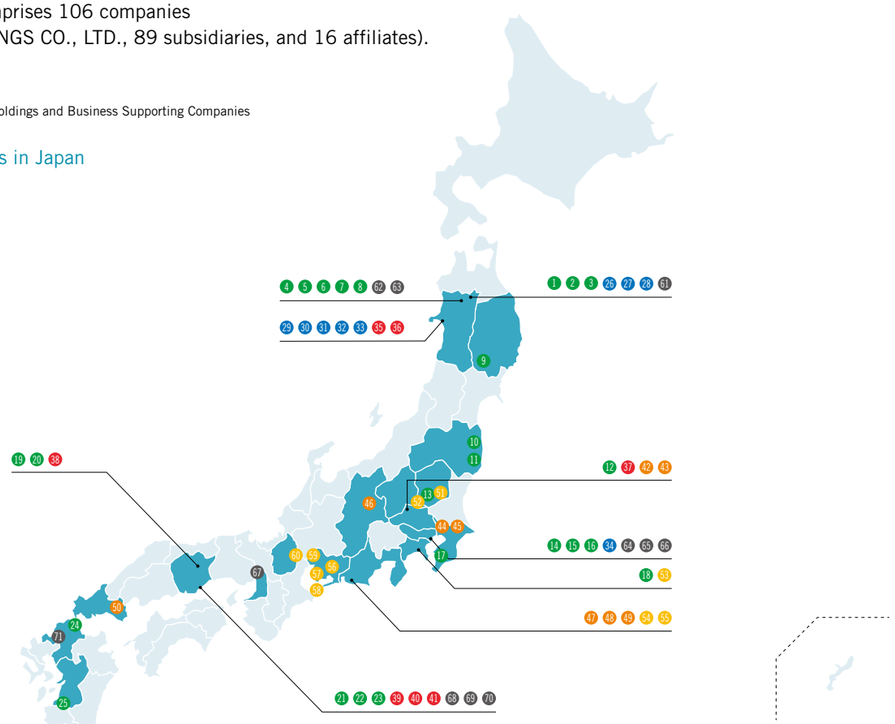
*1. EBITDA is calculated by adding operating income and depreciation.
*2. Changes put forth in the Partial Amendments to Accounting Standard for Tax Effect Accounting (ASBJ Statement No. 28, issued February 16, 2018) have been applied to the consolidated financial results for the fiscal year under review. These amendments have been retroactively applied to the consolidated financial results for fiscal 2017, and the amount of total assets has been adjusted accordingly.
*3. On October 1, 2017, the Company conducted a 5-for-1 reverse stock split.
*4. Ordinary income divided by the average of total assets at the beginning and end of the fiscal year.
*5. Net income attributable to owners of parent divided by the average of shareholders' equity (the amounts after deducting non-controlling interest amounts from equity amounts) at the beginning and end of the fiscal year.
*6. The ratios have been calculated using shareholders' equity (the amounts after deducting non-controlling interest amounts from equity amounts).

Subsidiaries and Affiliates (As of March 31, 2025)

The DOWA Group operates businesses in 13 countries and regions, including Japan.
The Group comprises 106 companies
(DOWA HOLDINGS CO., LTD., 89 subsidiaries, and 16 affiliates).

- ES
- EL
- TH
- MM
- MT
- DOWA Holdings and Business Supporting Companies

Major Locations in Japan



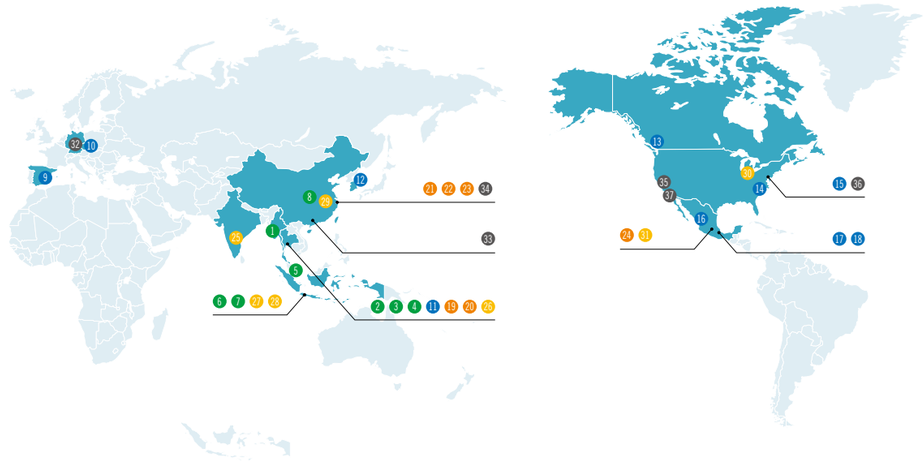
1 GREEN FILL KOSAKA CO., LTD.
2 ECO-SYSTEM RECYCLING CO., LTD. Northern Japan Plant
3 ECO-SYSTEM KOSAKA CO., LTD.
4 Research and Development Center
5 ECO-SYSTEM AKITA CO., LTD.
6 HOKUSHU KANKYOU SERVICES CO., LTD.
7 ECO-SYSTEM HANAOKA CO., LTD.
8 ECO-RECYCLE CO., LTD.
9 DOWA-TSUUN CO., LTD.
10 Soso Smart Eco-Company Co., Ltd.
11 MELTEC IWAKI Co., Ltd.
12 ECO-SYSTEM RECYCLING CO., LTD. East Japan Plant
13 MELTEC Ltd.
14 ECO-SYSTEM JAPAN CO., LTD.
15 GEOTECHNOS CO., LTD.
16 E&E Solutions Inc.
17 ECO-SYSTEM CHIBA CO., LTD.
18 MELTEC Ltd. Yokosuka Plant
19 ECO-SYSTEM SANYO CO., LTD.
20 OKAYAMA KOYU CO., LTD.
21 ECO-SYSTEM RECYCLING CO., LTD. West Japan Plant
22 ECO-SYSTEM OKAYAMA CO., LTD.
23 BIODIESEL OKAYAMA CO., LTD.
24 KOWA SEIKO CO., LTD.
25 Act-B Recycling Co., Ltd.
26 Technical Research Center (Kosaka)
27 KOSAKA SMELTING & REFINING CO., LTD.
28 NIPPON PGM CO., LTD.
29 Technical Research Center (Akita)
30 AKITA ZINC CO., LTD.
31 AKITA ZINC SOLUTIONS CO., LTD.
32 AKITA RARE METALS CO., LTD.
33 AKITA ZINC RECYCLING CO., LTD.
34 Acids Co., Ltd.
35 Semiconductor Materials Laboratory
36 DOWA SEMICONDUCTOR AKITA CO., LTD.
37 Electronic Materials Laboratory
38 DOWA F-TEC CO., LTD.
39 Advanced Fine Materials Laboratory
40 DOWA ELECTRONICS MATERIALS OKAYAMA CO., LTD.
41 DOWA IP CREATION CO., LTD.
42 Technology Center (Electroplating)
43 DOWA HIGHTECH CO., LTD.
44 HOEI SHOJI CO., LTD.
45 NEW NIPPON BRASS CO., LTD.
46 DOWA POWER DEVICE CO., LTD.
47 Technology Center (Metal Processing)
48 DOWA METAL CO., LTD.
49 DOWA METANIX CO., LTD.
50 TOKUYAMA-DOWA POWER MATERIALS CO., LTD.
51 DOWA THERMOENGINEERING CO., LTD. Moka Plant
52 DOWA THERMOENGINEERING CO., LTD. Ota Plant
53 DOWA THERMOENGINEERING CO., LTD. Kanto PE Department
54 DOWA THERMOENGINEERING CO., LTD. Hamamatsu Plant
55 DOWA THERMOENGINEERING CO., LTD. Hamamatsu-kita Plant
56 DOWA THERMOENGINEERING CO., LTD. Chuseibu PE Department
57 DOWA THERMOENGINEERING CO., LTD. Chukyo-Handa Plant
58 TONETSU KOHSAN CO., LTD.
59 CEMM CO., LTD.
60 DOWA THERMOENGINEERING CO., LTD. Shiga Plant
61 DOWA TECHNO RESEARCH CO., LTD.
62 UNEKURA MINING CO., LTD.
63 AKITA ENGINEERING CO., LTD.
64 DOWA HOLDINGS CO., LTD.
65 DOWA TECHNOLOGY CO., LTD.
66 DOWA MANAGEMENT SERVICE CO., LTD.
67 DOWA Group Osaka Branch
68 DOWA KOHSAN CO., LTD.
69 DOWA TECHNO ENGINEERING CO., LTD.
70 YOWA ENGINEERING CO., LTD.
71 DOWA Group Kyushu Branch

Number of Bases by Segment

	Consolidated Subsidiaries		Affiliates Accounted for by the Equity Method	Subtotal (Consolidated Subsidiaries and Equity Method Affiliates)	Non-consolidated Subsidiaries and Non-equity Method Affiliates	Total
	Japan	Overseas				
DOWA HOLDINGS CO., LTD.	—	—	—	—	—	1
Environmental Management & Recycling	21	10	3	34	2	36
Nonferrous Metals	9	7	4	20	0	20
Electronic Materials	5	0	1	6	2	8
Metal Processing	7	7	2	16	0	16
Heat Treatment	4	7	0	11	1	12
Others	8	3	2	13	0	13
Total	54	34	12	100	5	106

Please refer to “Subsidiaries and Affiliates” for companies included in the scope of coverage of this report.
https://hd.dowa.co.jp/en/ir/library/annual.html

Major Overseas Locations



1 GOLDEN DOWA ECO-SYSTEM MYANMAR COMPANY LIMITED
2 WASTE MANAGEMENT SIAM LTD.
3 BANGPOO ENVIRONMENTAL COMPLEX COMPANY LIMITED
4 EASTERN SEABOARD ENVIRONMENTAL COMPLEX CO., LTD.
5 Modern Asia Environmental Holdings Pte. Ltd.
6 PT PRASADHA PAMUNAH LIMBAH INDUSTRI
7 PT DOWA ECO SYSTEM INDONESIA
8 DOWA ENVIRONMENTAL MANAGEMENT CO., LTD.
9 DOWA METALS & MINING CO., LTD. Spain office
10 Nippon PGM Europe s.r.o.
11 DOWA METALS & MINING (THAILAND) CO., LTD.
12 NPGM KOREA Co., Ltd.
13 DOWA METALS & MINING CO., LTD. Vancouver office
14 NIPPON PGM AMERICA, INC.
15 DOWA METALS & MINING AMERICA INC.
16 Minera Plata Real, S. de R.L. de C.V.
17 DOWA METALS & MINING CO., LTD. Mexico office
18 MINERA TIZAPA, S.A. DE C.V.
19 DOWA METALTECH CHONBURI CO., LTD.
20 DOWA METALTECH (THAILAND) CO., LTD.
21 DOWA ADVANCED MATERIALS (SHANGHAI) CO., LTD.
22 DOWA NEW MATERIALS (SHANGHAI) CO., LTD.
23 DOWA METALTECH (NANTONG) CO., LTD.
24 DOWA METALTECH MEXICO, S.A. de C.V.
25 HIGHTEMP FURNACES LTD.
26 DOWA Thermotech (Thailand) Co., Ltd.
27 PT. DOWA THERMOTECH FURNACES
28 PT. DOWA THERMOTECH INDONESIA
29 KUNSHAN DOWA THERMO FURNACE CO., LTD.
30 DOWA THT AMERICA, INC.
31 DOWA THERMOTECH MEXICO S.A. DE C.V.
32 DOWA HD Europe GmbH
33 DOWA HOLDINGS (SHANGHAI) CO., LTD. Shenzhen branch
34 DOWA HOLDINGS (SHANGHAI) CO., LTD.
35 DOWA INTERNATIONAL CORPORATION San Jose Branch
36 DOWA INTERNATIONAL CORPORATION
37 DOWA INTERNATIONAL CORPORATION Irvine Branch

Company Data and Stock Information (As of March 31, 2025)

Company Data

Company Name	DOWA HOLDINGS CO., LTD.
Founded	September 18, 1884
Incorporated	March 11, 1937
Number of Employees	11,337 (figure for the entire Group, including part-time employees)

Stock Information

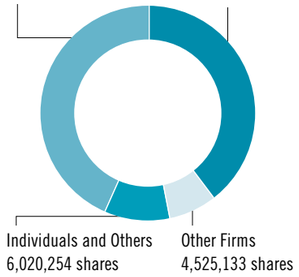
Authorized Shares	200,000,000 shares
Shares Issued	61,989,206 shares
Number of Shareholders	9,668
Stock Listing	Tokyo Stock Exchange, Inc.
Fiscal Year-End	March 31
Annual General Meeting of Shareholders	June
Stock Transfer Agent	Sumitomo Mitsui Trust Bank, Limited
Accounting Auditor	Deloitte Touche Tohmatsu LLC

Principal Shareholders

Name	Percentage of Outstanding Shares (%)
The Master Trust Bank of Japan, Ltd. (Trust Account)	15.83
Custody Bank of Japan, Ltd. (Trust Account)	9.83
NORTHERN TRUST CO. (AVFC) RE SILCHESTER INTERNATIONAL INVESTORS INTERNATIONAL VALUE EQUITY TRUST	6.58
STATE STREET BANK AND TRUST COMPANY 505001	5.37
NORTHERN TRUST CO. (AVFC) RE U.S. TAX EXEMPTED PENSION FUNDS	3.93
Fujita Kanko Inc.	3.12
National Mutual Insurance Federation of Agricultural Cooperatives	2.81
NORTHERN TRUST CO. (AVFC) RE NON TREATY CLIENTS ACCOUNT	2.62
BNP PARIBAS FINANCIAL MARKETS	2.16
NORTHERN TRUST CO. (AVFC) RE IEDU UCITS CLIENTS NON LENDING 15 PCT TREATY ACCOUNT	1.78

Note: The Company holds 1,855 thousand shares of treasury stock.

Shareholder Distribution



Rating Information

Institution	Long-term	Short-term
Japan Credit Rating Agency, Ltd. (JCR)	A+/Stable	J-1
Rating and Investment Information, Inc. (R&I)	A/Stable	—

External Evaluation (As of July 2025)

ESG Indexes

FTSE4Good

FTSE Blossom Japan Index

FTSE Blossom Japan Sector Relative Index

FTSE Russell confirms that DOWA HOLDINGS CO., LTD. has been independently assessed according to the index criteria, and has satisfied the requirements to become a constituent of the FTSE Blossom Japan Index. Created by the global index and data provider FTSE Russell, the FTSE Blossom Japan Index is designed to measure the performance of companies demonstrating strong Environmental, Social, and Governance (ESG) practices. The FTSE Blossom Japan Index is used by a wide variety of market participants to create and assess responsible investment funds and other products.

MSCI Selection Indexes Constituents 2025

2025 CONSTITUENT MSCI日本株 ESGセレクト・リーダーズ指数

S&P/JPX カーボン エフィシェント 指数

Morningstar Japan ex-REIT Gender Diversity Tilt Index

THE INCLUSION OF DOWA HOLDINGS CO., LTD. IN ANY MSCI INDEX, AND THE USE OF MSCI LOGOS, TRADEMARKS, SERVICE MARKS, OR INDEX NAMES HEREIN, DO NOT CONSTITUTE A SPONSORSHIP, ENDORSEMENT, OR PROMOTION OF DOWA HOLDINGS CO., LTD. BY MSCI OR ANY OF ITS AFFILIATES.
THE MSCI INDEXES ARE THE EXCLUSIVE PROPERTY OF MSCI. MSCI AND THE MSCI INDEX NAMES AND LOGOS ARE TRADEMARKS OR SERVICE MARKS OF MSCI OR ITS AFFILIATES.

Other Certifications

DX認定

Certified Companies
DOWA HOLDINGS CO., LTD.

2025 健康経営優良法人 KENKO Investment for Health 大規模法人部門

Certified Companies
(Large Enterprise Category)
DOWA HOLDINGS CO., LTD.
DOWA ECO-SYSTEM CO., LTD.
DOWA METALS & MINING CO., LTD.
DOWA ELECTRONICS MATERIALS CO., LTD.
DOWA METALTECH CO., LTD.
DOWA THERMOTECH CO., LTD.
ECO-SYSTEM CHIBA CO., LTD.
ECO-SYSTEM SANYO CO., LTD.
ECO-SYSTEM JAPAN CO., LTD.
KOWA SEIKO CO., LTD.
KOSAKA SMELTING & REFINING CO., LTD.
DOWA METAL CO., LTD.

2025 健康経営優良法人 KENKO Investment for Health ～中小規模法人部門～

Certified Companies
(Small and Medium-Sized Enterprise Category)
ECO-SYSTEM AKITA CO., LTD.
ECO-SYSTEM OKAYAMA CO., LTD.
GEOTECHNOS CO., LTD.
AKITA ZINC CO., LTD.
DOWA SEMICONDUCTOR AKITA CO., LTD.
DOWA METANIX CO., LTD.

Eruboshi Certification

Certified Companies
DOWA HOLDINGS CO., LTD. (Level 3)
E&E Solutions Inc. (Level 3)
GEOTECHNOS CO., LTD. (Level 2)

Kurumin Certification

Certified Companies
DOWA HOLDINGS CO., LTD.

Financial Section of DOWA REPORT 2025

Please refer to the “Financial Section” of DOWA REPORT 2025 for detailed fiscal information on the fiscal year ended March 31, 2025.
https://hd.dowa.co.jp/en/ir/library/annual.html

Inquiries

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