

2021

Integrated Report
DOWA HOLDINGS CO., LTD.
For the year ended March 31, 2021

DOWA REPORT



DOWA HOLDINGS CO.,LTD. DOWA REPORT 2021

DOWA HOLDINGS CO.,LTD.

14-1, Sotokanda 4-chome, Chiyoda-ku, Tokyo 101-0021, Japan
Website: https://www.dowa.co.jp/index_e.html


DOWA

DOWA continues to realize materials and technologies that underpin society.

Reflecting our Corporate Mission, “Contribute to creating an affluent, recycling-oriented society through our business activities worldwide,” we will tirelessly evolve our five core businesses in order to continue realizing materials and technologies that underpin society.

The DOWA Group’s Corporate Mission, Vision, Values, and Code of Conduct



 **The DOWA Group’s Corporate Mission**
https://www.dowa.co.jp/en/about_dowa/philosophy.html

CONTENTS

Forward-Looking Vision

- 1 The DOWA Group’s Corporate Mission, Vision, Values, and Code of Conduct
- 2 President Message
- 10 At a Glance
- 12 Highlights

Creating Value

- 14 Adapting to Change
- 18 Value Creation Process
- 20 Recycling-Oriented Business Model
- 22 **SPECIAL FEATURE 1**
DOWA’s Sustainability—Contributing to Resource Recycling and Decarbonization
- 24 **SPECIAL FEATURE 2**
Creating a Digital Transformation Promotion System
- 26 Sustainability Management

Medium- to Long-Term Strategy

- 28 Progress of Midterm Plan 2020
- 30 Results by Segment
- 32 Environmental Management & Recycling Business
- 36 Nonferrous Metals Business
- 40 Electronic Materials Business
- 44 Metal Processing Business
- 48 Heat Treatment Business

Foundation for Creating Value

- 54 Sustainability for the DOWA Group—Vision for 2020, Plans, and Goals
- 56 Governance
- 63 Risk Management
- 64 Board of Directors and Officers
- 67 A Discussion between the DOWA Group’s Outside Directors

- 72 Safety
- 74 Environmental Initiatives
- 81 Social Initiatives

Financial / Corporate Information

- 90 Financial Review
- 94 Consolidated Performance Trends
- 96 Subsidiaries and Affiliates
- 99 Company Data and Stock Information

The Scope of Coverage

The companies included in the section “Subsidiaries and Affiliates” on page 96 to page 98.

A Cautionary Note regarding Figures

The figures in this report have been rounded down.

A Cautionary Note regarding 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 International Integrated Reporting Framework, published by the International Integrated Reporting Council (IIRC)
- Guidance for Collaborative Value Creation, published by the Ministry of Economy, Trade and Industry



I believe we can contribute continuously toward a sustainable society through our core businesses, the promotion of resource recycling, and the provision of excellent materials and technologies.

The DOWA Group's Reason for Being—to Help Resolve Social Issues by Supporting the Foundations of Society and Reducing the Environmental Impact of Economic Activities

In November 2020, the DOWA Group announced the revision of its Mission, Vision, Values, and Code of Conduct. The Group's five businesses share common traits: they provide support for society and reduce the environmental impact created by economic activities. I believe that the reason for the Group's existence is to promote

the evolution of these traits so that it can continue its contributions to society. For this very reason, I am confident that if we can prompt the evolution and development of our five core businesses, we will help resolve climate change and other environmental and social issues.

President's Message



SEKIGUCHI Akira
President and Representative Director

Working from this idea, we have established a new vision for the DOWA Group that describes our goal for 2030: to contribute continuously to building a sustainable future through our core

businesses, the promotion of resource recycling, and the provision of excellent materials and technologies.

Leveraging the Results of Our Measures to Date to Increase

Revenues and Profits

Looking at our results for fiscal 2020, the year ended 31 2021, by business division, three of them, the Environmental Management & Recycling Business, the Nonferrous Metals Business, and the Electronic Materials Business saw year-on-year increases in revenues and profits. These three business divisions have deep-rooted connections to a variety of social activities. Despite being affected by the spread of COVID-19, I believe their solid performance has increased their presence as businesses that support society.

Conversely, the Metal Processing Business and Heat Treatment Business both saw a decrease in revenues and profits. Nonetheless, we were still able to avoid recording an overall loss. Customers in these two business divisions are mainly involved in the automotive industry, which has been subject to major fluctuations. In fiscal 2020, the spread of COVID-19 led to a sharp drop in automotive-related demand, making the outlook for the year unclear at the beginning. However, the automotive industry made a recovery in demand

starting in August 2020 at a speed that exceeded expectations. Our ability to respond to these fluctuations prevented the negative results from these two business divisions from putting a major dent in the Group's consolidated performance.

Despite the differing results in each core business, revenues and profits increased for the DOWA Group as a whole, with net sales increasing

21.2% from the previous fiscal year, to ¥588.0 billion, operating income expanding 44.3%, to ¥37.4 billion, and ordinary income growing 28.3%, to ¥37.2 billion. The key takeaway from fiscal 2020 is that these strong results were without a doubt the fruits of the measures implemented in each of our businesses and efforts we have made to date.

Making Good Progress with the Development of the Los Gatos Mine

The DOWA Group is currently working to carry out Midterm Plan 2020, after its coverage period was extended by one year to fiscal 2021. As mentioned earlier, the results of fiscal 2020 were achieved thanks to measures implemented as part of the plan.

One measure of particular note is the development of the Los Gatos Mine, the largest investment project within Midterm Plan 2020. The mine performed well in terms of profits, owing to the rise in nonferrous metal prices from the second half of fiscal 2020 and other factors, while the Group was also able to receive payments from its joint venture partners for construction-related expenses that had been temporarily shouldered. These payments were made in full in July 2021, ahead of schedule. There were also no major operational issues, all of which makes this a successful investment project. Going forward,

we believe that it will be important to maintain safe and stable operations at the Los Gatos Mine.

On the other hand, there remain issues that exist outside of the numbers. For example, new investments in Southeast Asia by the Environmental Management & Recycling Business have been affected by COVID-19, which has led to engineers from overseas being barred from entering Southeast Asian countries and other problems, bringing some projects to a standstill or causing delays. Although we expect to monetize projects in keeping with rising local demand, this only applies to projects for which equipment installation has been completed. Regarding projects with no prospects of progress whatsoever, we will review such projects on an individual basis for the next Midterm Plan, taking into account the circumstances in the relevant countries.

Expectation of Achieving Profit Targets Thanks to Earnings Growth in the Environmental Management & Recycling Business and Nonferrous Metals Business

The Environmental Management & Recycling Business and Nonferrous Metals Business are expected to reach their final-year profit targets for Midterm Plan 2020 in fiscal 2021. On the other hand, the Electronic Materials Business, Metal Processing Business, and Heat Treatment Business are likely to fall short of their targets. However, we anticipate that the Environmental Management & Recycling Business, which greatly contributes to the profitability of the DOWA Group, combined with the expanded earnings of

the Nonferrous Metals Business will offset the reduced earnings from the other three business divisions and allow the Group as a whole to exceed its profit targets for the final year of Midterm Plan 2020.

The Environmental Management & Recycling Business promotes safe and secure waste treatment and recycling in the domestic market, with an emphasis on difficult-to-process waste. As a result, the competitiveness of each of its businesses is increasing. In Southeast Asia, however,



the significant impact of COVID-19 has led to a more stagnant market than what existed when we formulated Midterm Plan 2020.

The biggest factor driving up earnings in the Nonferrous Metals Business is the upturn in nonferrous metal prices, especially for precious metals. While there is no avoiding the effects of fluctuating market prices when dealing with nonferrous metals, the Group has been working for over 10 years to enhance its smelting and recycling complex, rooted in Kosaka Smelting & Refining Co., Ltd., taking steps to recover several types of metal from a variety of materials at low processing cost and with high efficiency. The success of these efforts, coupled with a shift toward a corporate structure that ensures fluctuations in market prices have a positive effect on earnings, have been key factors in increasing earnings in the Nonferrous Metals Business.

In the Electronic Materials Business, the reason it fell short of its target was the delay in bringing new products to market. As part of Midterm Plan 2020, we were developing deep ultraviolet LEDs with sterilization applications in order to make them a mainstay for the next few years. However, when the market did not grow as expected, and with the prospect of increasingly fierce cost competition, we decided that even if we continued according to plan, there would be little in the way of returns, so we thus shifted our focus toward medical and industrial applications. This change in direction led to delays in launching the product

in the market and higher initial investment costs, which had a negative impact on profits.

The products handled by the Electronic Materials Business are characterized by a short life cycle. Another issue is that it is very rare for a market to reach its expected scale at the expected speed. Further still, the low barrier of entry from a technological standpoint can lead to fierce competition, meaning a product may not yield high profits. All of the above means that committing to an excessive up-front investment from the outset of a plan carries with it major risks, since things can change along the way. Consequently, it makes the Electronic Materials Business a very difficult one to ascertain. Taking into account such characteristics, I think that changing our product development trajectory in the way previously described was a good decision from a medium- and long-term perspective, although it may sting in the short term.

Both the Metal Processing Business and the Heat Treatment Business belong to fields affected strongly by automotive-related demand. The impact of COVID-19 on this demand in Japan and overseas—particularly the slow recovery in the overseas market—played a role in our missing our targets. But, even under these circumstances, we are systematically working to expand our production capacity in anticipation of the shift toward electric and smart cars and are moving ahead with the creation of a system that will be able to meet growing automotive-related demand in the future.

Helping Resolve Environmental Issues by Continuing Our Efforts in Each Business Field

At this point, I would like to explain the directions and themes we are exploring for our next Midterm Plan.

The DOWA Group possesses products and technologies that can help resolve a variety of environmental issues. Examples of such products include silver powder for solar panels, high-performance copper alloy strips crucial to the shift toward electric and smart cars, and industrial furnaces that aid with reducing CO₂ emissions on heat treatment lines, as well as technology used in the recycling of spent lithium-ion batteries. Therefore,

we believe that by continuing our efforts in each business, we will be able to contribute to the creation of a recycling-oriented society while helping combat climate change and resolving other issues. As a result, for our next Midterm Plan, we intend to maintain the course taken for each business to date.

In particular, we will show our superiority in terms of resolving environmental issues, which comes from the knowledge, expertise, and infrastructure that we have built up for over 130 years in mining and smelting, our founding business.

Given the global trend toward a recycling-oriented society, metal recycling businesses that utilize smelting technology are huge assets. Since metal recycling is a technologically mature field, we need to differentiate ourselves from the rest of the pack, which means figuring out how to move forward with initiatives that leverage our expertise. When it comes to this task, we can boast of a deep well of experience and technology to draw from, with a history in metal recycling that stretches back over 40 years.

Our mining and smelting technology is also the cornerstone of the Environmental Management & Recycling Business. This business has a high affinity for the Nonferrous Metals Business—which is rooted in smelting. This means that if we can successfully evolve and integrate these businesses, we will have a business model that is unique at a global level. Although it will require more time, I would like us to pursue this goal.

Another example of technology derived from mining is the powder technology utilized in the Electronic Materials Business. Our powder technology originated at our mining business in the Okayama area and is currently being used to manufacture silver powder for solar panels, the main product of the Electronic Materials Business. In the future, we plan to utilize this technology to develop materials for fuel cells, all solid-state batteries, and other next-generation applications. The value of a materials manufacturer like DOWA is found in how it can apply existing technologies and expertise toward new applications, and we intend to continue making steady efforts in this direction.

As for our response to climate change, in August 2021, ahead of our next Midterm Plan, we announced our goal to become carbon neutral by 2050.

In fiscal 2020, approximately 40% of the Company's CO₂ emissions came from waste,

roughly another 40% stemmed from electricity, and about 20% were caused by fossil fuels. The emissions generated by waste include those from the treatment of waste received from outside of the Company as part of the Environmental Management & Recycling Business. Since we handle waste as part of our business, it is difficult for us to reduce greenhouse gas emissions in a significant way; however, we are striving to do so as much as possible through research aimed at improving combustion technology. I believe that demand for incineration will not disappear, even if the market for waste incineration shrinks in the future. If the market does indeed shrink, one option is to have our customers bear the necessary costs. At the same time, however, DOWA also needs to develop technology to ensure that these costs do not become too great a burden.

Emissions derived from fossil fuels offer a great challenge for us, which we will approach with vigorous technological development. Going forward, we will promote efforts to reduce greenhouse gas emissions including reducing fossil fuel consumption and switching to renewable energy sources.

In fiscal 2021, we established the Climate Change Committee, which is chaired by a director on the Board. The committee is charged with clarifying the DOWA Group's current position on climate change and considers its future response policy thereto based on Japan's Strategic Energy Plan and the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD). Specific details will be revealed in 2022, alongside the next Midterm Plan, so please look forward to those announcements.

The Group will also continue to show its support for the United Nations Global Compact, which it has been a signatory to since 2009, and work in a united manner to help realize the sustainable development of society.

Making Active Efforts to Promote Digital Transformation and Enhance Risk Management

Another important theme that will direct our efforts in the next Midterm Plan is strengthening our internal infrastructure. Doing so includes promoting digital transformation (DX) and enhancing

risk management. Regarding DX, the use of digital technology has become an extremely important theme for the DOWA Group. Therefore, in fiscal 2020 a project team was launched with the task of

making preparations to promote DX. We are currently looking into advancing the standardization of office work and a shift to paperless methods, with a focus on accounting-related affairs. At the same time, we are upgrading to a cloud-based backbone core system common to all Group companies while working to strengthen information security in line with this shift. On the other hand, as the Group's production bases handle a wide variety of materials and products, it will be necessary to first reconfirm what is important at each site, such as ensuring safety and improving production efficiency, then clarify the goals of promoting DX, and, after these steps have been taken, introduce the latest digital technology. Using this framework as our guide, we plan to promote DX across the entire Group.

In addition, risk management at the Group is primarily handled by the operating companies, and when a major risk becomes apparent, various divisions of the holding company take measures to support the relevant operating company.

However, it is becoming increasingly important to understand and assess risks before they manifest, which entails understanding potential risks in the society of the future and assessing how these risks could impact the entire Group.

To meet this need, we aim to build a standardized risk management system for the DOWA Group. To this end, we are looking at our current system, in which operating companies and operating subsidiaries are the main entities conducting risk management activities, to confirm whether these entities have the capacity to adequately deal with risks and whether the roles for risk management have been clearly delegated. We expect to restructure our risk management policy based on the results of this investigation.

The DOWA Group is aware that it is lagging behind when it comes to promoting DX and enhancing risk management, so it intends to make active efforts to enhance these areas in the next Midterm Plan.

outside directors. The three outside directors currently on the Board, all of whom had a deep understanding of our business before their appointments, contribute greatly toward increasing the Group's corporate value. Furthermore, it is important to respond to the trends that

accompany corporate governance reforms, and we are pursuing a model that eschews surface-level changes in favor of one that is effective. Therefore, we will continue to appoint candidates with the backgrounds and insight necessary to help increase our corporate value.

Evolving Our Core Businesses as the Ideal Path toward Increased Corporate Value

The Group's five core businesses are closely connected to sustainability. With this fact in mind, we intend to implement a business strategy that acts as an extension of our current one in the next Midterm Plan. That said, the future brings with it technological innovation, and I believe that several of our goals cannot be achieved without an accompanying shift in social paradigms.

To give one example, our recycling business was established in anticipation of a new society. Our launching point has been to take waste, which was not thought of as having any value, and to utilize it as recycled materials. As the understanding and perception of recycling continue to permeate society as a whole, I believe we need to figure out how to incorporate technological innovation and social changes into our vision for the future. Accordingly, we do not need to

reinvent the wheel and make sweeping changes to our direction. Instead, DOWA's path toward increased corporate value entails striving for the evolution of its core businesses while adapting to changes in society.

Going forward, we will continue to work in these core businesses with the goal of contributing to the creation of an affluent, recycling-oriented society, and I invite you to look forward to our efforts in this regard.

September 2021



SEKIGUCHI Akira
President and Representative Director

Invigorating the Board of Directors with the Appointment of Two Inside Directors and One Outside Director

In order to invigorate its Board of Directors, the Company appointed two inside directors and one outside director to the Board by resolution at the General Meeting of Shareholders held in June 2021, and I look forward to their active participation based on their respective areas of expertise.

Of the two inside directors, TOBITA Minoru is in charge of quality assurance as well as the environment and safety. In addition to having long served as the head of the Environmental Management & Recycling Business, Mr. Tobita is well versed in on-site safety management as a mining engineer. Furthermore, as someone with extensive insight regarding addressing climate change, I am confident that he will make full use of his experience in promoting solutions to environmental and safety issues throughout the DOWA Group.

SUGAWARA Akira, the other newly appointed inside director, is responsible for technologies and business innovation research. As head of the Metal Processing Business, Mr. Sugawara is

experienced in responding to the technological needs of a variety of customers in the automotive industry. I thus expect that he will play a leading role in determining the Group's ideal direction in keeping with the shift toward electric and smart cars.

The newly appointed outside director, SATO Kimio, is, broadly speaking, from the same industry as DOWA, as a member of Nittetsu Mining Co., Ltd. With mining as its main business, it has more insight into the mining business than us. Mine development—especially overseas mine development—requires massive investment, making it critical to ascertain the risks beforehand. My hope is that Mr. Sato will enliven discussions at Board meetings with frank opinions regarding the potential risks of mine development and how to avoid them. He has already utilized his experience as a corporate manager to identify several shortcomings in the DOWA Group's management as a whole.

With the appointment of Mr. Sato, the Board of Directors comprises one-third independent



At a Glance (Fiscal 2020)

Operating Companies and Main Products and Services

Net Sales Ratio*

Ordinary Income Ratio*

* Excluding adjustments

Relevant Industries and Applications

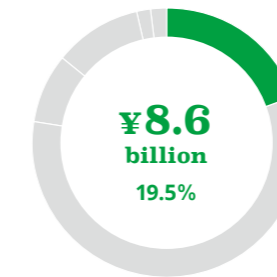
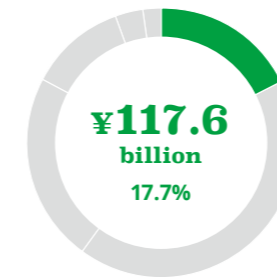
Environmental Management & Recycling Business

□ P.32

DOWA ECO-SYSTEM CO., LTD.

Based on the technologies it cultivated in mining and smelting, the DOWA Group was one of the pioneer enterprises to engage in environmental and recycling businesses in the 1970s. In addition to waste treatment, recycling, and soil remediation, our strengths as part of one-stop services include the transportation of waste from generators to controlled landfill facilities both in Japan and overseas.

Waste Treatment **Soil Remediation** **Recycling** **Southeast Asia**



Hazardous waste

Metal scrap

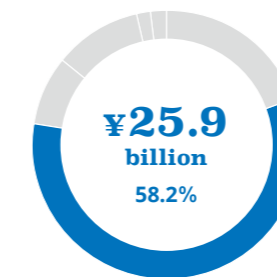
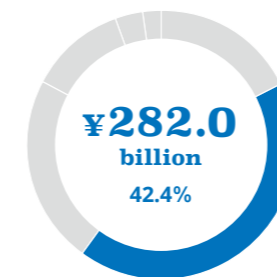
Nonferrous Metals Business

□ P.36

DOWA METALS & MINING CO., LTD.

Black ore, a complex sulfide ore that was mined at the Kosaka mine in Akita Prefecture, the birthplace of the DOWA Group, is rich in precious metals such as gold and silver. However, the ore also contains various impurities that make it very hard to refine. The Nonferrous Metals Business was founded on a technology developed from refining this complex sulfide ore. Coupled with its network of copper and zinc smelting facilities, the Group is able to recover approximately 20 types of metal from various raw materials.

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



Electronic components

Automotive

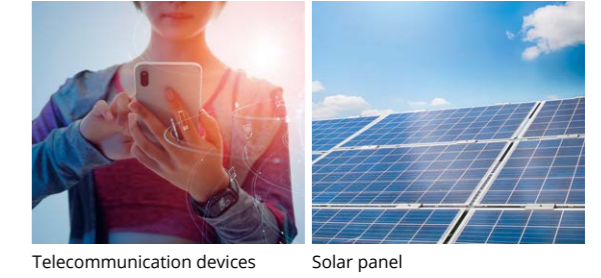
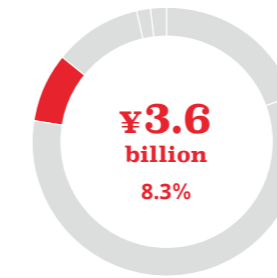
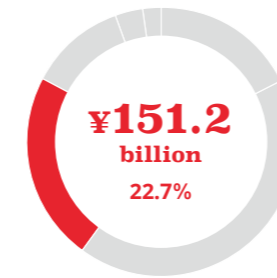
Electronic Materials Business

□ P.40

DOWA ELECTRONICS MATERIALS CO., LTD.

The Electronic Materials Business started with the exploration of new applications for the metallic by-products produced in mining and smelting, through pulverization, purity improvement, and many other processing procedures. Today, the DOWA Group supplies a wide range of materials to the electronics industry, namely, semiconductor materials, electrical conducting materials, magnetic materials, and various electronic materials of high performance and quality. We currently have a substantial market share of electronic materials worldwide.

Semiconductors **Electronic Materials** **Advanced Fine Materials**



Telecommunication devices

Solar panel

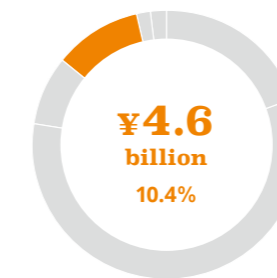
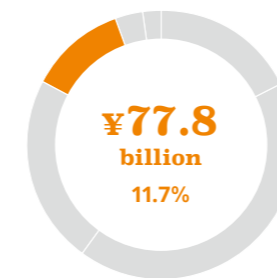
Metal Processing Business

□ P.44

DOWA METALTECH CO., LTD.

Starting from the manufacture of copper rolled products, the Metal Processing Business has expanded alongside the markets for automobiles and electronic devices and now provides a lineup of products that are made principally from high-performance copper alloys. In addition to copper alloys, we engage in electroplating processes for automotive components using gold and tin and provide metal-ceramics substrates, which are used in electric power management devices such as industrial machinery.

Copper Rolled Products **Electroplating** **Metal-Ceramics Substrates**



Automotive

Telecommunication devices

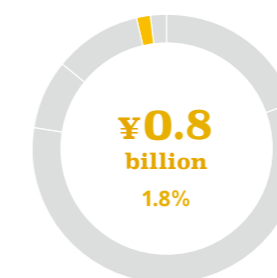
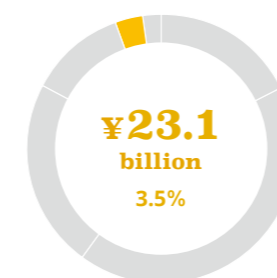
Heat Treatment Business

□ P.48

DOWA THERMOTECH CO., LTD.

The metal parts of engines and transmissions are subjected to harsh environments and therefore require heat treatment to improve their durability. The Heat Treatment Business was developed to meet demand from the automobile industry, which uses many such components. Our comprehensive engineering services include the design, construction, and maintenance of heat treatment facilities. In addition, we provide various heat treatment processing services on commission.

Heat Treatment Processing **Industrial Furnaces**



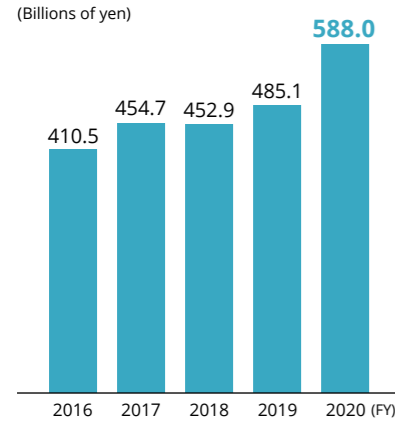
Automotive

Automotive components

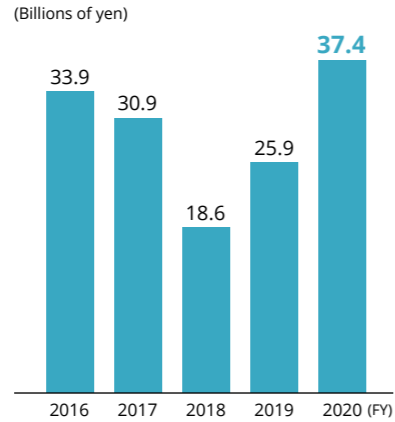
Highlights

Financial Highlights*1

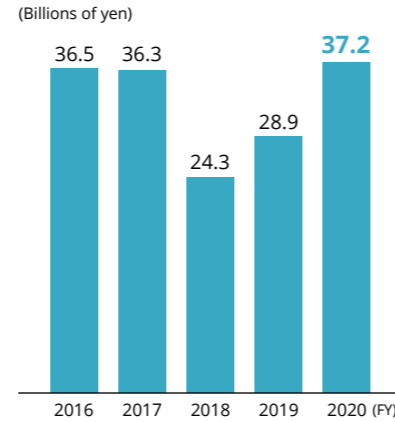
Net Sales



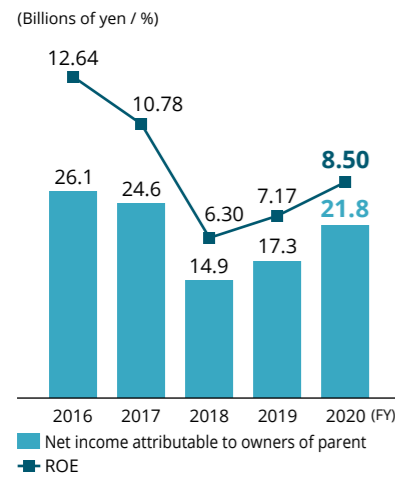
Operating Income



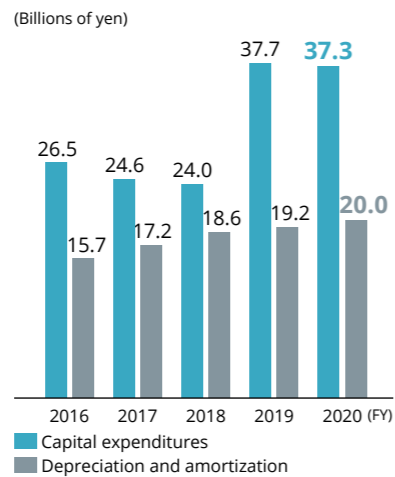
Ordinary Income



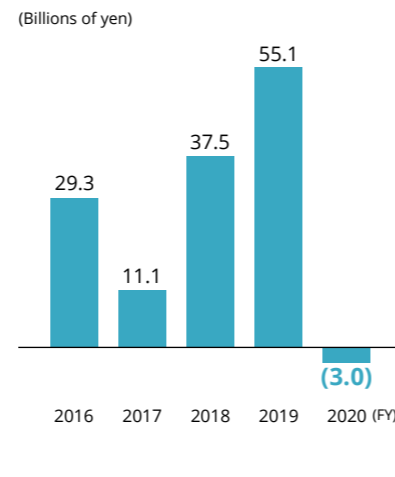
Net Income Attributable to Owners of Parent, ROE*2



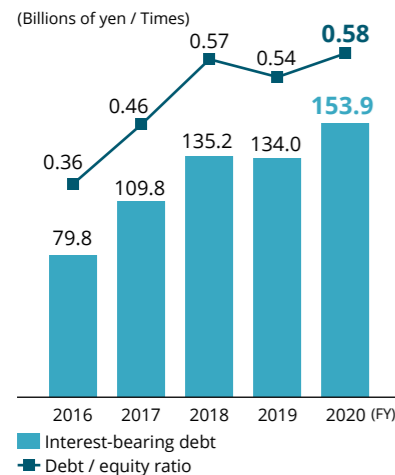
Capital Expenditures, Depreciation and Amortization



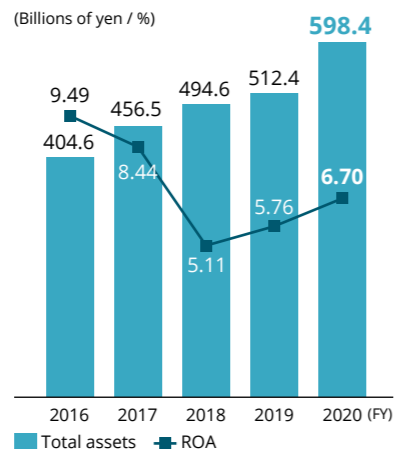
Cash Flows from Operating Activities



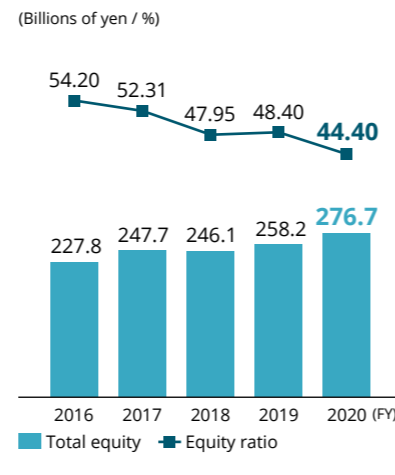
Interest-Bearing Debt, Debt / Equity Ratio



Total Assets, ROA*3



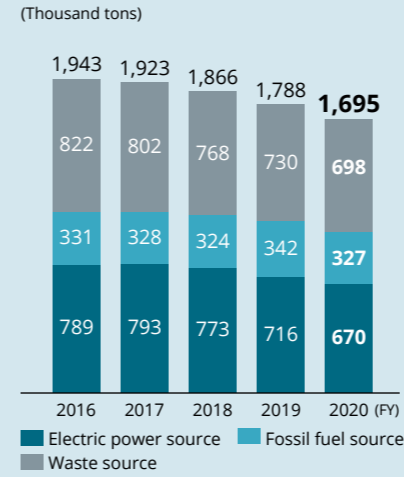
Total Equity, Equity Ratio



*1 The years stated in the tables are ended March 31. Thus, "2020" refers to the fiscal year that ran from April 1, 2020 through March 31, 2021.
 *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.

Non-Financial Highlights

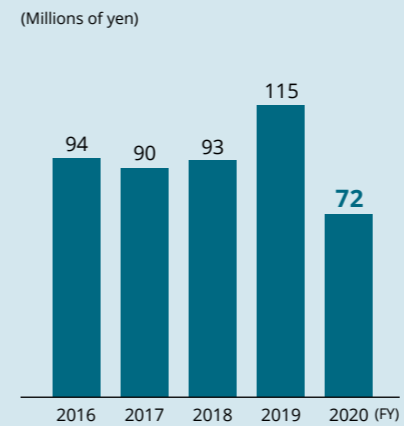
CO₂ Emissions*4



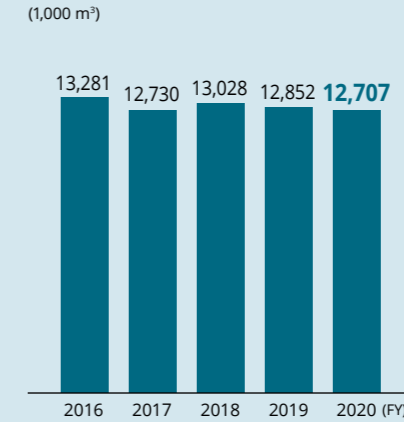
Frequency Rate of Accidents at Work*6



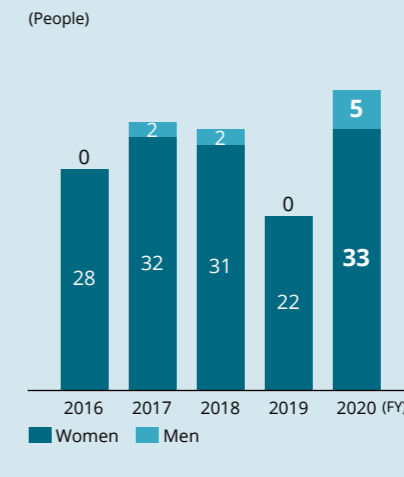
Amount Invested in Education



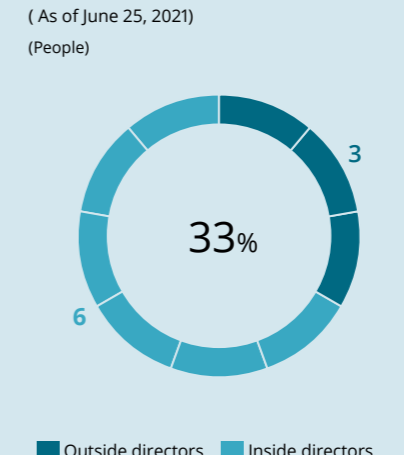
Freshwater Consumption



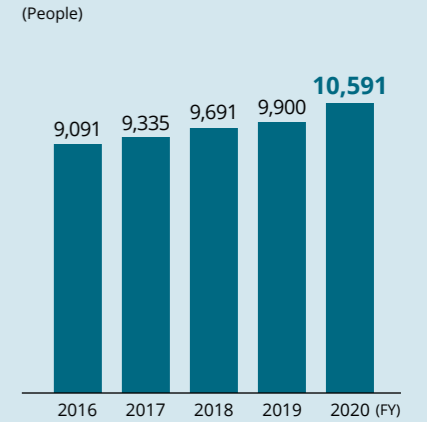
Number of Employees Who Took Childcare Leave



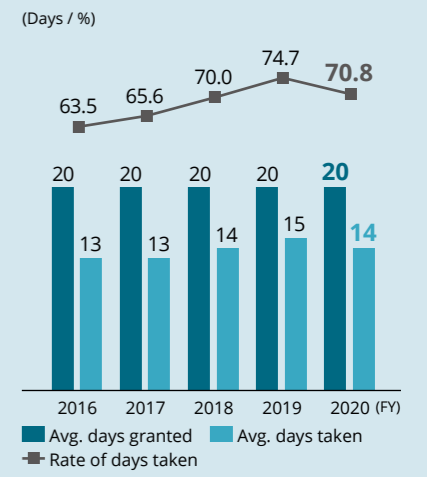
Ratio of Outside Directors



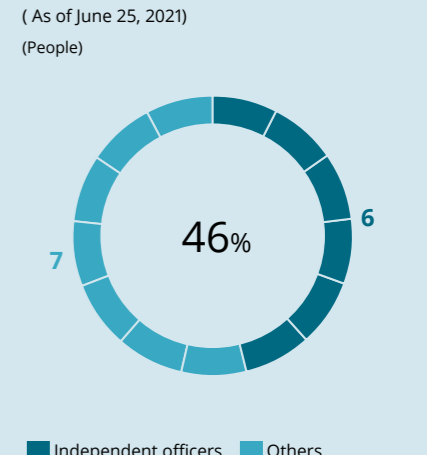
Number of Employees*5



Rate of Annual Paid Leave Taken



Ratio of Independent Officers

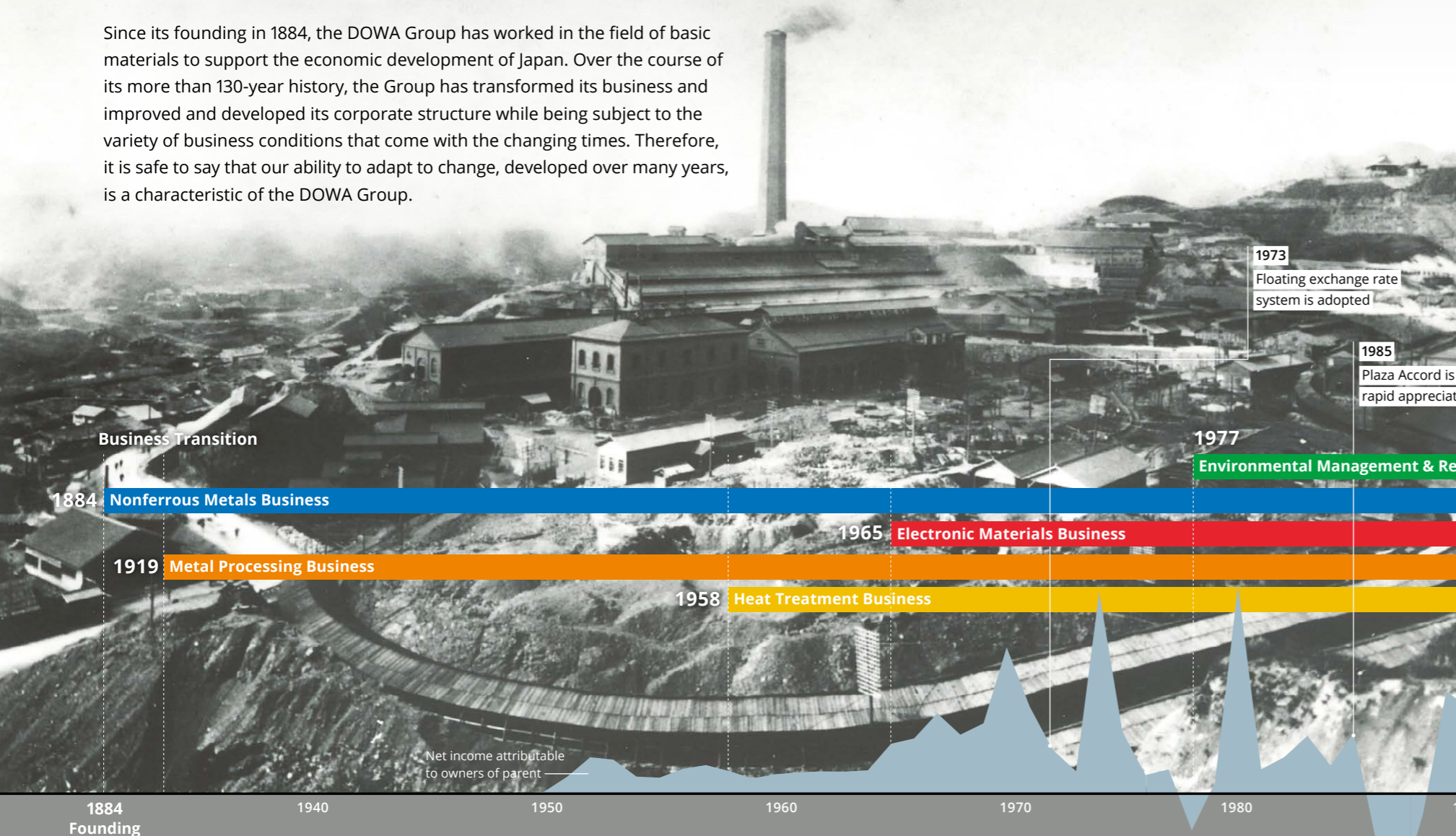


*4 Some figures reported in DOWA Report 2021 have been changed to reflect a revision of total figures.
 *5 Figures for the entire Group, including part-time employees.
 *6 Some cooperating companies and contractors have been included when calculating these figures.

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 more than 130-year history, 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.

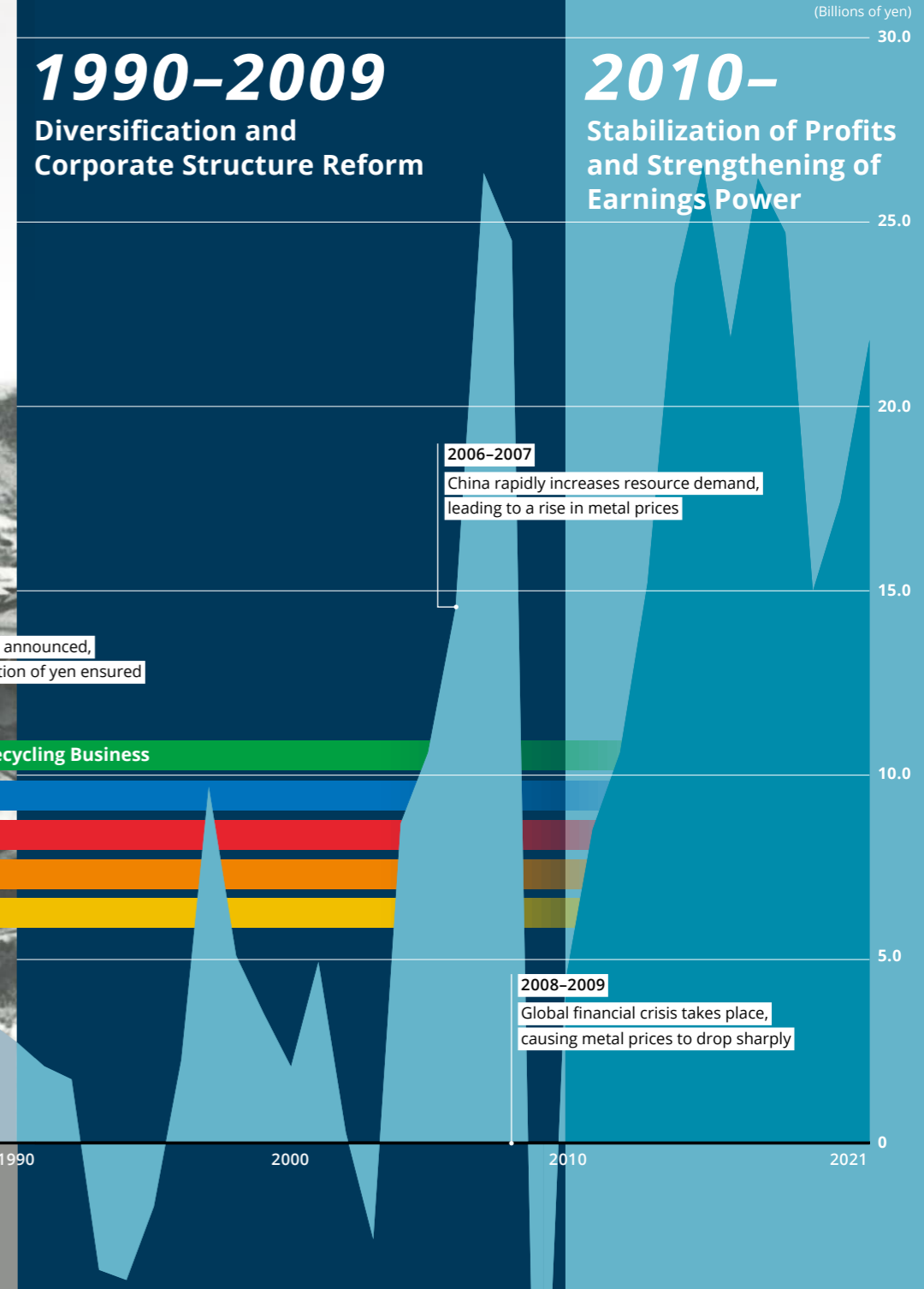


1973 Floating exchange rate system is adopted

1985 Plaza Accord is announced, rapid appreciation of yen ensured

1990-2009 Diversification and Corporate Structure Reform

2010- Stabilization of Profits and Strengthening of Earnings Power



1884-1989

Evolution beyond a Mining Business

The Company was established with the purchase of the Kosaka mine in Akita Prefecture from the Japanese government. Although it was the leading silver mine in Japan at the time, the Company ran into financial difficulties roughly 10 years after its establishment when the mine's silver ore reserves became depleted.

However, the Company went on to develop technology for refining a complex sulfide ore known as "black ore," which revived the Kosaka mine as a copper mine. Unfortunately, the sharp appreciation of the yen in the 1980s led to a significant drop in the domestic prices of nonferrous metals. This in turn led to a rapid drop in the profitability of the mining business, which was the Company's main business at the time, forcing several mines to close. On the other hand, our mining-related equipment and pollution prevention technology has been passed down to our current Environmental Management & Recycling Business.



Founder
FUJITA Denzaburo
(1841-1912)

DOWA's History and the Origins of Sustainability-Focused Management

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 (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."

1990-2009

Diversification and Corporate Structure Reform

Diversification

Upon changing from a mining-oriented business structure in 1990, we established and embarked upon a long-term management vision with a view to 10 years in the future. This vision highlighted three basic policies: "reform and strengthen existing businesses by establishing a comprehensive environmental management business, enhancing the Nonferrous Metals Business and Electronic Materials Business, developing the Metal Processing Business downstream, and expanding the Heat Treatment Business"; "develop and commercialize new businesses"; and "implement organizational restructuring and corporate culture reforms." To carry out these policies, we put forward a variety of measures to initiate change.

While these actions formed the basis for our five current core businesses, they did not serve to drastically improve profit levels due to the shrinkage of our then-main business, mining. Instead, this rapid expansion of scale led to an increase in total assets and interest-bearing debt.

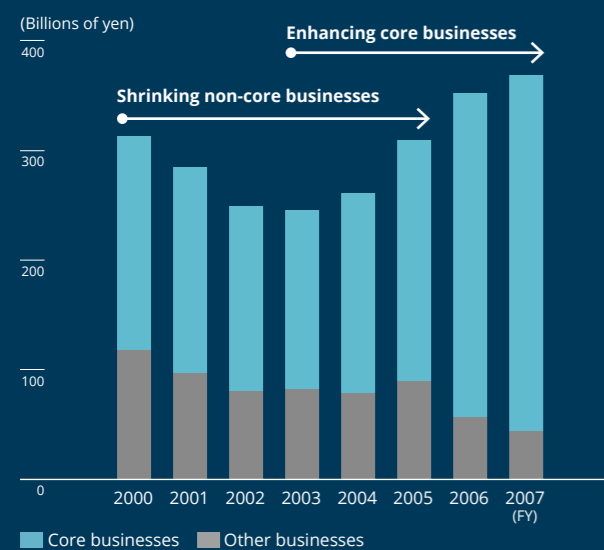
Corporate Structure Reorganization

Taking the aforementioned situation into account, we went forward with reorganizing our corporate structure beginning in 2000, with a focus on reforming our profit and asset structures in addition to reducing our interest-bearing debt. We generated funds and lowered interest-bearing debt by withdrawing from businesses in which we lacked a competitive edge and selling assets with low profitability. In addition, we established and actively 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—allowing us to utilize the technology we had cultivated to date and showcase our competitiveness going forward. Moreover, asset efficiency improved greatly as we simultaneously expanded profits and reduced interest-bearing debt by cultivating highly profitable businesses.

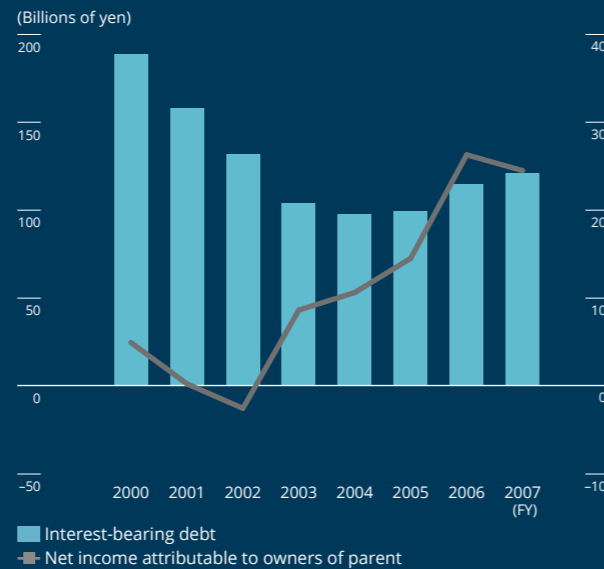
Our core businesses continued to grow steadily in the latter half of the 2000s, and our profits continued to increase, coupled with soaring prices of nonferrous metals against a backdrop of rising resource demand in China.

However, the global financial crisis of September 2008 led to a plunge in metal prices and a sharp drop in demand for our core businesses, forcing us to record significant losses.

Total Assets



Interest-Bearing Debt, Net Income Attributable to Owners of Parent



2010-

Stabilization of Profits and Strengthening of Earnings Power

Stabilization of Profits and Strengthening of Earnings Power

Metal prices continued to fall in the aftermath of the 2008 global financial crisis as the yen continued its sharp rise. The Company, which had previously benefited from booming metal prices, posted a large deficit due to the decline in domestic prices of nonferrous metals and valuation losses on inventories. While it can be said that companies dealing in metals are at the mercy of fluctuations in the market when it comes to their profits, in the year following the financial crisis we established and improved upon a mechanism for reducing the degree to which even large market fluctuations can impact on profits by changing our methods for hedging metal prices and exchange rates.

On the other hand, the earnings power of our core businesses remained strong, and even in fiscal 2009, amid the lingering effects of the global financial crisis, we generated operating cash flows of over ¥20.0 billion, which we continued to invest in our core businesses. The effect of these efforts gradually bore fruit, and we achieved record-high profits in fiscal 2014.

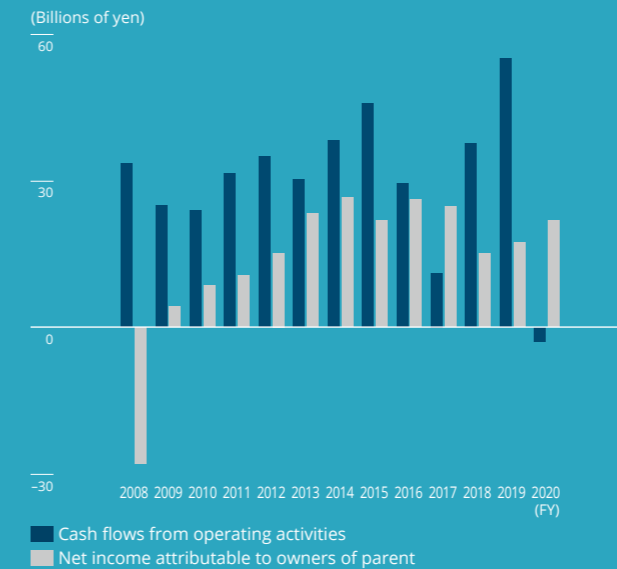
Accumulation of Strengths and Building Up of Management Capital

Since our founding and across the course of our history, we have overcome various difficulties by transforming our business and both developing and improving our corporate structure. Presently, we have built a smelting and recycling complex to operate a business that combines proper waste treatment and metal recycling, something that is without precedent worldwide. We also provide highly functional materials and technologies in the fields of automobiles and information and communication and have a large number of products that comprise major shares of the markets in these fields.

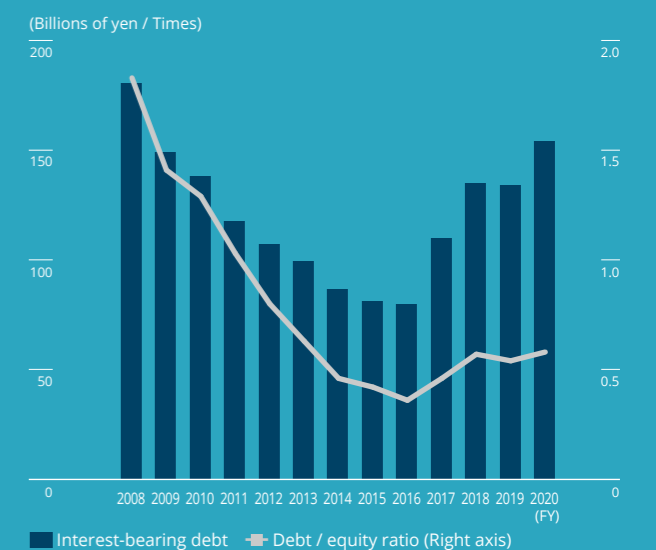
Furthermore, we are working to maintain and improve our already sound financial position and are promoting activities in each region to ensure that stakeholders recognize the value of our business.

As we head toward the future, we will continue to strengthen the Company on both the financial and non-financial fronts with the goal of improving our corporate value further.

Cash Flows from Operating Activities, Net Income Attributable to Owners of Parent



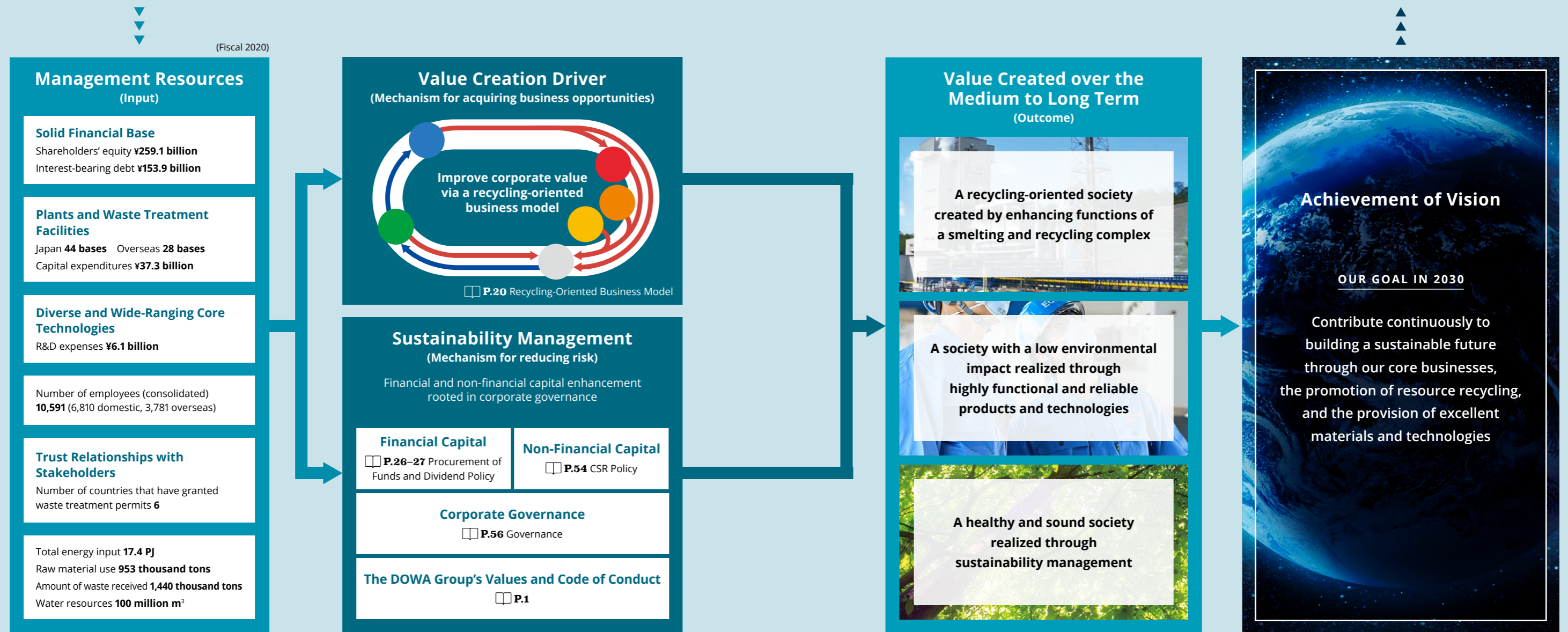
Interest-Bearing Debt, Debt / Equity Ratio



Creating Value

Key Social Issues for the Company

- Climate change
- Resource and energy saving
- Prevention of environmental pollution
- Biodiversity and protection of ecosystems
- Spread of infectious diseases
- Fluctuations in exchange rates and metal prices
- Improvement of governance
- Human resource development
- Prevention of occupational accidents
- Work-life balance
- Contribution to local communities



Realization of Our Corporate Mission

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

Value Creation Process

The DOWA Group believes that its most important missions are to engage all of its stakeholders in a sincere and open manner through business operations emphasizing society and the environment and to contribute to the realization of a sustainable society.

Looking at the different social issues that surround the Company, we aim to seek out opportunities by leveraging our "value creation driver," which is centered on our recycling-oriented business model. At the same time, we intend to enhance "sustainability management" as a mechanism to reduce risk and ensure that we can continue to create value over the medium to long term. With these actions, we are realizing our Corporate Mission: "Contribute to creating an affluent, recycling-oriented society through our business activities worldwide."

DOWA's Business and the SDGs

We believe that SDG 12, calling for "sustainable consumption and production patterns," holds the greatest relevance to DOWA, which thrives on the utilization of metal resources, an area where we can make a massive contribution. As put forth in our Corporate Mission, we aim to achieve SDG 12 by putting our technologies and resources toward building a recycling-oriented society.



DOWA's Value Creation

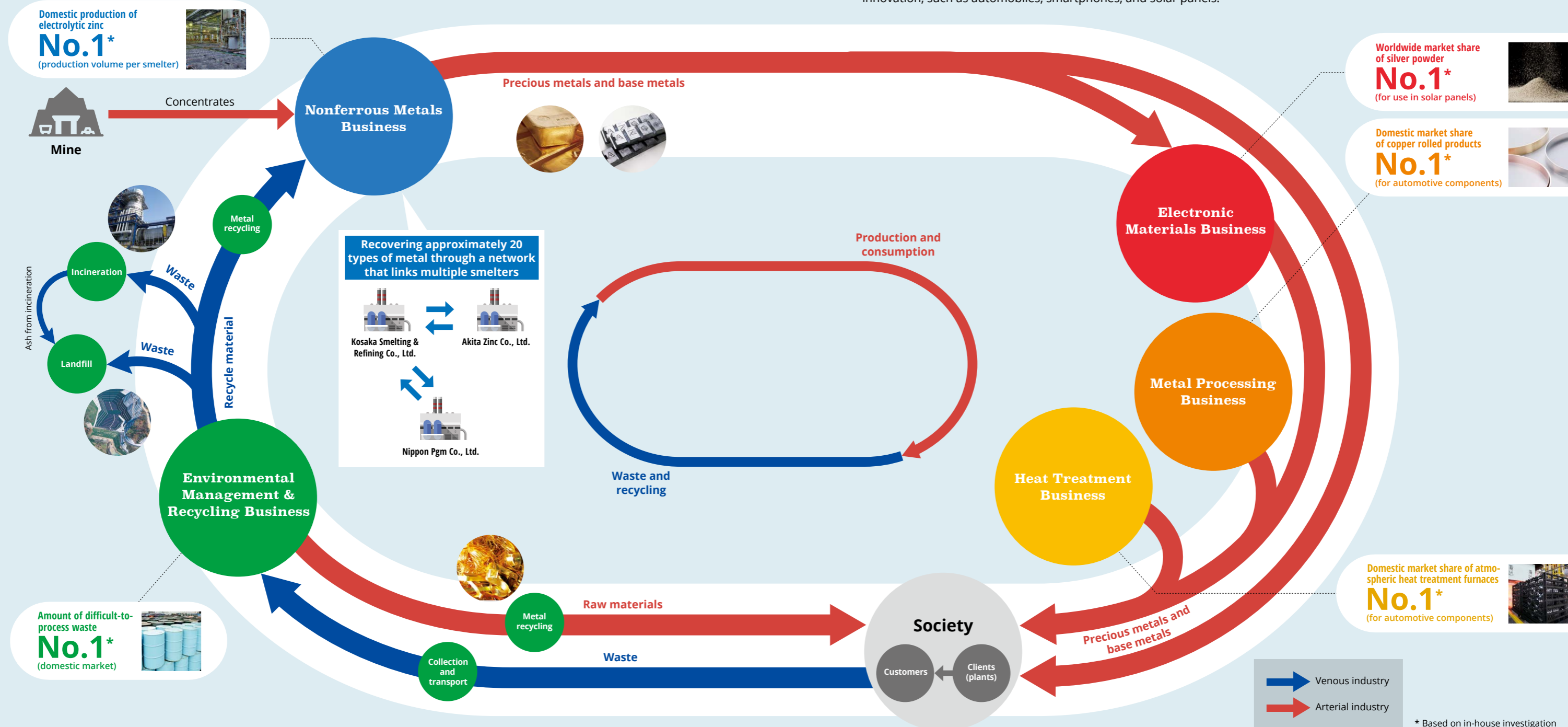
Recycling-Oriented Business Model

STRENGTH

01 A Smelting and Recycling Complex Function That Enables Highly Efficient Metal Recovery

We have combined the waste management of our Environmental Management & Recycling Business with the highly efficient metal recovery technology of our Nonferrous Metals Business to form a smelting and recycling complex.

We use a variety of processes to recycle large amounts of metal from materials that are no longer of use to society. Moreover, materials that cannot be recycled are incinerated and transported to landfills to reduce their environmental impact.



SPECIAL FEATURE 1

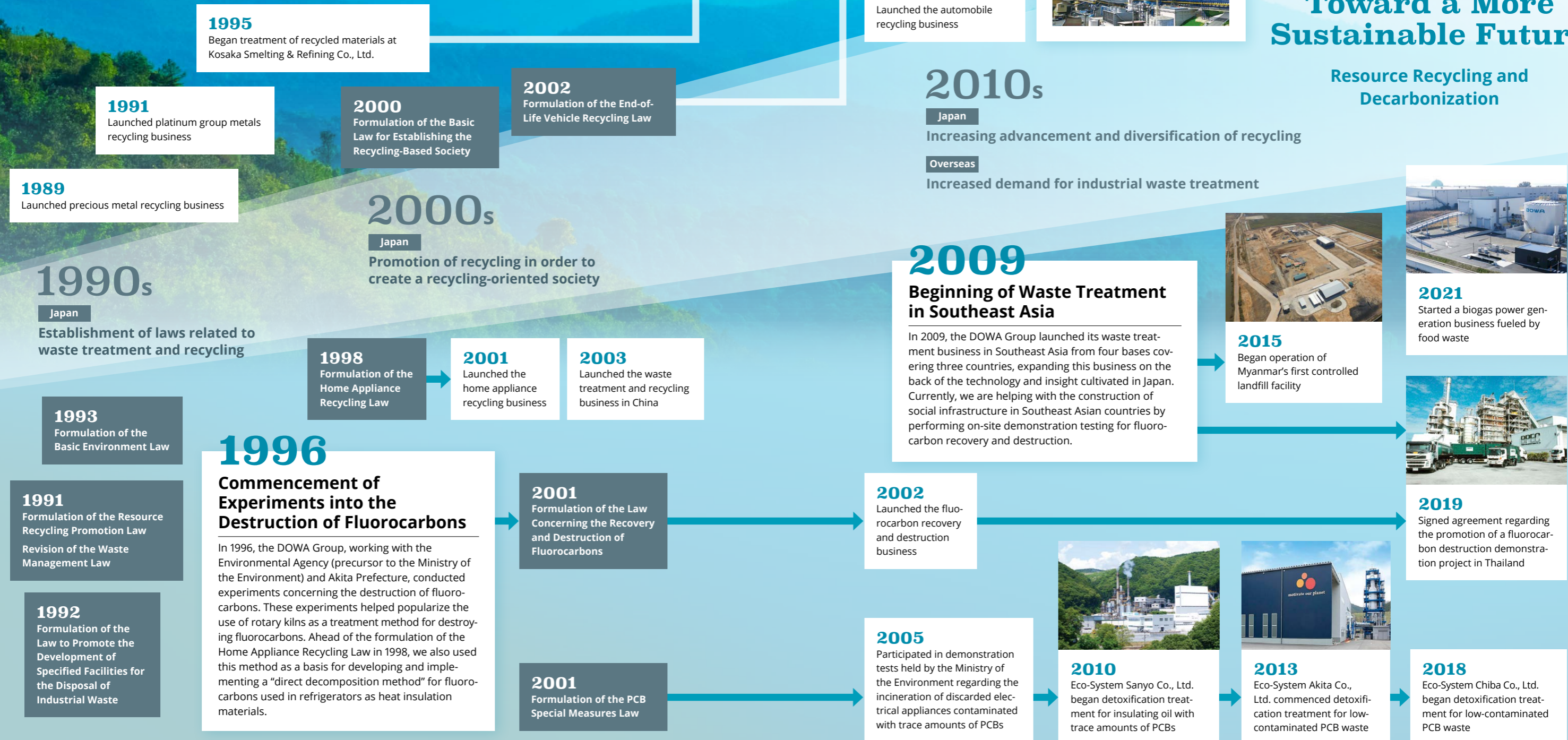
DOWA's Sustainability—Contributing to Resource Recycling and Decarbonization

Since the 1990s, the DOWA Group has worked with governments to lead the industry in running demonstration tests concerning environmental conservation and recycling laws. In the 2000s, the Group established several businesses aimed at creating a recycling-oriented society. From 2010 onward, it has worked to meet diversifying recycling needs in Japan while making active efforts to expand its waste treatment and recycling business overseas.

Going forward, the DOWA Group will continue to leverage the waste treatment and recycling capabilities rooted in its core businesses to help take on the challenge of resolving social issues and contribute toward making a sustainable and secure future.

Toward a More Sustainable Future

Resource Recycling and Decarbonization



SPECIAL FEATURE 2

Creating a Digital Transformation Promotion System

With the rapid expansion of digital technology, the DOWA Group has made it a goal to expand such technology by developing systems and functions to effectively promote digital transformation (DX).

Initiatives to Date

To date, the DOWA Group has introduced groupware, web conferencing, online purchasing, and robot process automation (RPA) as ways to optimize office work. At our plants, meanwhile, we have made use of image recognition as part of our inspection processes and have taken advantage of AI to optimize our investments in materials. These efforts have enabled us to increase our production. However, since these activities have such wide-ranging applications, it is becoming increasingly important to coordinate and share data and expertise throughout the Group. There is also demand to transform business through greater utilization of data, as more links between customers and their ordering data become more apparent.

Establishment of the DX Promotion Committee

In light of these rapid changes, in fiscal 2021 we established the DX Promotion Committee to deliver a response driven by digital technology.

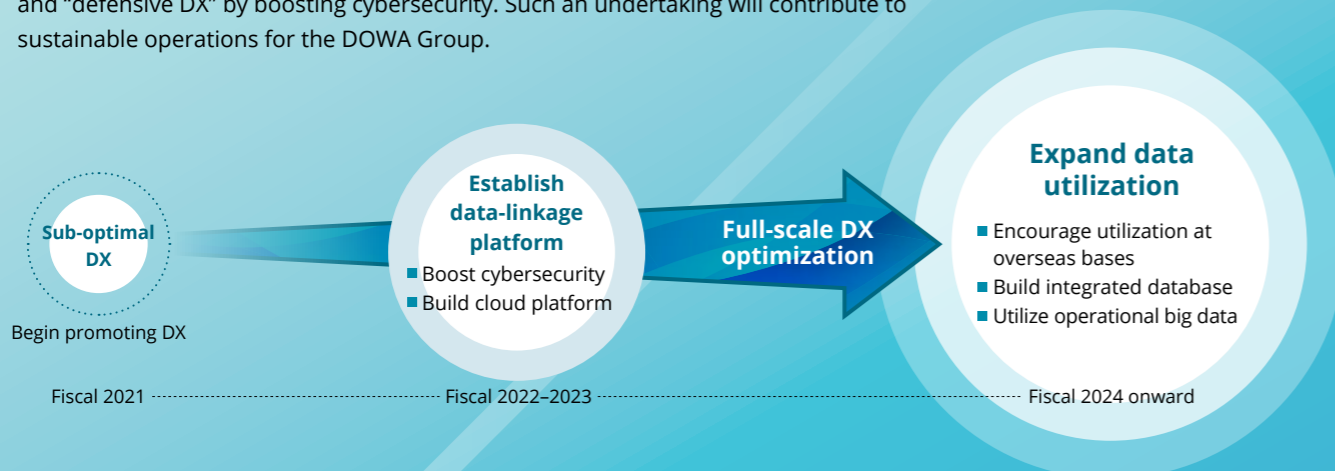
The committee, which is led by the executive officer in charge of the Information Systems Department, investigates systems and functions required to promote DX across the DOWA Group. This includes developing a Groupwide DX strategy, establishing a digital infrastructure, and cultivating human resources well versed in digital technology.

Directors
Executive officers
DX Promotion Committee
Investigation of functions and systems needed to promote DX across the Group

DX Promotion Road Map

The DOWA Group is currently strengthening its cybersecurity capabilities and building a cloud-based data-linkage platform (backbone core system) scheduled to start operation in fiscal 2023. From fiscal 2024, after this platform launches, we will make efforts to expand data utilization and make its use a top priority in each business, used in parallel with operations. One facet of these efforts will involve enhancing our employee education system to cultivate human resources who are well versed in digital technology.

Going forward, we will effectively implement “aggressive DX” using digital technology and “defensive DX” by boosting cybersecurity. Such an undertaking will contribute to sustainable operations for the DOWA Group.



Message from the Executive Officer in Charge

Even in the quick-to-innovate digital market, the DOWA Group will “embrace change and turn it into an opportunity to challenge ourselves.” With this mindset, we will continue to leverage DX for growth.

In recent years, data utilization has changed in line with the increasingly sophisticated business structures and globalization of corporate entities, including the DOWA Group. This has created a growing need for both a drastic revamping of the Group’s systems and the utilization of digital technology. To add to this, the COVID-19 pandemic at the start of 2020 sped up the rate of digitalization further, as well as sparking a major shift in our values. To respond to such a tumultuous environment, we committed to a digital transformation starting in fiscal 2020.

Determining our course toward digitalization is absolutely essential for reinforcing our corporate structure over the next 10 to 20 years. To that end, we have made the Corporate Strategy Department, the Technologies Department, and the Information Systems Department of DOWA Holdings responsible for DX promotion and have established a system for driving DX throughout the DOWA Group. In addition, we have newly established the DX Promotion Committee that works with subsidiary companies to spread DX by promoting various activities throughout the Group. This committee also leads the response to the Digital Governance Code implemented by the Ministry of Economy, Trade and Industry. In the future, we will expand and strengthen these functions and build a strong promotion system that allows subsidiary companies and departments charged with promoting DX to work closely and effectively with one another.

The key to the success of DX is data linkage, including the linkage of manufacturing processes and of bases. Therefore, we will utilize digital technology to, among other things, centralize information, automate work, enable remote operations, and strengthen data analysis, while expanding its applications beyond office work to cover factory work as well. The DOWA Group will also actively leverage DX to boost the governance functions of overseas bases, which are becoming increasingly important as its business becomes more global. In fiscal 2021, we are continuing to update our backbone core system, integrate system infrastructure within the Group, eliminate technical debt, and strengthen information security.

The essence of DX is in transforming a company’s business model in a way that will increase its superiority in the market. However, we cannot just rely on digital means—it is important that we integrate real channels with virtual channels and introduce the processes a business needs flexibly. To this end, we must be able to interpret trends and maintain the right perspective. In this light, even in the quick-to-innovate digital market, the DOWA Group will take inspiration from its Values and “embrace change and turn it into an opportunity to challenge ourselves.” With this mindset, we will continue to leverage DX for growth.

WAKABAYASHI Eiichi

Executive Officer (Part-Time),
General Manager of Information Systems Dept.
President and Representative Director,
DOWA Management Services Co., Ltd.



Sustainability Management

In addition to bolstering our recycling-oriented business model, which is focused on acquiring opportunities, it is important to strengthen the mechanisms that support said model and to reduce business-related risks if we are to ensure the sustainable growth of the DOWA Group. To that end, we have built a system to effectively utilize our financial and non-financial capital, both of which are rooted in corporate governance, and are working continuously to maintain and enhance the components comprising both types of capital.



1 Procurement of Funds

We require funds for working capital, capital investments focused on growth areas, investments in R&D, and for the distribution of profits to shareholders. Our working capital increases and decreases significantly. This changeability reflects the fluctuation of inventories in conjunction with metal prices, which is attributable to the Company's business structure. Our basic approach is to use operating cash flows to meet the aforementioned funding needs. As required, we also use externally procured capital to meet such needs. At the same time, DOWA enhances capital efficiency through Group financing. Our means of procuring capital include normal borrowing from financial institutions. As an additional means of securing short-term liquidity, we have

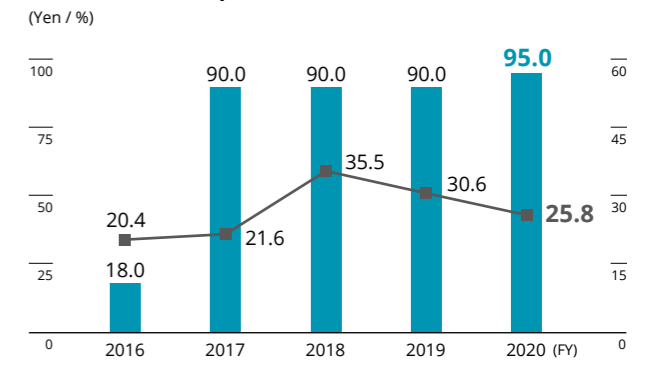
concluded commitment line agreements with multiple financial institutions. Moreover, we issue short term corporate bonds in the form of electronic commercial paper up to a limit of ¥45.0 billion. To secure flexible long-term funding, we have registered for the issuance of ¥30.0 billion in corporate bonds between March 30, 2021 and March 29, 2023. As for individual projects, we select the most advantageous method of capital procurement in light of market conditions at the time. For example, we procure U.S. dollar-denominated funding for the development of overseas mines from government-affiliated financial institutions, and we utilize various systems that provide financing for new domestic investment projects.

2 Dividend Policy

DOWA views the payment of dividends to shareholders as one of its most important management issues. The Company's fundamental policy is to maintain stable payment of dividends and, in that light, it pays a dividend commensurate with performance, having appropriated a sufficient amount of retained earnings to bolster the Group's business position and support future business development. As part of Midterm Plan 2020, we aim to increase dividends according to profit levels, maintaining a stable dividend of at least ¥90.0 per share.

Based on the above, the annual dividend paid for the fiscal year under review was ¥95.0 per share, an increase of ¥5.0 per share compared with the previous fiscal year, taking into account the results for fiscal 2020, future funding needs, and other factors.

Basic Net Income per Share / Cash Dividends

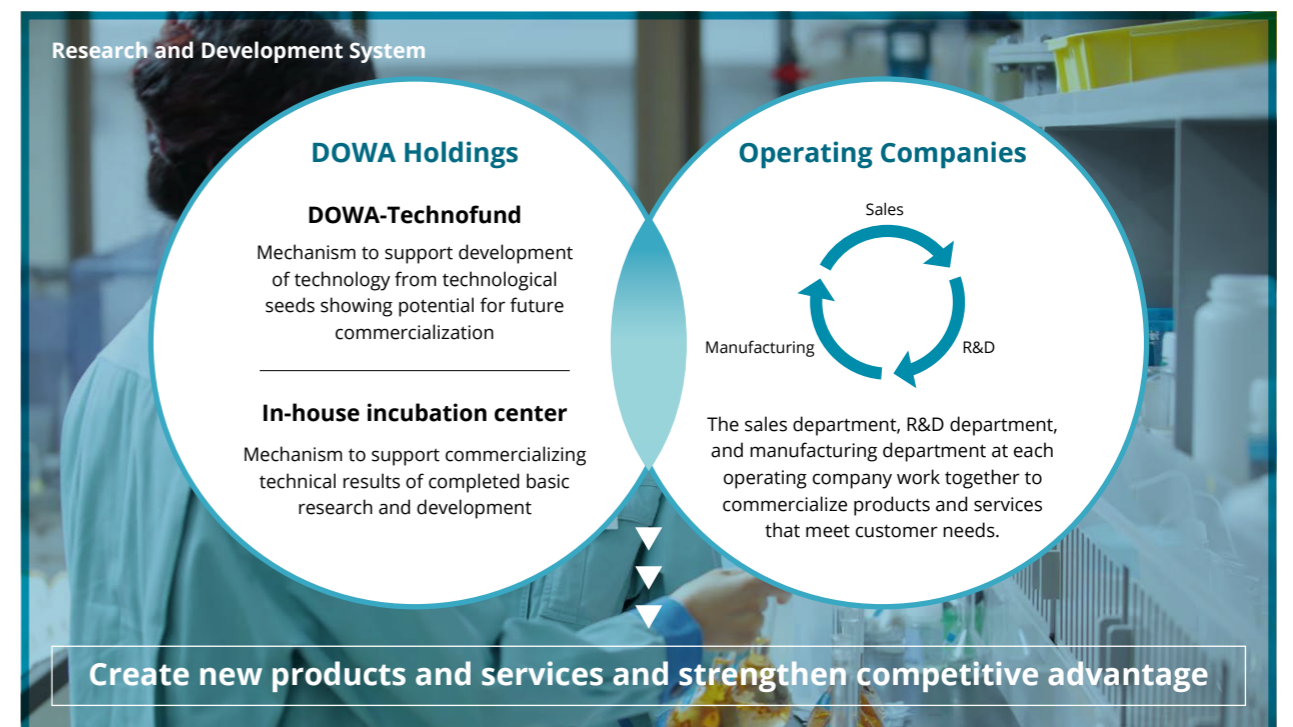


Note: On October 1, 2017, the Company conducted a 5-for-1 reverse stock split.

3 Research and Development

Each operating company within the DOWA Group has its own R&D department working to improve its current products and services, to develop the next generation of products and services in anticipation of customer needs, and to improve the manufacturing processes and equipment at the core of the Group's business. In addition, we are ramping up the development and commercialization of promising new products across the entire Group via our in-house

incubation center. Furthermore, with sights set on the near future, we are creating promising development themes by utilizing the DOWA-Technofund to enable numerous joint research projects with universities and other institutions in fundamental fields that are related to new-concept products and services and innovative technologies.



Create new products and services and strengthen competitive advantage

Progress of Midterm Plan 2020

The DOWA Group is moving forward with Midterm Plan 2020, drawing from the policies presented below to become a company with both stability and growth potential. To achieve this, we will strengthen our business base and invest management resources aggressively toward further growth.

Basic Policies

Expand Businesses in Growth Markets

Aggressively invest management resources in markets for automobiles, information and communication, environment and energy, and healthcare

Increase Competitiveness of Existing Businesses

Enhance the earnings power of existing businesses by increasing competitiveness in the mature domestic markets and improving the functionality of DOWA's recycling and smelting complex

Scope of Midterm Plan 2020

Pre-Change

Fiscal 2018–fiscal 2020 (three years)

➔

Post-Change

Fiscal 2018–fiscal 2021 (four years)

The global expansion of COVID-19 has made demand trends for DOWA products and services opaque. Therefore, in September 2020 we decided to extend the period of Midterm Plan 2020 by one year.

Review of Fiscal 2020

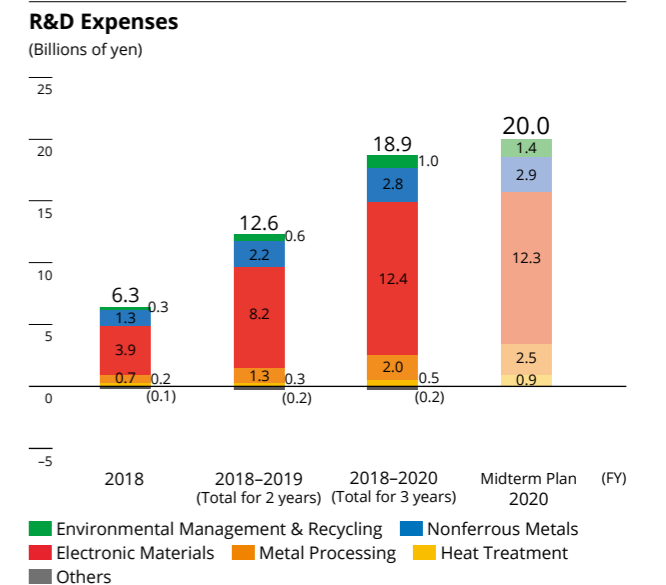
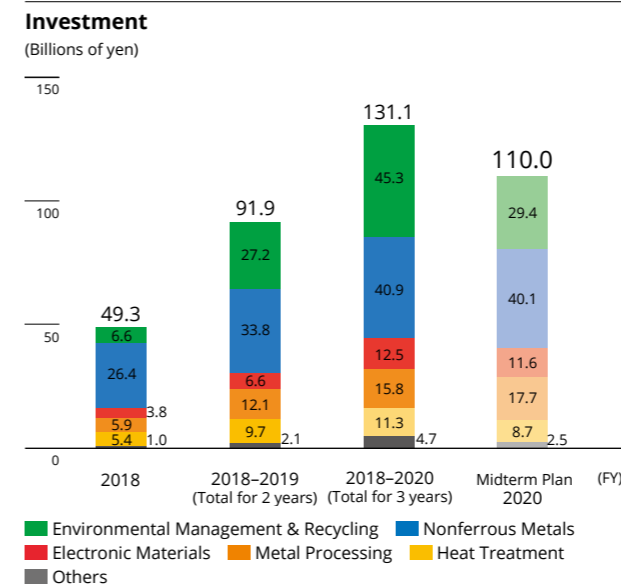
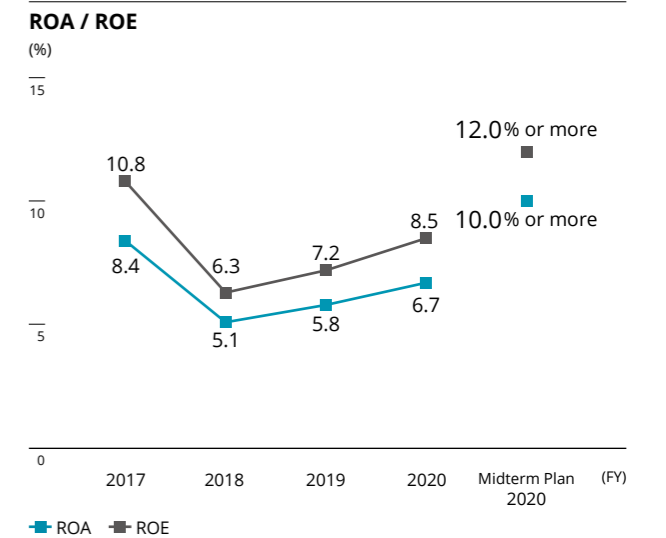
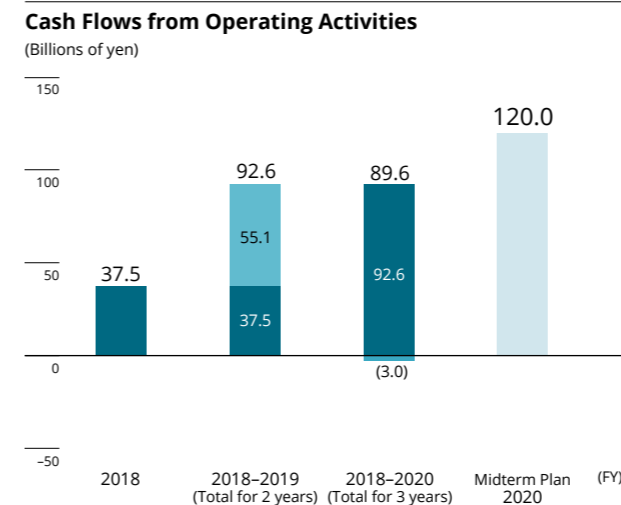
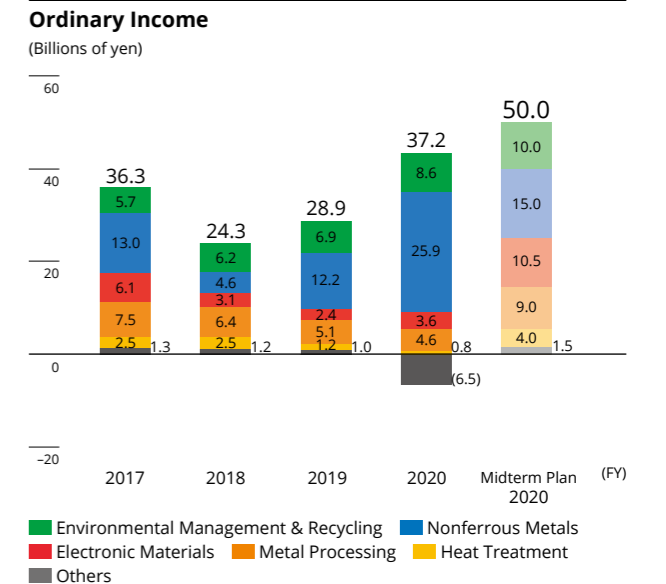
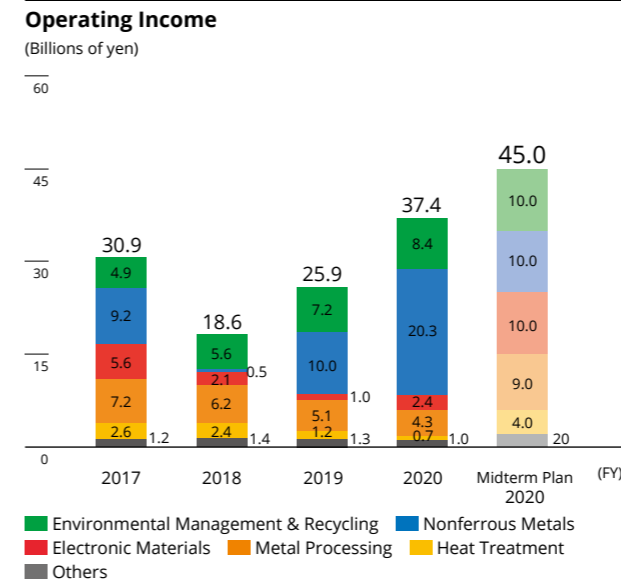
Fiscal 2020 was marked by harsh business conditions amid the global spread of COVID-19, including a substantial drop in demand for automobile-related products in the first half of the fiscal year. However, the second half saw a rapid recovery in demand for these products, in addition to a notable return to form for all business divisions, with prices for precious metals and base metals remaining strong toward the end of the fiscal year.

Regarding investments, total investment amounts exceeded those laid out in Midterm Plan 2020 due to the execution of projects not part of forecasts within the plan. In fiscal 2021, we will see the benefits of some of the projects we have invested in to date, and we expect these projects to contribute to profits.

Furthermore, investments in R&D are building up in line with plans and contributing toward the development of new products.



Status of Key Performance Indicators



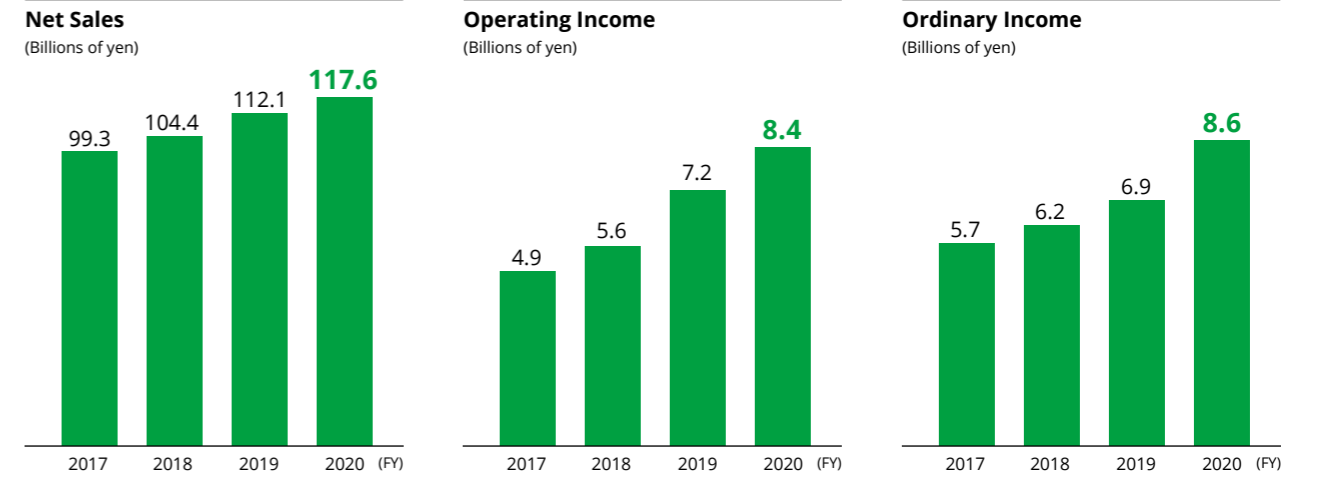
Results by Segment



Environmental Management & Recycling Business

Going forward, Dowa Eco-System Co., Ltd. will establish a leading position in Asia by enhancing the competitiveness of our existing businesses even further, by increasing our market share in respective business fields and regions, and by accelerating the rollout of new products and services. We will also lay the foundations of new mainstay businesses in anticipation of global environmental trends.

YANAI Yasuharu
President and Representative Director



Business Lines



Waste Treatment

Main Products and Services

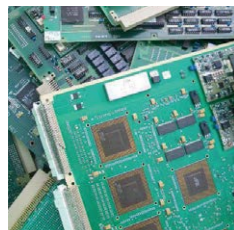
- Incineration of industrial waste
- Melting and recycling of incinerated ash



Soil Remediation

Main Products and Services

- Surveys and remediation of soil
- Landfilling of waste
- Environmental consulting



Recycling

Main Products and Services

- Recycling of metal
- Recycling of discarded household appliances
- Treatment of automotive shredder dust



Southeast Asia

Main Products and Services

- Landfilling of hazardous and non-hazardous waste
- Incineration of hazardous and non-hazardous waste
- Recycling of metal and waste

Advantages

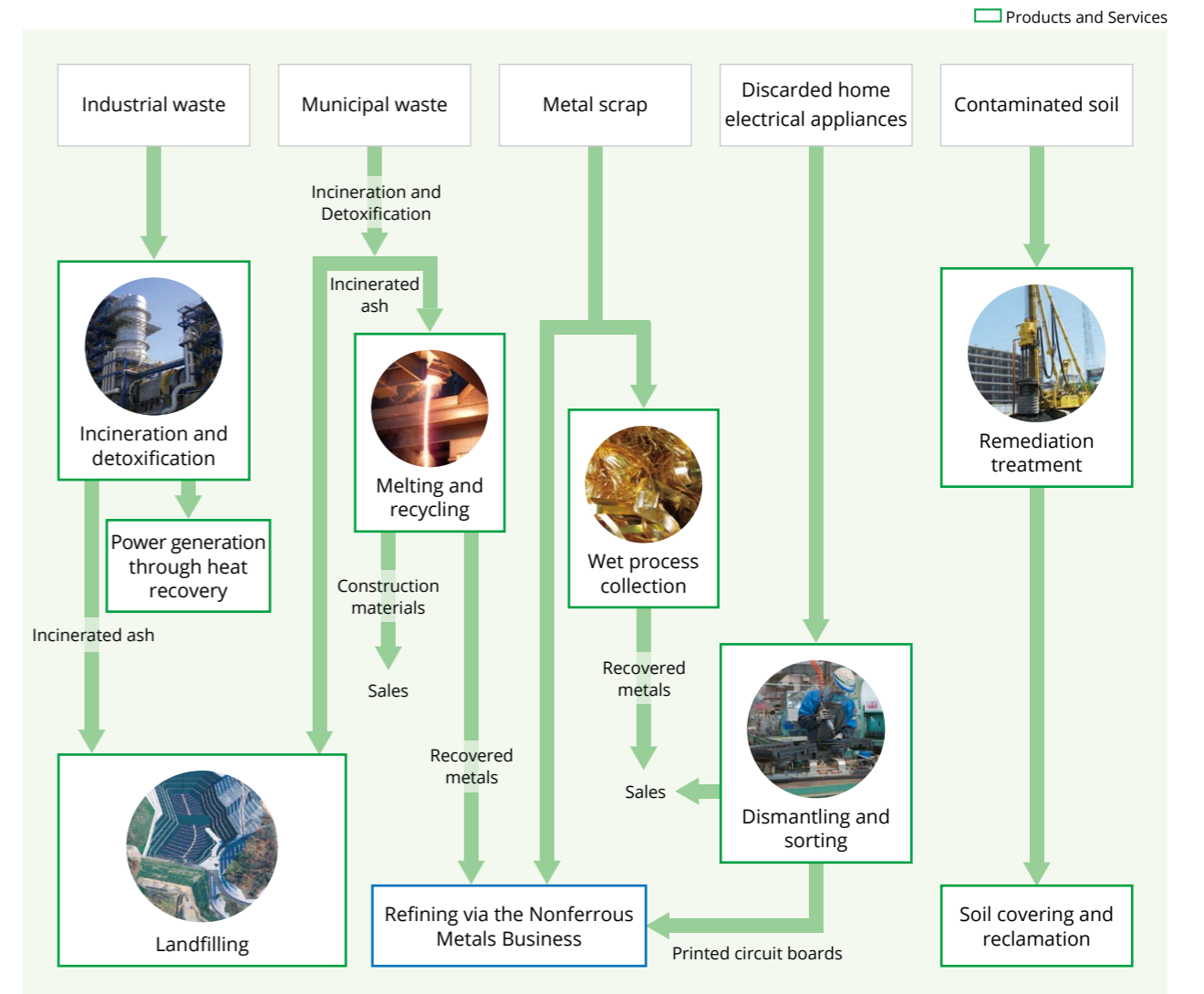
01
Integrated in-house treatment capabilities encompassing the collection and transport of waste through to its incineration and landfilling

02
One of the largest waste incineration capacities in Japan

03
Operation of soil remediation and metal recycling businesses and the provision of comprehensive environmental solutions to clients

04
Operation of a waste treatment business in four Southeast Asian countries (Indonesia, Thailand, Singapore, and Myanmar)

Treatment Flow for Waste and Metal Scrap



Business Conditions (Opportunities and Risks)

External Conditions	Description	Medium- to Long-Term Initiatives	Main Business Areas	Progress in Fiscal 2020
Strengthening of environmental regulations in China and other countries	Opportunities Domestic treatment of waste and recycled materials may lead to revitalization of the market.	Maximize volume handled by waste treatment and recycling businesses	Waste Treatment Recycling	<ul style="list-style-type: none"> Increased treatment of low-concentration PCB and other difficult-to-process waste Maintained high operational standards for automobile recycling and home appliance recycling
Economic and population growth in Southeast Asian countries	Opportunities Growth may lead to increased waste production and changes to waste composition.	<ul style="list-style-type: none"> Opened a new landfill site and constructed a new incinerator in Indonesia Expanded hazardous waste treatment in Thailand and Singapore 	Southeast Asia	<ul style="list-style-type: none"> Focused on collecting hazardous waste in Indonesia and Thailand Promoted construction of new landfill sites and incinerators in Indonesia Promote expansion of landfill sites in Thailand
Progression toward a recycling-oriented and carbon-free society	Opportunities Progress may lead to expansion and diversification of metal recycling needs.	Expand melting and recycling and other businesses that combine waste treatment and metal recycling	Waste Treatment	<ul style="list-style-type: none"> Expanded waste collection conducted by Meltec Ltd. and Meltec Iwaki Co., Ltd. Promoted construction of raw material pre-treatment facilities
		Launch new businesses such as biogas power generation and lithium-ion battery recycling	Waste Treatment and other businesses	<ul style="list-style-type: none"> Launched biogas power generation business using food waste as raw materials Expanded recycling business for spent lithium-ion batteries
	Risks <ul style="list-style-type: none"> Volume of generated waste may decrease Competition may intensify regarding the acquisition of raw materials for recycling 	Capture demand with an abundant set of treatment options	Waste Treatment Recycling Soil Remediation	<ul style="list-style-type: none"> Increased percentage of difficult-to-process waste Focus on the global collection of discarded circuit boards to be used as recycling materials in Group-owned smelters Completed construction of new landfills in Japan Conducted environmental assessment regarding expansion of existing landfill sites

Business Conditions in Fiscal 2020

In the waste treatment business, the volume of waste treated through incineration was approximately level with that of the previous fiscal year, and unit prices stayed strong, while the volume of melting and recycling treatments increased. Sales in the soil remediation businesses were approximately the same as in the previous fiscal year. In the recycling business, collection of recycled materials for Company smelters decreased, whereas the amount of discarded home appliances recycled increased. In the Southeast Asia business, orders for waste treatment in Indonesia and Thailand decreased.

As a result, net sales for the Environmental Management & Recycling Business increased 4.9%, to ¥117.6 billion, operating income was up 17.4%, to ¥8.4 billion, and ordinary income increased 25.5%, to ¥8.6 billion.

TOPIC Increasing the Recycling Capacity for Spent Lithium-Ion Batteries

In 2018, Dowa Eco-System participated in a collaborative collection scheme for lithium-ion batteries with the Japan Automobile Manufacturers Association, Inc. Spent lithium-ion batteries are safely detoxified through heat treatment and then separated into iron, aluminum, copper, a cobalt-nickel mixture, and other materials, which are recovered and recycled as smelting materials or for other purposes.

In March 2021, Eco-System Akita, Co., Ltd. increased its intake capacity for electrical and electronic devices, including lithium-ion batteries. Going forward, we will continue to make capital investments and develop technology to capture the growth in recycling demand.

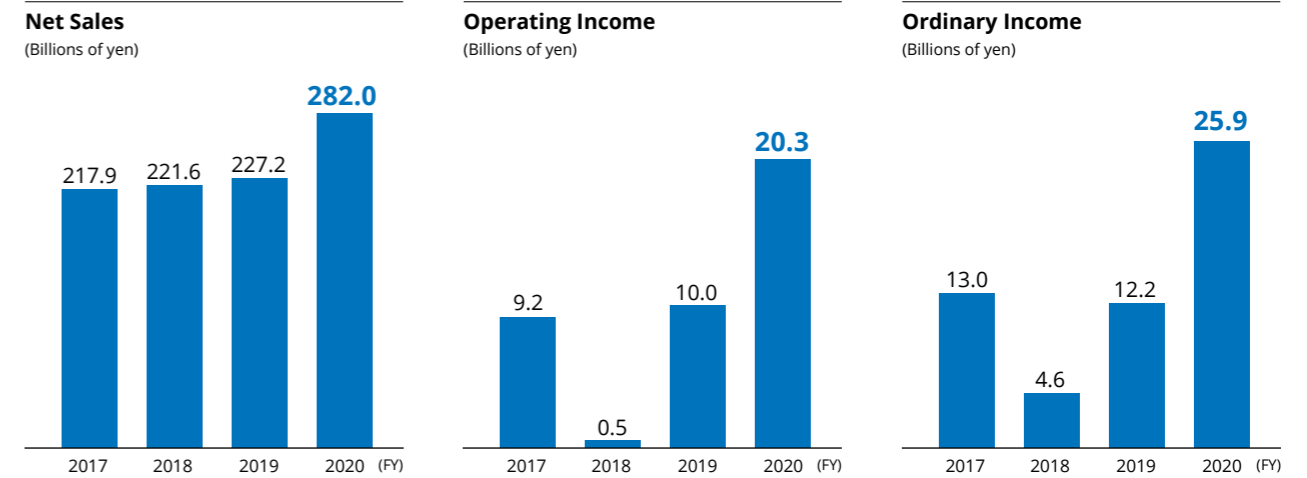


ECO-SYSTEM AKITA CO., LTD.

Nonferrous Metals Business

Dowa Metals & Mining Co., Ltd. strives to deepen the capabilities of its mining, smelting, and recycling complex and increase the resilience of its businesses by enhancing its ability to handle impurities in raw materials and by advancing the development of mines overseas.

SUYAMA Toshiaki
President and Representative Director



Business Lines



Precious Metals and Copper Smelting

Main Products and Services

- Gold
- Silver
- Copper
- Lead
- Tin
- Antimony
- Nickel



Platinum Group Metals Smelting

Main Products and Services

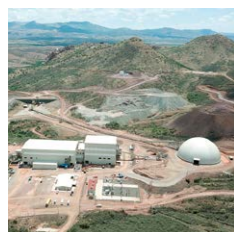
- Platinum
- Palladium
- Rhodium



Zinc Smelting

Main Products and Services

- Zinc
- Zinc alloy
- Indium
- Sulfuric acid



Resource Development and Raw Material Procurement

Main Products and Services

- Stable procurement of raw materials for in-house smelting operations
- Acquisition and development of Group-owned mines and interests in other mines

Advantages

01 Capabilities of our mining, smelting, and recycling complex centered on Kosaka Smelting & Refining

Kosaka Smelting & Refining Co., Ltd.

Recycling and smelting operations that can recover approximately 20 types of metal from a wide range of raw materials, including e-scrap and by-products of zinc smelting

Akita Zinc Co., Ltd.

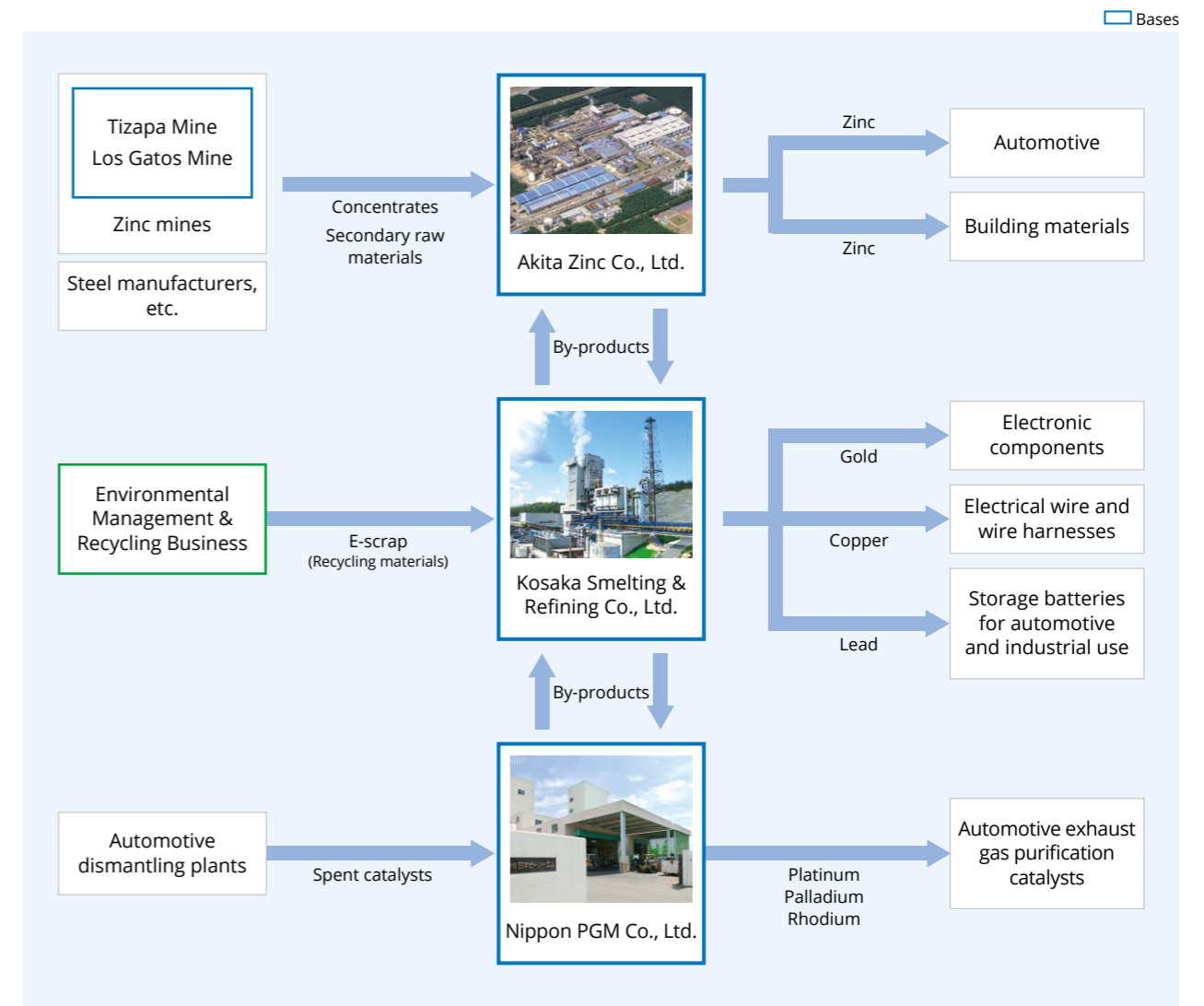
Zero-emissions smelting operations that boast the largest zinc production volume in Japan

Nippon PGM Co., Ltd.

Recovery and recycling of platinum group metals from spent catalysts from automotive exhaust gas purification using specialized smelters

02 Worldwide raw material collection network that is coordinated with the Environmental Management & Recycling Business

Overview of the Mining, Smelting, and Recycling Complex



Business Conditions (Opportunities and Risks)

External Conditions		Description	Medium- to Long-Term Initiatives	Main Business Areas	Progress in Fiscal 2020
Realization of a carbon-free and recycling-oriented society	Opportunities	Social changes will increase demand for various nonferrous metals and recycling.	Strengthen the functions of the mining, smelting, and recycling complex	Precious Metals and Copper Smelting	▶ Promoted treatment of various raw materials, including recycled materials, at Kosaka Smelting & Refining Co., Ltd.
			Diversify and maximize metals produced	Precious Metals and Copper Smelting	▶ Increased production and regular sales of high-purity tin
Strengthening of environmental regulations worldwide and an increase in the number of vehicles that comply with such regulations	Opportunities	There may be an increase of catalysts generated from exhaust purification.	Expand overseas collection by increasing overseas bases	Platinum Group Metals Smelting	▶ Promoted steady collection of spent catalysts from exhaust gas purification for used vehicles
Intensified competition for raw materials	Risks	There may be changes in the content and proportion of valuable metals and impurities found in raw materials.	Enhance ability to handle impurities in materials	Zinc Smelting	▶ Started operation of equipment for removing impurities in zinc concentrates and equipment for increasing secondary raw materials
	Risks	Conditions for the procurement of raw materials could worsen.	Ensure stable procurement by increasing rate of procurement from Company mines	Resource Development and Raw Material Procurement	▶ Increased production and quality of concentrates at Los Gatos Mine (Mexico) ▶ Conducted mineral exploration as part of the Palmer Zinc and Copper Project in the United States

Business Conditions in Fiscal 2020

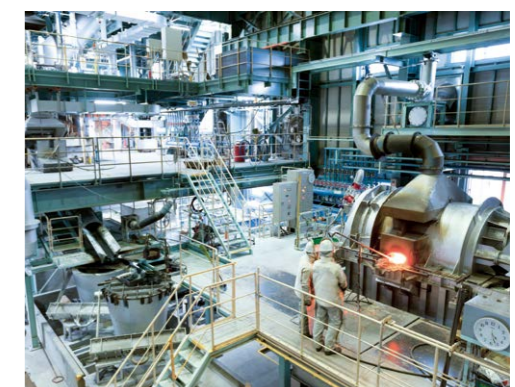
Copper production in the precious metals and copper smelting business was roughly the same as in the previous fiscal year. In the platinum group metals smelting business, there was an increase in the amount of metal recovered from spent catalysts from automobile exhaust purification. Additionally, losses in the zinc smelting business shrank due to improved conditions for the purchasing of zinc concentrates and to a reduced loss on devaluation of zinc inventories. The Nonferrous Metals Business also benefited from a year-on-year increase in prices for gold, silver, platinum group metals (PGMs), and other precious metals. In addition, profit increased for equity-method affiliates due to the start of stable operations at the Los Gatos Mine in Mexico.

As a result, net sales for the Nonferrous Metals Business increased 24.1%, to ¥282.0 billion, operating income expanded 103.3%, to ¥20.3 billion, and ordinary income increased 112.5%, to ¥25.9 billion.

TOPIC Expanding the Platinum Groups Metals Smelting Business

Dowa Metals & Mining is taking steps to enhance its platinum group metals smelting business. In fiscal 2020, we exceeded the monthly target set in Midterm Plan 2020 of collecting and treating 1,000 tons of catalysts from automobile exhaust purification for use as raw materials, thanks to the steady collection of platinum group metals and an increase in the price of these metals.

The DOWA Group plans to establish new collection bases in Spain and South Korea in fiscal 2021 and intends to increase collection amounts in each of these countries. With these actions, we will maintain our high levels of collection and treatment and strengthen the platinum group metals smelting business further going forward.

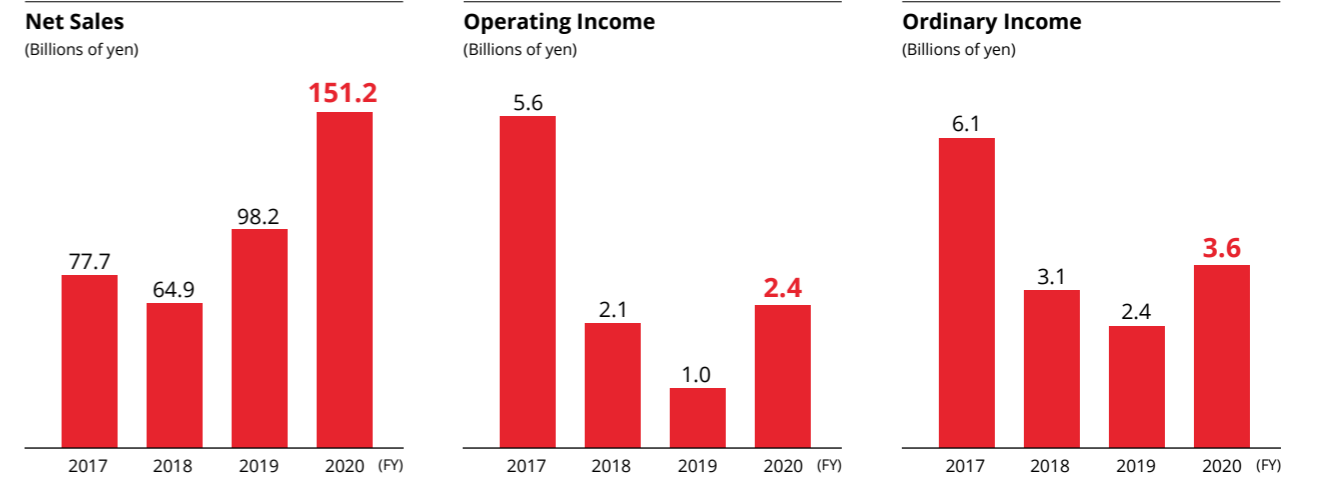


Nippon PGM Co., Ltd.

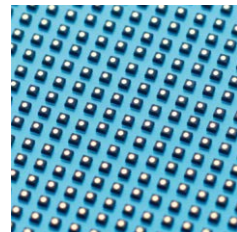
Electronic Materials Business

Dowa Electronics Materials Co., Ltd. is ramping up its efforts to develop new products that will rise to the top of niche markets and become earnings mainstays for generations to come. We are also working to extend business into the automotive and healthcare fields, which promise market growth.

SUZUKI Koji
President and Representative Director



Business Lines



Semiconductors

Main Products and Services

- High-purity gallium
- Indium
- Gallium arsenide wafers
- Red and infrared LEDs
- Deep ultraviolet LEDs



Electronic Materials

Main Products and Services

- Silver powder
- Copper powder
- Silver oxide powder
- Conductive atomized powder



Advanced Fine Materials

Main Products and Services

- Metal powder
- Carrier powder
- Ferrite powder
- Compound oxide powder

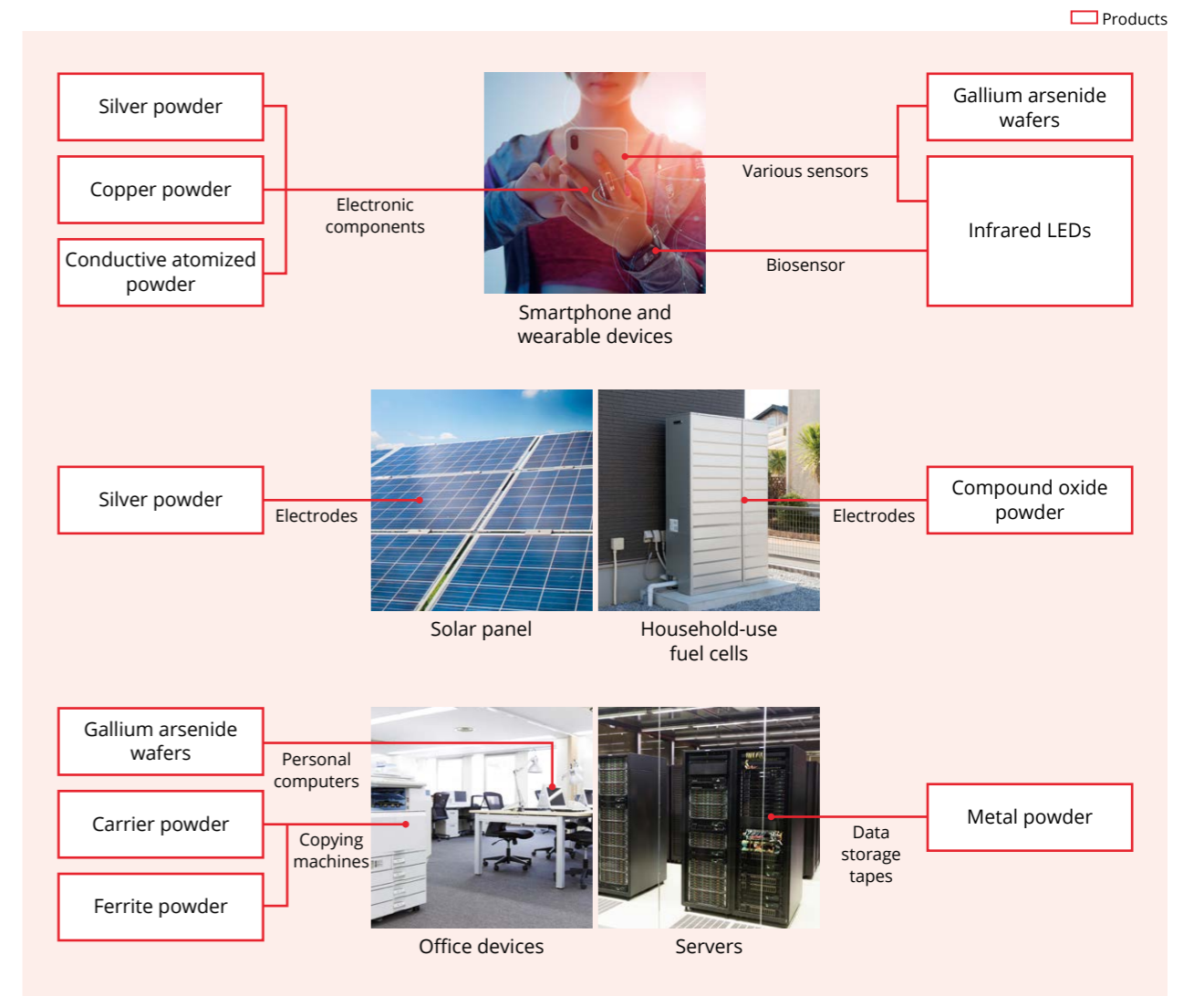
Advantages

01
Numerous products boasting leading shares of niche markets

02
Production technology that allows for uniform quality from small-scale production to mass production

03
Timely identification of changes in client needs and competence in the development of technologies that cater to these new needs

Mainstay Products and Applications



Business Conditions (Opportunities and Risks)

External Conditions	Description	Medium- to Long-Term Initiatives	Main Business Areas	Progress in Fiscal 2020
Progression toward a decarbonized society	Solar panel installation is expanding.	Maintain a high market share for silver powder for solar panels	Electronic Materials	▶ Maintained sales of silver powder for solar panels
	The market for fuel cells is expanding.	<ul style="list-style-type: none"> Expand sales of materials for household-use fuel cells Develop fuel cell materials for industrial applications 	Advanced Fine Materials	▶ Began construction of a facility to increase production of fuel cell materials
Shift toward more advanced telecommunications	The market is expanding for electronic components used in telecommunications terminals and base stations.	Commercialize new products (conductive atomized powder, etc.)	Electronic Materials	▶ Began mass production of conductive atomized powder to be used in electronic components for condensers and other items
Heightened health awareness	Wearable devices are becoming more diverse and their market is expanding.	Develop and mass-produce new LEDs for biosensors and other applications	Semiconductors	<ul style="list-style-type: none"> ▶ Expanded sales of red and infrared LEDs for medical devices ▶ Began construction of a facility to mass-produce short-wavelength LEDs for wearable devices
Increased data capacity thanks to the IoT, AI, and other factors	Demand is growing for tapes used in data archiving.	Produce magnetic powder for data storage tapes in keeping with customers' development schedules	Advanced Fine Materials	▶ Boosted sales of magnetic powder for next-generation data storage tapes
Emergence of alternative technologies in key markets where DOWA products are utilized	There may be a decrease in demand for mainstay products.	Create new products to meet customer needs and commercialize these products as early as possible	Semiconductors Electronic Materials Advanced Fine Materials	▶ Promoted the development of new products at our research institutes and the Technology Development Department

Business Conditions in Fiscal 2020

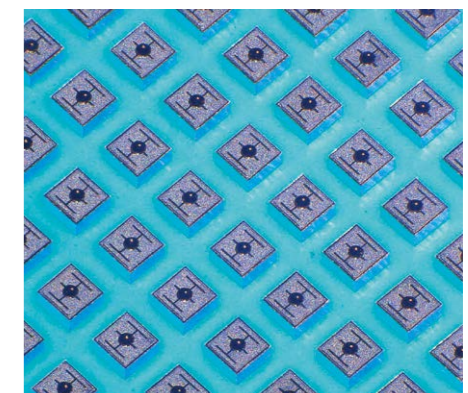
In the semiconductor business, sales increased for LEDs used in medical devices and other applications. Sales were also strong in the electronic materials business for silver powder for solar panels due to global expansion in new energy-related markets. However, sales were sluggish for magnetic powder in the advanced fine materials business. As for new product development, we began commercial production of conductive atomized powder for use in electronic components and consequently saw an increase in sales.

As a result, net sales for the Electronic Materials Business increased 54.0%, to ¥151.2 billion, operating income increased 133.2%, to ¥2.4 billion, and ordinary income increased 53.9%, to ¥3.6 billion.

TOPIC Starting of Sales of Mass-Produced Short-Wavelength Infrared LEDs

Dowa Electronics Materials has embarked on the sale of mass-produced, short-wavelength infrared LEDs for sensors used in the healthcare field.

Short-wavelength infrared LEDs produce light with wavelengths ranging from 800 nm to 2,000 nm, making them highly penetrative to organisms. As a result, work is being done to apply them in the healthcare field. In anticipation of healthcare market growth, in 2018 Dowa Electronics Materials increased sample work on these LEDs and began construction of a mass production facility and commenced sales of LEDs for wearable devices in June 2021. Dowa Electronics Materials will continue to develop these technologies so that they are adopted in the coming generation of devices and in other applications in the future.



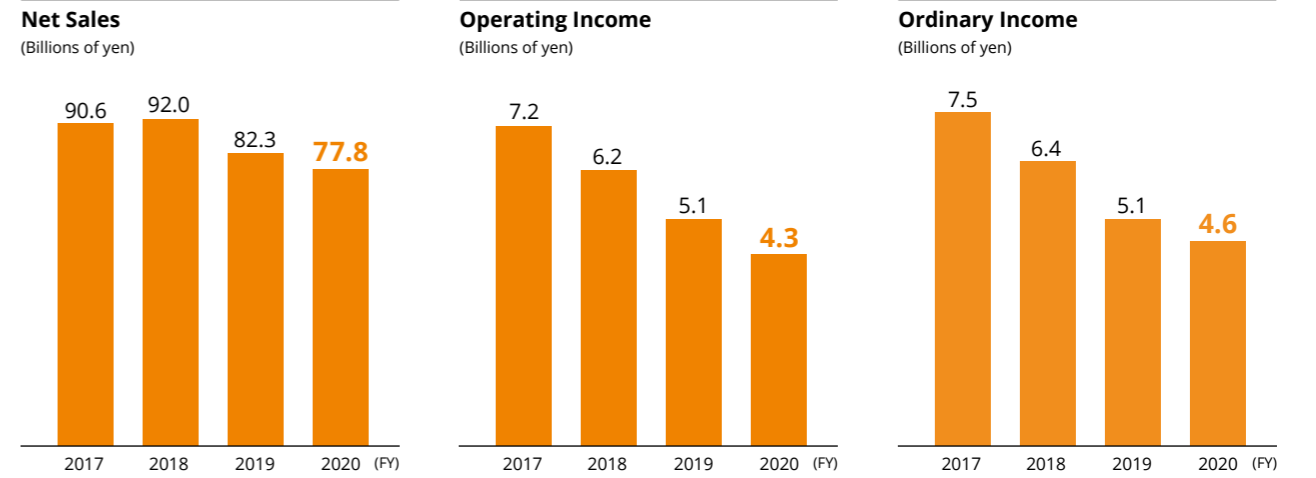
Short-wavelength infrared LED chips

Metal Processing Business

Dowa Metaltech Co., Ltd. has a lineup of highly functional mainstay products that cater to a wide range of demand and are used in automobiles, smartphones, and other items. We are also working to develop new products, boost production capacity in Japan, and expand our production bases in Asia. We will continue to focus on the automotive and IoT-related fields and further increase profitability through the establishment of a solid business base that can withstand changes in the business environment.



ONIOH Takashi
President and Representative Director



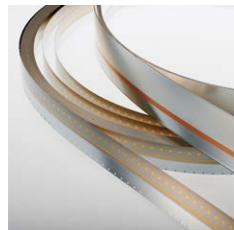
Business Lines



Copper Rolled Products

Main Products and Services

- Copper, brass, and copper alloy strips
- Nickel alloy strips
- Reflow tin-plated strips
- Brass alloy rods
- Forged brass products



Electroplating

Main Product and Service

- Electroplating



Metal-Ceramics Substrates

Main Product and Service

- Metal-ceramics substrates

Advantages

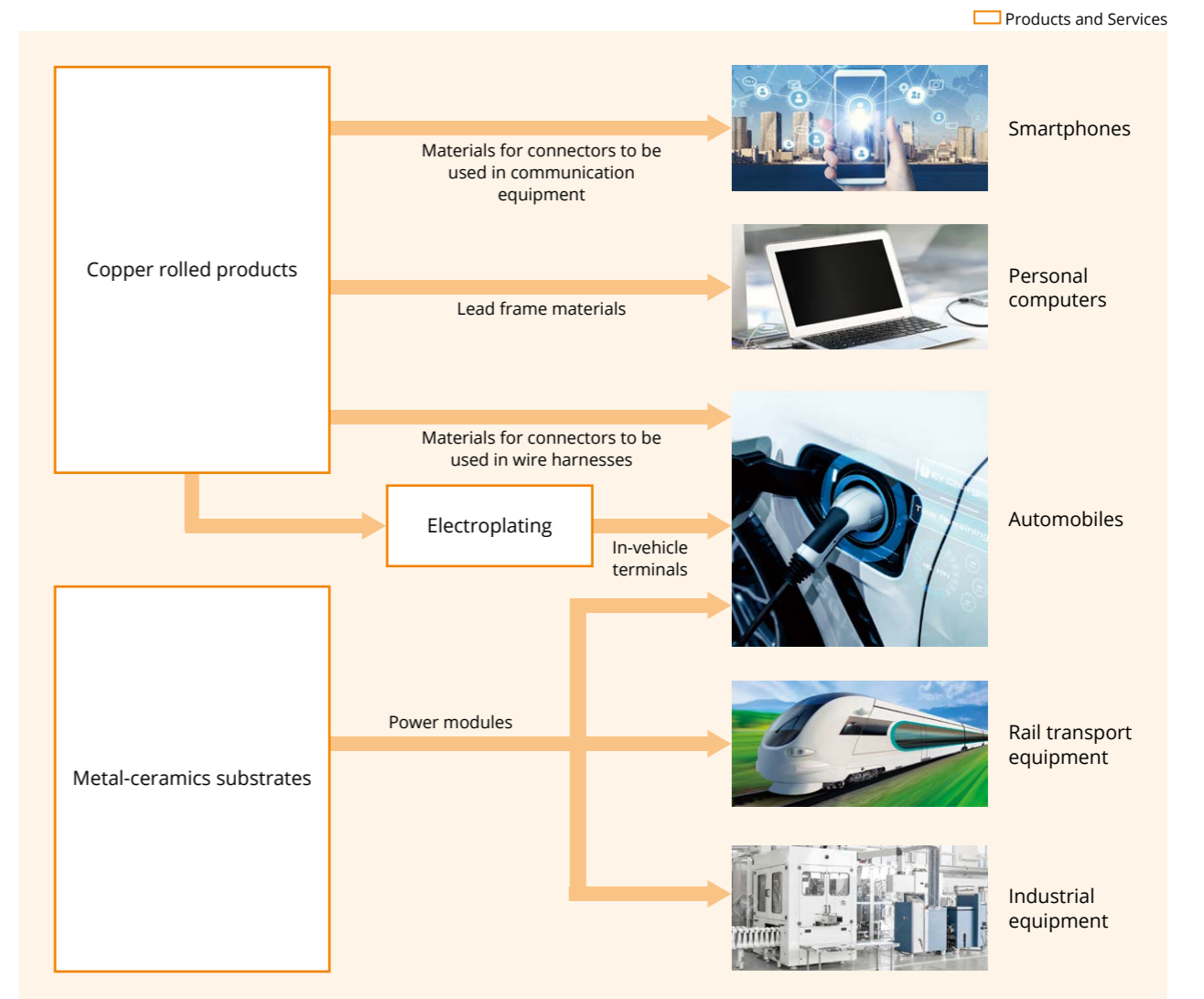
01
Extensive lineup of products that have high levels of performance in terms of conductivity, strength, and workability

02
Multiple processing bases in China and Thailand, which are important demand destinations in Asia

03
Large share of the market for automotive copper rolled products and electroplating in Japan

04
One of the largest shares of the global market for metal-ceramics substrates for power modules

Mainstay Products and Applications



Business Conditions (Opportunities and Risks)

External Conditions	Description	Medium- to Long-Term Initiatives	Main Business Areas	Progress in Fiscal 2020
<ul style="list-style-type: none"> • Increase in the number of automobiles sold • Growing proportion of environment-friendly cars 	There is an increasingly rapid spread of electric and smart vehicles.	Increase production and sales of copper alloy strips	Copper Rolled Products	▶ Built up facilities for production of high-performance copper alloy strips
		Expand the range of processing conducted at bases in Japan and Asia	Copper Rolled Products	▶ Commenced operations at the processing base in Nantong, Jiangsu Province, China
		Heighten competitiveness by optimizing electroplating production lines in Japan and overseas	Electroplating	▶ Expanded silver-plating lines at production bases in Japan ▶ Began mass production at silver-plating lines and at our second electroplating base in Thailand, thereby increasing yields
		Expand sales of metal-ceramics substrates and develop new products	Metal-Ceramics Substrates	▶ Increased production of mainstay products and promoted development of improved integrated substrates
Shift to more advanced telecommunications	There is an increase in demand for higher-performance, higher-speed communication.	Increase production and sales of copper alloy strips	Copper Rolled Products	▶ Built up facilities for production of high-performance copper alloy strips
Hastening shift toward automation, labor-savings, low-carbon, and energy conservation	There is growing demand for industrial machinery and railways.	Expand sales of metal-ceramics substrates and develop new products	Metal-Ceramics Substrates	▶ Increased sales of mainstay products for industrial machinery and railways
Emergence of alternative technologies in key markets where DOWA products are utilized	Demand for key products may decrease.	Develop new products to address customer demand	Copper Rolled Products Electroplating Metal-Ceramics Substrates	▶ Promoted the development of new products at our research institutes and the Technology Development Department

Business Conditions in Fiscal 2020

Sales of copper rolled products for automobiles recovered during the second quarter of the consolidated fiscal year under review and remained strong in the third and fourth quarters. In addition, sales increased for copper rolled products used in mobile 5G communications systems. Similar to the copper rolled products business, the electroplating business saw a recovery in electroplating for automobiles. In the metal-ceramics substrates business, although sales to railways decreased, sales targeting industrial machinery increased.

As a result, net sales for the Metal Processing Business decreased 5.5%, to ¥77.8 billion, operating income contracted 14.2%, to ¥4.3 billion, and ordinary income decreased 10.8%, to ¥4.6 billion.

TOPIC Commencement of Operations at the Second Plant for the Tin-Plating of Copper Rolled Products in China

Dowa Metaltech commenced full-scale operations at Dowa Metaltech (Nantong) Co., Ltd., the second of Dowa Metaltech's processing facilities in China and part of its copper rolled products business.

As the number of automobiles and related parts produced in China increases, demand for safety and long-term reliability regarding automotive parts is continuing to grow. Dowa Metaltech will continue to offer various copper rolled products while providing high-quality reflow tin-plating and diverse slitting services. Through these efforts, the company will seek to meet the demand from its customers operating in China.

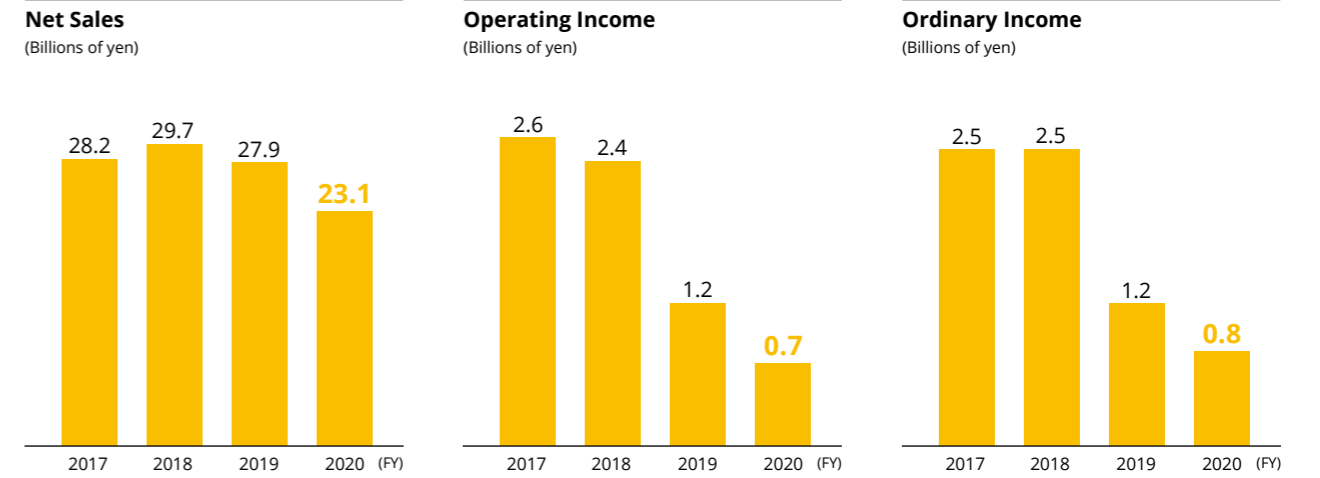


Dowa Metaltech (Nantong) Co., Ltd.

Heat Treatment Business

Dowa Thermotech Co., Ltd. conducts contracted heat treatment processing and engages in the manufacture, sale, and maintenance of heat treatment processing facilities. We are also working to develop businesses in new fields in anticipation of changes in the automotive industry.

TSUJI Ryuji
President and Representative Director



Business Lines



Heat Treatment Processing

Main Products and Services

- Heat treatment
- Surface treatment



Industrial Furnaces

Main Products and Services

- Design, manufacture, marketing, and maintenance of heat treatment facilities and ancillary equipment

Advantages

01
Significant share of the market for the carburizing treatment of automotive components in Japan

02
Network of bases that covers the principal automotive manufacturing regions in Japan and overseas

03
Support for clients in terms of both processing and facilities through the heat treatment processing and industrial furnaces businesses

Mainstay Products and Applications



Business Conditions (Opportunities and Risks)

External Conditions	Description		Medium- to Long-Term Initiatives	Main Business Areas	Progress in Fiscal 2020
<ul style="list-style-type: none"> Increase in the number of automobiles produced Reorganization of customers' global production systems 	Opportunities	Structural changes are taking place in the heat treatment processing market, such as the shift from a model emphasizing demand in Japan to one prioritizing demand overseas.	Increase the capacity of heat treatment processing facilities at bases in Japan and overseas to reflect demand	Heat Treatment Processing	<ul style="list-style-type: none"> Began operations at two new facilities in India Increased capabilities at bases in China and the United States
			Introduce automation and energy-saving processes at heat treatment processing bases in Japan		
<ul style="list-style-type: none"> Progression toward a decarbonized society Growing proportion of environment-friendly cars 	Opportunities	<ul style="list-style-type: none"> The product needs of customers are becoming increasingly complex. There is growing demand for facilities with low CO₂ emissions. 	Develop heat and surface treatment processing facilities for new applications	Heat Treatment Processing	<ul style="list-style-type: none"> Started mass production of new diamond-like carbon coating surface treatment equipment
			Establish new facilities to meet the demand for low CO ₂ emissions	Industrial Furnaces	
	Risks	There may be a decline in the number of heat-treated parts as electric vehicles become more commonplace.	Acquire orders by leveraging Dowa Thermotech's strengths as a comprehensive heat treatment company	Heat treatment processing and industrial furnaces	<ul style="list-style-type: none"> Promoted the acquisition of new orders and cost reductions

Business Conditions in Fiscal 2020

During the first quarter of the consolidated fiscal year under review, the heat treatment processing business suffered due to a global decrease in automobile production. However, contracting numbers in Japan, China, the United States, and India recovered during the second quarter and remained strong from the third quarter onward. In the industrial furnace business, orders for new facilities and maintenance were sluggish.

As a result, net sales for the Heat Treatment Business decreased 17.2%, to ¥23.1 billion, operating income fell 38.6%, to ¥0.7 billion, and ordinary income decreased 34.7%, to ¥0.8 billion.

TOPIC Developing of Facilities That Will Help Realize a Decarbonized Society

In response to growing demand from manufacturers of automobiles and automobile parts for facilities that will help decrease CO₂ emissions, Dowa Thermotech and Toyota Motor Corporation co-developed the SS Vacuum Carburizing Furnace. Since the furnace has multiple cells, manufacturers can utilize it for small-lot production while simultaneously reducing treatment time. This makes the furnace suitable for installation on a machining line. In addition, application of the vacuum carburizing technology of this heat treatment equipment helps create a clean operating environment and significantly reduces CO₂ emissions. The furnace has been well received in the heat treatment processing market, earning the Technology and Development Award from Toyota Motor Corporation.



The SS Vacuum Carburizing Furnace



Foundation for Creating Value

The DOWA Group draws from its Corporate Mission, “to contribute to creating an affluent, recycling-oriented society through our business activities worldwide,” to meet the expectations of its customers, shareholders, investors, business partners, local community members, employees, and other stakeholders without fail. At the same time, we are committed to addressing social issues through our business activities.

- 54 Sustainability for the DOWA Group—Vision for 2020, Plans, and Goals
- 56 Governance
- 63 Risk Management
- 64 Board of Directors and Officers
- 67 A Discussion between the DOWA Group’s Outside Directors
- 72 Safety
- 74 Environmental Initiatives
- 81 Social Initiatives

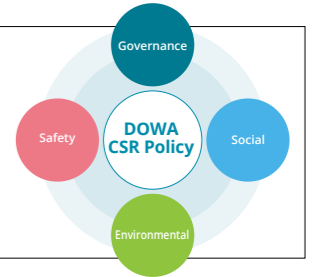
Sustainability for the DOWA Group—Vision for 2020, Plans, and Goals

At the DOWA Group, we have established Vision for 2020, which sets forth medium-term goals in terms of governance, safety, the environment, and society—the four priority areas of our CSR Policy. Since then, we have made annual plans to achieve these goals and endeavored to carry out these plans while constantly assessing our actions, conducting evaluations, and making revisions. In fiscal 2020, the final year for achieving these goals, we accomplished the following achievements.

In the future, we will promote new initiatives under the new Midterm Plan currently being formulated.

“Vision for 2020”

“S+ESG” management based on the CSR Policy is established at all DOWA Group companies, and we are able to contribute to resolving global social issues by simultaneously minimizing management risks and improving corporate value.



Area	CSR Policy	Medium-Term Goals under Vision for 2020	Priority Measure	Indicators	FY2020 Goals	Evaluation	
						FY2020 Results	Future Initiatives
Governance	<ul style="list-style-type: none"> We will aim to be an open and transparent company. Taking into consideration international initiatives, we will work on anti-corruption, including bribery. We will take CSR into consideration in our procurement. 	Promote sound business management by ensuring sufficient functions, appropriate information disclosure, and transparency for internal control systems	Strengthen internal controls and governance	No. of important deficiencies that should be disclosed	Zero incidences	Zero incidences	We met our J-SOX (an internal control system for financial reporting) targets and will continue to improve our internal control systems with efforts to make it more suitable and efficient.
		By each employee carrying out appropriate activities based on the DOWA Group's Values and Code of Conduct, promote business management that does not give rise to any kind of fraud or corruption	Strengthen compliance and risk management	Implementation rate of internal education and briefings	100%	100%	We achieved our goal with initiatives that included sending regular compliance-related emails to all employees and disseminating compliance-related content through posts on the Company's internal portal site. We will continue to disseminate such information on a regular basis.
		Promote CSR throughout the whole supply chain by building partnerships with suppliers	Promote CSR procurement	Coverage rate for supplier* surveys * Excluding construction contractors	80% on a transaction amount basis	Below the target.	We developed a survey system for suppliers that utilizes self-assessments and on-site audits. We will work to expand use of this system internally and among suppliers while increasing survey coverage rates.
Safety	<ul style="list-style-type: none"> All employees will independently take part in activities to improve the level of health and safety based on our basic philosophy of “safety takes priority over everything.” We will prevent accidents at work and will support the health of our employees. 	Appropriately manage and minimize occupational safety risks in the workplace, and make a comfortable and safe working environment a reality	Raising the Companywide safety level	Frequency rate	0.7 or less	1.04	While the target was not met, numbers are on a downward trend and we will boost efforts to prevent the recurrence of accidents and disasters.
			Severity rate	0.01 or less	0.27	Although the fiscal 2019 goal of 0.01 or less was reached, we did not achieve our goal for fiscal 2020. We will strive to develop a system that allows us to return to and maintain the severity rate of fiscal 2019.	
		Strengthen safety education at subsidiaries outside Japan	No. of times education is implemented	20 times in total	62 times in total	We achieved our goals, both in terms of the number of events held and the number of attendees, which helped reduce the frequency of accidents and disasters overseas. We will continue to enhance facility risk assessments going forward.	
The Environment	<ul style="list-style-type: none"> We will provide customers (clients and regions) with products and services that contribute to building a recycling-oriented society. We will reduce environmental impacts and risks in our business activities. From managers to employees, we will be unified in working on environmental conservation activities. We will promote business activities that consider biodiversity. 	Be responsible for the essentials of the international resource-recycling network in Asia and the Pacific rim area	Strengthen the recycling business: Collection volume, recycling volume, and an increase in the number of elements, etc.	Collection volume of recyclable raw materials	Increase from the preceding fiscal year	<ul style="list-style-type: none"> Reduced collection of discarded electronic circuit boards for precious metal and copper smelting Increased number of discarded home appliances processed Increased collection of spent catalysts 	We continue to help create a recycling-oriented society by taking greater advantage of our superior recycling system. We will also maintain our contributions to conserving the environment through our environmentally friendly products and services.
		Realize effective reduction of CO ₂ emissions per unit by enacting energy-saving measures and actively utilizing renewable energy	Improve the utilization ratio of renewable energy	Amount of CO ₂ emissions per unit	Compared with FY1990, 15% reduction	Below the target.	CO ₂ emissions per unit of sales increased approximately 1.4 times compared with fiscal 1990 levels for a variety of reasons, including increased sales and a greater number of offices. As a result, we did not reach our goal. Going forward, we will formulate medium-term goals while establishing and then carrying out emissions reduction measures in order to achieve our goal of becoming carbon neutral by 2050.
		Properly manage the environmental risks of the workplace, and minimize the risk of environmental accidents happening	Minimize the risk of environmental accidents* and strengthen the ability to respond thereto	No. of environmental accident occurrences	Zero occurrences	Zero occurrences	We will work to reduce the risk of accidents that cause environmental damage by enhancing our management systems and through self-assessments at our facilities.
		Promote biodiversity conservation activities in collaboration with upstream and downstream partners of the supply chain	Understand the biodiversity risks of suppliers	Survey rate for suppliers and mines	100%	25.3%	We will strive to understand and analyze which ecosystem services our business activities rely on and how said activities impact these services, and then endeavor to avoid or reduce this impact.
Society	<ul style="list-style-type: none"> We will aim to create a workplace where diversity and the human rights of employees are respected, and where each person can demonstrate their maximum abilities with satisfaction and pride. 	While diverse human resources mutually respect each other, employees themselves select the diverse ways of working that are in line with their respective life stages and lifestyles, and the Company and teams support each other	Promote diversity	Employment rate of people with disabilities*	2.3%	2.09%	Despite not reaching our goal by the end of fiscal 2020, we did so by the end of March 2021 (2.31%, holding company only).
			Promote work-life balance	Attendance rate for seminars on promoting the success of women	100%	60%	Due to the COVID-19 pandemic, the fiscal 2020 program was postponed. For this and other reasons, we did not achieve our goal. From fiscal 2021 onward, we will establish settings where information can be shared regularly.
		Establish a culture that fosters fair evaluation and treatment, with employees experiencing growth, results, and satisfaction. Employees themselves create an organization where they respectfully compete with each other and support each other	Train both evaluators and those being evaluated	Employee degree of satisfaction	90%	90%	There were more employee participants in briefings explaining our human resource evaluation system than in fiscal 2019, due to our distributing videos of the briefings and conducting evaluator training online. We will continue to focus on providing education on our human resource evaluation system and ensuring suitable operations thereof, even amid the effects of COVID-19.
			Strengthen in-house human resource education	- Individual business planning system	70%	52%	Although we did not reach the attendance rate target for our career development support events, we will continue to promote voluntary career support for employees, including career education for new and young employees.
<ul style="list-style-type: none"> In unity with local communities, we will promote social contributions that reflect their unique characteristics. 	Deploy inside and outside of Japan social contributions together with each region	Promote social contribution	—	—	—	We will continue to aim for greater social and corporate value.	

* Target has been adjusted to meet the legally mandated employment rate

Governance

Policy

- We will aim to be an open and transparent company.
- Taking into consideration international initiatives, we will work on anti-corruption, including bribery.
- We will take CSR into consideration in our procurement.

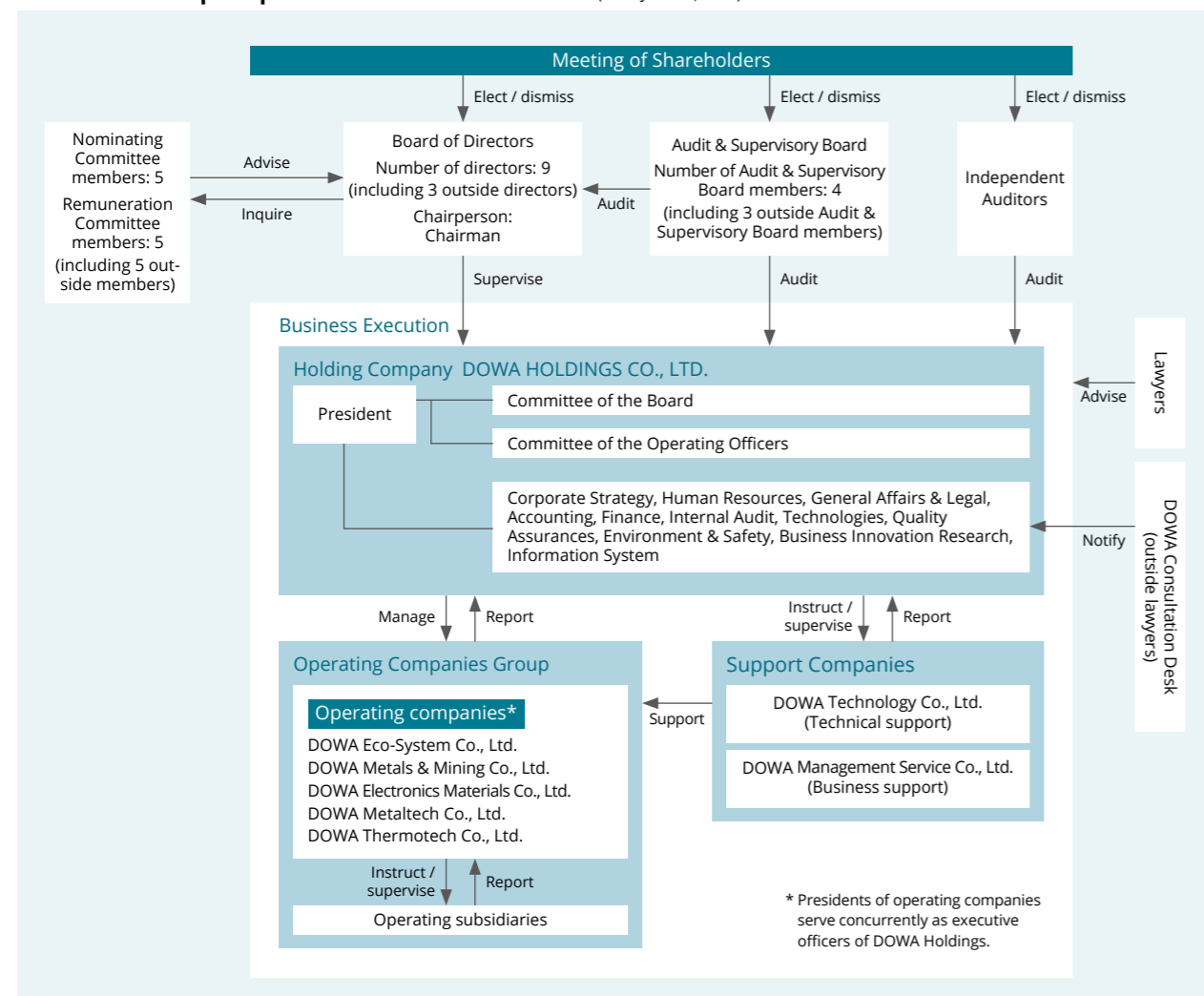
The DOWA Group has made the strengthening of corporate governance one of its most important management priorities and is engaged in developing and operating effective and efficient internal controls.

Composition of the Board of Directors (As of June 25, 2021)

Name	YAMADA Masao	SEKIGUCHI Akira	MATSUSHITA Katsuji	KAWAGUCHI Jun	TOBITA Minoru	SUGAWARA Akira	HOSODA Eiji	KOIZUMI Yoshiko	SATO Kimio	Number of independent outside directors
Position	Chairman and representative director	President and representative director	Director	Director	Director	Director	Outside director	Outside director	Outside director	(3/9)
Date of Appointment	June 2009	June 2018	June 2013	June 2018	Newly appointed	Newly appointed	June 2010	June 2015	Newly appointed	
Area of Supervision	—	—	Accounting, finance, human resources	Corporate strategy, general and legal affairs	Quality assurance, environment & safety	Technologies, business innovation research	—	—	—	
Number of Company shares held*	4,868	2,100	1,000	2,140	1,069	2,503	0	0	0	
Number of Board of Directors' meetings attended (number of meetings attended / number of meetings held)	14/14	14/14	14/14	14/14	Newly appointed	Newly appointed	14/14	14/14	Newly appointed	
Remuneration Committee	—	—	—	—	—	—	○ (Committee Chairperson)	○	○	(3/5)
Nominating Committee	—	—	—	—	—	—	○ (Committee Chairperson)	○	○	(3/5)

* Number of Company shares held as of April 30, 2021

The DOWA Group Corporate Governance Structure (As of June 25, 2021)



Efforts to Enhance Corporate Governance

	Board of Directors and Audit & Supervisory Board	Other
Fiscal 2000		Introduced executive officer system
Fiscal 2003	Reduced number of Board members from 20 to 15, shortened directors' terms of office from two years to one	
Fiscal 2006	Reduced number of Board members from 15 to 13	Moved to a holding company structure
Fiscal 2007	Appointed one outside director	
Fiscal 2009		Abolished hostile takeover defense measure
Fiscal 2015	Appointed one female outside director, updated governance structure to include two outside directors	Revised internal control systems
Fiscal 2017	Introduced evaluation of Board of Directors' effectiveness	
Fiscal 2018	Verified decisions to continue or discontinue cross-shareholdings at Board meeting	
Fiscal 2019		Established Nominating Committee
Fiscal 2020	Conducted an evaluation of Board effectiveness utilizing an external organization	Established Internal Audit department
Fiscal 2021	Appointed one outside director, updated governance structure to include three outside directors	

Advisory Committees

Name of Committee	Committee Chairperson	Composition	Role and Duties
Remuneration Committee	Outside director	3 outside directors 2 outside experts	Provide the president with impartial assessments and advice regarding director remuneration based on objective factors such as the Group's consolidated performance, dividends to shareholders, and remuneration levels outside the Company
Nominating Committee	Outside director	3 outside directors 2 outside experts	Provide objective assessments and advice to the Board of Directors regarding the important matter of appointing and dismissing management personnel

Basic Approach

The DOWA Group and the companies of which it consists meet a wide variety of needs from society, drawing from its Corporate Mission: “Contribute to creating an affluent, recycling-oriented society through our business activities worldwide.” As the Group makes social contributions, strengthening corporate governance is one of its priorities, thus it is making Groupwide efforts to establish effective internal control systems with appropriate composition and management, based on the DOWA Group’s Corporate Mission, Vision, Values, and Code of Conduct.

The Company employs a holding company structure. The structure gives us a deeper grasp of customer

needs at the ground level of the market and enables us to make swift decisions 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.

Furthermore, the Company has established an Audit & Supervisory Board and appoints outside directors to ensure sound management.

Outline of Corporate Governance

DOWA is a Company with an Audit & Supervisory Board. Moreover, the Company uses a system of operating officers and a holding company structure that separates core businesses as subsidiaries in order to expedite decision-making and improve management efficiency. In addition, the maximum number of directors has been set at 13 to further improve the supervisory function of the Board of Directors. Management responsibilities are clearly maintained by keeping the term of office of directors at one year.

As of June 25, 2021, there were nine directors (including three outside directors). The Board of Directors’ meeting is held once every month, in principle. There

are also nine executive officers (none of whom are also directors), with a Committee of the Operating Officers held once every month, in principle, for directors to share information regarding the status of business execution. We also have an Audit & Supervisory Board comprising four Audit & Supervisory Board members (including three outside Audit & Supervisory Board members), each of whom conducts audits of business execution by directors and reports their findings at the Audit & Supervisory Board meeting, held once every month, in principle, ensuring audit effectiveness and efficiency.

Corporate Governance System (As of June 25, 2021)

Organizational form	Company with an Audit & Supervisory Board
Number of directors	9 (Number of the Company’s Articles of Incorporation: 13)
Number of outside directors on the Board of Directors	3 (all of whom are designated independent officers)
Term of office	1 year
Chairperson of the Board of Directors	Chairman
Number of Audit & Supervisory Board members	4 (Number of the Company’s Articles of Incorporation: 5)
Number of outside members on the Audit & Supervisory Board	3 (all of whom are designated independent officers)

Board of Directors and Officers

The Board of Directors consists of nine directors (eight men and one woman), including three outside directors, and its meetings are also attended by four Audit & Supervisory Board members, three of whom are outside Audit & Supervisory Board members. In fiscal 2020, the Board of Directors met 14 times, and the attendance rate of outside directors was 100%.

We believe that, at meetings of the Board of Directors, there is a lively exchange of opinions during the deliberation of each proposal and regarding the supervision of the execution of business and that decision-making and supervision are conducted effectively. In addition, outside directors and outside Audit & Supervisory Board members also contribute by meeting regularly to exchange opinions.

Evaluation of the Effectiveness of the Board of Directors

The Company conducts self-evaluations and analysis of the effectiveness of the Board of Directors with the aim of improving the functionality of the Board and, by extension, increasing corporate value. Self-evaluations and analysis were conducted via the method described below in accordance with advice received from an external organization.

In March 2021, the Company provided a questionnaire to all directors sitting on the Board and to Audit &

Supervisory Board members who attended Board meetings. Responses were delivered directly to an external organization, thereby assuring anonymity. An analysis, discussion, and evaluation took place at a regular Board of Directors’ meeting in June 2021 based on said organization’s report on the aggregated results. What follows is a summary of these results.

Overall evaluation

- The Board of Directors was evaluated positively for the frequency and operation of Board meetings, ensuring the effectiveness of the Board of Directors as a whole.

Issues

- Some opinions called for continued efforts to address issues highlighted in the previous fiscal year’s evaluation, namely, to increase investigations into Companywide risk assessment methods and issues related to dialogues with stakeholders.
- Opinions were also made expressing the need for further acquisition of knowledge, further improvement of communication between inside directors and outside directors, and securing time for reviewing agenda items.

The Board of Directors will continue to work toward enhancing its functionality by giving thorough consideration and executing a response to the issues brought forth by this evaluation of its effectiveness.

Audit & Supervisory Board and Corporate Auditors

The Audit & Supervisory Board comprises four members, also regarded as corporate auditors, one of whom has accounting and financial knowledge from working in the banking industry. In accordance with the audit policies and audit plans for the term stipulated by the Audit & Supervisory Board, members attend Board of Directors’ meetings and other important meetings and audit the execution of directors’ duties, such as

reviewing status reports on such tasks from directors. They also monitor the independence of the independent accounting auditors and work with them to explain the audit plans of the independent accounting auditor and report audit findings.

There were 19 meetings of the Audit & Supervisory Board in fiscal 2020. Following is a summary of the attendance rate of each member.

Name	Number of meetings held during term	Number of meetings attended
YUKITAKE Katsuya*1	6	6
KOBAYASHI Hidefumi*2	19	19
KINOSHITA Hiroshi*3	13	13
TAKEDA Jin	19	19
EGAWA Shigeru	19	19

*1 Mr. Yukitake retired from his position following the 117th General Meeting of Shareholders held on June 24, 2020.

*2 Mr. Kobayashi retired from his position following the 118th General Meeting of Shareholders held on June 24, 2021.

*3 Mr. Kinoshita was appointed to his position following the 117th General Meeting of Shareholders held on June 24, 2020.

Execution of Business

By appointing executive officers, the Company separates executive functions from the Board of Directors and strengthens the supervisory function of the Board. In addition, in accordance with applicable laws and Company rules, regarding matters other than important business activities to be decided upon by the Board of Directors, upon consideration of transaction size, etc., authority is delegated to executive officers concurrently

serving as presidents of operating companies.

The directors and executive officers will hold meetings of the Management and Executive Committee in order for executive officers to share information regarding the status of business execution. Also, items important to the management of the Group are discussed by the Committee of the Operating Officers and then presented to the Board of Directors.

Remuneration for Directors and Audit & Supervisory Board Members

Remuneration for directors comprises fixed basic remuneration and performance-based remuneration. The composition of remuneration has been designed with input from the Remuneration Committee and is based on objective factors such as the Group's consolidated performance, dividends to shareholders, and remuneration levels outside the Company. Since outside directors perform supervisory roles from an independent and objective standpoint, they are not subject to remuneration based on individual performance. Remuneration for Audit & Supervisory Board members is limited to basic remuneration—as their duties are independent of business execution—and is determined by deliberation among Audit & Supervisory Board members within the limits approved by the General Meeting of Shareholders. The Remuneration Committee meets once a year and the majority of its members are from outside the Company, who serve as outside directors or outside experts.

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

Performance-based remuneration is an annual cash bonus paid at a fixed time that reflects individual performance. The amount is determined based on net income attributable to owners of parent and dividends distributed to shareholders. These criteria have been highlighted as indicators for calculating performance-based remuneration in order to link Company profits with remuneration, thereby increasing motivation to contribute to business growth, and to promote shared value growth with shareholders.

The Remuneration Committee examines the ratio of fixed basic remuneration to performance-based remuneration for each director using companies of a similar scale as well as companies in related industries and with analogous business formats as benchmarks. The president and representative director is given the authority to determine the remuneration of individual directors by the Board of Directors and does so while adhering to findings presented by the Remuneration Committee and staying within the ratio proposed therein. When determining the specific remuneration for each director, the Remuneration Committee conducts a multifaceted examination, which includes a check for consistency with the policy for determining remuneration set by the Board. The president and representative director makes their decision following the committee's calculation process. The president and representative director receives said authority due to their oversight of business operations in their role as representative director, which facilitates appropriate decision-making. The Board of Directors has determined that the remuneration for each individual is in line with the policy for determining remuneration due to the aforementioned involvement of the Remuneration Committee.

An upper limit for total director remuneration of ¥570 million was set at the General Meeting of Shareholders held on June 24, 2016. In addition, an upper limit for remuneration for Audit & Supervisory Board members of ¥100 million was set at the General Meeting of Shareholders held on June 28, 2006.

Total Remuneration for Directors and Audit & Supervisory Board Members with Subtotals for Each Type of Remuneration and Numbers of Recipients

Classification	Total remuneration paid (Millions of yen)	Remuneration paid by type (Millions of yen)			Recipients (People)
		Fixed basic remuneration	Performance-based remuneration	Retirement bonuses	
Directors* ¹	353	241	112	—	6
Audit & Supervisory Board members* ²	26	26	—	—	2
Outside directors and Outside Audit & Supervisory Board members	69	60	8	—	5

*1 Excluding outside directors

*2 Excluding outside Audit & Supervisory Board members

Cross-Shareholdings

The Company's cross-shareholdings serve as a means to maintain and strengthen ties with business partners and form solid trust relationships with issuing companies, which in turn lead to improved corporate value.

With regard to each individual issuance of major shares held, the Company makes comprehensive judgments on the worthwhileness of continued possession based on whether each shareholding fulfills its intended purpose and whether the benefits and risks of such possession are commensurate with the capital cost. The substance of these judgments is routinely examined by the Board of Directors. If it is determined that continued possession of a cross-shareholding will not improve corporate value, the Company will gradually sell off the shareholding, taking into consideration market impact.

When voting rights are exercised to approve or reject a proposal related to a cross-shareholding, a determination is made after considering all the pros and cons, such as whether the decision to conduct a cross-shareholding will improve the corporate value of the issuing company and whether it will improve the corporate value of the Company.

In fiscal 2020, decisions to continue or discontinue holdings of all listed shares under possession were verified by the Board of Directors during a meeting held on December 11, 2020. These decisions were arrived at by weighing transaction status, materiality, dividend results, and other factors against capital costs. As a result of this process, we sold a portion of shares of one issuing company within the fiscal year under review.

Internal Control Systems

In accordance with the DOWA Group's Corporate Mission, Vision, Values, and Code of Conduct, the Company and Group companies have made a collective effort to design and operate effective and efficient internal controls to contribute to society, maximize corporate value, and carry out the responsibilities of management entrusted to us by our shareholders. At the same time, laws are being revised and the public's general stance toward compliance is hardening, so we expect even stronger demands to be placed on the Group going forward.

In response, the Company has adopted a holding company structure. While this raises the level of specialization of each business group and the speed at which

policies can be executed, it also carries the risk that internal control systems will become localized and overall governance will suffer. As a result, at the DOWA Group, basic policies and internal control systems are shared among Group companies. Additionally, individual companies can utilize their own unique characteristics for specific activities in order to develop an effective and efficient internal control system suited to our holding company structure. Moreover, internal control systems must continuously be revised in line with changes in business activities and the social environment, so we are working to further strengthen these systems.

Disclosure Based on Corporate Governance Code Regulations

For disclosure based on Corporate Governance Code regulations, please see our Corporate Governance Report here: https://www.dowa.co.jp/en/about_dowa/governance.html (in Japanese only).

Participation in International Organizations and an International Consortium

In March 2009, the DOWA Group endorsed and signed the United Nations Global Compact (UNGC). We respect the 10 principles in the four fields of human rights, labor, environment, and anti-corruption listed in the UNGC and are working toward the sustainable development of society. We are also actively participating in the activities of the Global Compact Network Japan (GCNJ), UNGC's local network in Japan.

Global Compact Network Japan
<https://www.ungcjin.org/index.html> (Japanese only)



Initiatives for Human Rights and Anti-Harassment

The DOWA Group highlights “respect diversity and individuals” as part of its Values, while the Code of Conduct clearly states both its intent to “respect the rights of all people” and “avoid discrimination on any grounds” and its resolution to “never engage in any unlawful or unreasonable act, such as forced labor including child labor, inhumane treatment, and harassment.” In addition to the Japanese version, we have provided translations of the DOWA Group’s Values and Code of Conduct in English, Chinese, and Thai as part of our efforts to spread the ideals ingrained within the entire Group. Furthermore, respect for human rights and the elimination of child labor are clearly stated within the DOWA Group CSR Procurement Policy and Procurement Guidelines, and we are promoting efforts to protect human rights throughout the supply chain accordingly.

Anti-Corruption

The DOWA Group’s Code of Conduct states that “we shall prevent fraud and misconduct, including corruption, bribery, and abuse of dominant bargaining positions, and shall not engage in any prejudicial treatment of individuals who blow the whistle on such fraud and misconduct.” It also states our intention to “block all relations with antisocial forces.” Both statements are applicable inside and outside the Company. Efforts to address the matter of antisocial forces center on the General Affairs & Legal Department and constitute an organization-wide response that include cooperation with lawyers and other external experts when necessary. In addition, while ensuring that all executives and employees comply with the Code of Conduct and related laws and regulations through employee training and the distribution of manuals, we conduct internal audits to monitor compliance in this regard.

Internal Reporting System

The Company has established the DOWA Consultation Desk, which allows for anonymous consultation with two external lawyers (one male and one female), with the goals of fostering a healthy corporate culture and facilitating early detection and correction of unruly acts or situations that could lead to such acts occurring. Confidentiality concerning reports made and the protection of reporting parties against disadvantageous treatment are both guaranteed, and the availability of the consultation desk is known through the Company intranet and posters. Moreover, the DOWA Consultation Desk is also available for use by employees of suppliers and partner companies.

When consultations are made or opinions are received, corrective action is taken if necessary. In fiscal 2020, there were 21 consultations made, and all investigations into these consultations were completed as necessary.

Risk Management

The DOWA Group engages in risk management 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. We will continue efforts to enhance our risk management process, which involves identifying apparent and potential risks at each operating company, implementing countermeasures, and conducting reviews and audits.

Risks That May Affect the DOWA Group’s Operating Results, Share Price, and Financial Position

Description	Specific Risks	Responses
Market Fluctuation Risks	<ul style="list-style-type: none"> The economy may deteriorate in major markets where our products are utilized and in areas of demand. Industrial frameworks could change, leading to a drop in demand. 	<ul style="list-style-type: none"> Diversify risks throughout the Group by building a unique business portfolio comprising multiple businesses with differing market risks and risks involving changes to business structure
Price Fluctuation Risks	<ul style="list-style-type: none"> Prices of nonferrous metals could drop, or the yen may continue to appreciate for an extended period of time. 	<ul style="list-style-type: none"> Minimize price fluctuation risks through derivative contracts (nonferrous metal forward contracts, foreign exchange forward contracts, etc.)
Operational Risks	<ul style="list-style-type: none"> Natural disasters, power outages, accidents, or infectious diseases could cause a significant drop in production. 	<ul style="list-style-type: none"> Develop a business continuity plan (BCP) for natural disasters and states of emergency Formulate standardized facility design rules for accident prevention Implement thorough safety guidance and facility inspections and establish a system for sharing information related to safety, operations, and other matters Raise safety awareness through simulated danger training and workshops
Environmental Risks	<ul style="list-style-type: none"> Business activities could generate environmental pollution. 	<ul style="list-style-type: none"> Develop environmental management systems at major domestic and overseas plants Implement monitoring using internal standards stricter than those put forth in environment-related laws and regulations Implement periodic inspections to maintain stable conditions at suspended or closed mines and prevent environmental pollution stemming from mine wastewater, depression, landslides, and other mine-related damage
Quality Risks	<ul style="list-style-type: none"> There could be serious quality defects or abnormalities. 	<ul style="list-style-type: none"> Obtain ISO 9001 certification at major manufacturing plants Maintain compliance with the quality assurance guidelines established by the Japan Mining Industry Association and other groups Ensure quality of procured products through supplier surveys and audits
Information Security Risks	<ul style="list-style-type: none"> Confidential or personal information possessed by DOWA could be leaked, falsified, or destroyed, etc. 	<ul style="list-style-type: none"> Sign non-disclosure agreements and comply with information regulations Introduce and implement multi-factor authentication and other information security systems
Labor Shortage Risks	<ul style="list-style-type: none"> It could become difficult to secure the labor necessary for business continuity at manufacturing bases. 	<ul style="list-style-type: none"> Extend the age of retirement, implement workstyle reforms, and establish and enhance systems that enable diverse and flexible workstyles Promote business efficiency and laborsavings by actively utilizing digital technology
Regulatory Risks	<ul style="list-style-type: none"> Environmental and recycling-related laws in Japan and overseas, antitrust laws, or other laws and regulations could be introduced, which cannot be predicted at the present time. There could be an institutionalized introduction of carbon taxes or mandatory information disclosure. 	<ul style="list-style-type: none"> Preserve rights in Japan and overseas through legal means Investigate a variety of initiatives to achieve our 2050 goal of carbon neutrality

Board of Directors and Officers (As of June 25, 2021)

Chairman and Representative Director



YAMADA Masao

Apr. 1978 Joined the Company
 Jun. 2003 Officer
 Apr. 2005 Officer, President of Environmental Management & Recycling Company
 Oct. 2006 Officer, President and Representative Director of Dowa Eco-System Co., Ltd.
 Apr. 2008 President and Representative Director of Kosaka Smelting & Refining Co., Ltd., Director of Dowa Metals & Mining Co., Ltd.
 Jun. 2009 President and Representative Director
 Jun. 2018 Chairman and Representative Director (current position)
 Mar. 2019 Outside Director of Fujita Kanko Inc. (current position)
 Jun. 2019 Outside Director of CK SAN-ETSU Co., Ltd. (current position)

President and Representative Director



SEKIGUCHI Akira

Apr. 1983 Joined the Company
 Oct. 2006 Director of Dowa Metals & Mining Co., Ltd.
 Apr. 2011 President and Representative Director of Kosaka Smelting & Refining Co., Ltd.
 Apr. 2013 Officer, President and Representative Director of Dowa Metals & Mining Co., Ltd.
 Apr. 2018 Chairman of Japan Mining Industry Association (until March 2019)
 Jun. 2018 President and Representative Director (current position)

Outside Director

* Independent Officer



HOSODA Eiji*

Vice-President, Chubu University

Apr. 1994 Professor at Faculty of Economics, Keio University (until March 2019)
 Jul. 2001 Dean of Faculty of Economics, Keio University (until September 2005)
 Jan. 2009 Special Council Member of Central Environment Council, Ministry of the Environment (until January 2011)
 Apr. 2009 Expert Council Member of the Regulatory Reform Council, Cabinet Office (until March 2010)
 Dec. 2009 Special Council Member of Industrial Structure Council, Ministry of Economy, Trade and Industry (until January 2016)
 Jun. 2010 Director of the Company (current position)
 Jan. 2011 Council Member of Central Environmental Council, Ministry of the Environment (until January 2021)
 Mar. 2017 Representative Director of Japan Foundation for Advanced Auto Recycling (until June 2020)
 Apr. 2019 Professor at Faculty of Business Administration and Information Science, Chubu University (current position)
 Apr. 2020 Dean at Faculty of Business Administration and Information Science, Chubu University (current position)
 Apr. 2021 Vice-President, Chubu University (current position)

Directors



MATSUSHITA Katsuji

Apr. 1980 Joined the Company
 Jun. 2011 President and Representative Director of MODERN ASIA ENVIRONMENTAL HOLDINGS INC.
 Apr. 2013 Officer, responsible for Accounting, Finance and Labor Relations, President and Representative Director of Dowa Management Service Co., Ltd.
 Apr. 2013 Director of Dowa Eco-System Co., Ltd.
 Jun. 2013 Director (current position)
 Jun. 2013 President and Representative Director of Dowa Management Service Co., Ltd.
 Jul. 2013 Audit & Supervisory Board Member of Konoshima Chemical Co., Ltd. (current position)
 Apr. 2016 Director of Dowa Metals & Mining Co., Ltd. (current position)



KAWAGUCHI Jun

Apr. 1980 Joined the Company
 Apr. 2010 President and Representative Director of PT. PRASADHA PAMUNAH LIMBAH INDUSTRI
 Apr. 2013 Director of Dowa Metals & Mining Co., Ltd.
 Apr. 2016 President and Representative Director of Kosaka Smelting & Refining Co., Ltd.
 Apr. 2018 Officer, responsible for Strategic Planning and Public Relations, General and Legal Affairs
 Apr. 2018 Director of Dowa Eco-System Co., Ltd. (current position)
 Jun. 2018 Director (current position)



KOIZUMI Yoshiko*

Attorney
 Partner of City-Yuwa Partners

Apr. 1972 Registered as an Attorney
 May 2000 Chair of Women Business Lawyers Committee, Inter-Pacific Bar Association (until May 2002)
 Apr. 2009 Partner of City-Yuwa Partners (current position)
 Oct. 2012 Deputy Chair of Government Procurement Review Board (until October 2014)
 Apr. 2013 Director of Japan Bar Association (current position)
 Jun. 2015 Director of the Company (current position)
 Jun. 2015 Outside Director of Taiheiyō Cement Corporation (current position)
 Jun. 2016 Outside Audit & Supervisory Board Member of Sumitomo Bakelite Co., Ltd. (until Jun. 2019)
 Sep. 2017 Outside Audit & Supervisory Board Member of Nippon Koei Co., Ltd. (current position)



TOBITA Minoru

Apr. 1984 Joined the Company
 Apr. 2011 Senior Managing Director of Eco-System Chiba Co., Ltd.
 Apr. 2013 Director and General Manager of Waste Management Business Unit, Dowa Eco-System Co., Ltd.
 Apr. 2017 Executive Officer, President and Representative Director of Dowa Eco-System Co., Ltd.
 Apr. 2021 Executive Officer, responsible for Quality Assurance and Environment & Safety
 Jun. 2021 Director (current position)



SUGAWARA Akira

Apr. 1984 Joined the Company
 Jun. 1999 General Manager of Metallic Materials Laboratory
 Apr. 2004 General Manager of Shiojiri Factory, Metal Processing Business Unit, Electronics & Metal Processing Company
 Apr. 2006 General Manager of Metallic Materials Laboratory, Metal Processing Company
 Oct. 2006 Director and General Manager of Metallic Materials Laboratory, Dowa Metaltech Co., Ltd.
 Apr. 2013 Director and General Manager of Metal Processing Business Unit, Dowa Metaltech Co., Ltd.
 Apr. 2016 Executive Officer, President and Representative Director of Dowa Metaltech Co., Ltd.
 Apr. 2021 Executive Officer, responsible for Technologies and Business Innovation Research
 Jun. 2021 Director (current position)



SATO Kimio*

Honorary Senior Corporate Adviser of Nittetsu Mining Co., Ltd.

Apr. 1981 Joined Nittetsu Mining Co., Ltd.
 Jun. 2007 Kyushu Branch Office General Manager
 Jun. 2010 Limestone & Raw Materials Sales Department Manager
 Jun. 2011 Director, in charge of Non-Ferrous Metal & Ore Department and Limestone & Raw Materials Sales Department Manager
 Jun. 2012 Managing Director, in charge of General Accounting Department, Limestone & Raw Materials Sales Department, and Non-Ferrous Metal & Ore Department
 Jun. 2013 Director and Vice President
 Apr. 2015 Representative Director and President
 May 2019 Director
 Jun. 2019 Senior Corporate Adviser
 Mar. 2021 Honorary Senior Corporate Adviser (current position)
 Jun. 2021 Director of the Company (current position)

Audit & Supervisory Board Members

* Independent Officer



KINOSHITA Hiroshi
Corporate Auditor (Full-Time)

Apr. 1983 Joined the Company
Apr. 2011 Director of Kosaka Smelting & Refining Co., Ltd.
Oct. 2016 Vancouver Office Director of Resource Development & Raw Materials Dept. of Dowa Metals & Mining Co., Ltd.
Jun. 2020 Audit & Supervisory Board Member (current position)



FUKUZAWA Hajime*
Corporate Auditor (Full-Time)

Apr. 1983 Joined the Industrial Bank of Japan, Limited (currently Mizuho Bank, Ltd.)
Apr. 2008 General Manager of Americas Division
Apr. 2011 Executive Officer, General Manager of Administration Division (until March 2012)
Apr. 2012 Managing Director of DIAM Co., Ltd. (until September 2016)
Oct. 2016 Managing Executive Officer of Asset Management One Co., Ltd. (until March 2018)
Apr. 2018 Managing Executive Officer of Hodogaya Chemical Co., Ltd. (until March 2021)
Jun. 2021 Outside Audit & Supervisory Board Member (current position)



TAKEDA Jin*
Outside Corporate Auditor (Part-Time)
Attorney
Counsels of Marunouchi Sogo Law Office

Apr. 1986 Registered as an Attorney
Apr. 1986 Joined Marunouchi Sogo Law Office
Jul. 1996 Partner of Marunouchi Sogo Law Office (until December 2020)
Jun. 2011 Audit & Supervisory Board Member (current position)
Jun. 2013 Outside Audit & Supervisory Board Member of Sanken Electric Co., Ltd. (until Jun. 2017)
Apr. 2014 Executive Governor of Japan Federation of Bar Associations (until Mar. 2015)
Apr. 2014 Vice Chairman, Daini Tokyo Bar Association (until Mar. 2015)
Jun. 2018 Outside Audit & Supervisory Board Member of Japan Aviation Electronics Industry Ltd. (current position)
Jan. 2021 Counsel of Marunouchi Sogo Law Office (current position)



EGAWA Shigeru*
Outside Corporate Auditor (Part-Time)
Audit & Supervisory Board member of Fujita Kanko Inc.

Apr. 1981 Joined Fujita Kanko Inc.
Aug. 2001 General Affairs Manager of Tokyo Bay Ariake Washington Hotel
Apr. 2004 Leader of Finance Group of Tokyo BPS
Jan. 2009 General Manager of Legal and General Affairs Department, Management Division of Fujita Kanko Inc.
Mar. 2015 Representative Director and President of Fairton Corporation
Mar. 2019 Audit & Supervisory Board Member of Fujita Kanko Inc. (current position)
Jun. 2019 Audit & Supervisory Board Member (current position)

Officers



KATAGIRI Atsushi
Executive Officer (Full-Time)
General Manager of Human Resources Dept.



HOSONO Hiroyuki
Executive Officer (Full-Time)
General Manager of Corporate Strategy Dept.



YANAI Yasuharu
Executive Officer (Part-Time)
President and Representative Director, Dowa Eco-System Co., Ltd.



SUYAMA Toshiaki
Executive Officer (Part-Time)
President and Representative Director, Dowa Metals & Mining Co., Ltd.



SUZUKI Koji
Executive Officer (Part-Time)
President and Representative Director, Dowa Electronics Materials Co., Ltd.



ONIOH Takashi
Executive Officer (Part-Time)
President and Representative Director, Dowa Metaltech Co., Ltd.



TSUJI Ryuji
Executive Officer (Part-Time)
President and Representative Director, Dowa Thermotech Co., Ltd.



YAMADA Kiyoshi
Executive Officer (Part-Time)
President and Representative Director, Dowa Technology Co., Ltd.



WAKABAYASHI Eiichi
Executive Officer (Part-Time)
President and Representative Director, Dowa Management Service Co., Ltd.

Dialogue

A Discussion between
the DOWA Group's Outside Directors

In fiscal 2021, the outside directors had a discussion about the DOWA Group's governance and shared their opinions regarding the state of the Group's Board of Directors, the activities of the Remuneration Committee and the Nominating Committee—two advisory committees of the Group—and other topics.



HOSODA Eiji
Outside Director

KOIZUMI Yoshiko
Outside Director

SATO Kimio
Outside Director

Foundation for Creating Value

A Discussion between the DOWA Group's Outside Directors

What are your impressions of DOWA Holdings?

Hosoda I have been following DOWA as an economist since its days as DOWA Mining. Of particular interest to me has been the dynamic shift that has taken place thanks to the efforts to reform the Company's business structure, from a business focused on mining and smelting to its current structure, which features a portfolio spanning five core businesses. I have covered this topic several times for research purposes and otherwise, and I think this is what led to my appointment as an outside director.

Back when I was viewing DOWA from the outside, I had the impression of a flexible company that had accomplished a spectacular transformation. However, after my appointment as an outside director in 2010, I became aware of the great efforts needed for achieving this transformation in the form of wide-ranging discussions and decision-making. Learning that there was a side I could not see from the outside has rekindled the deep interest I have in this transformation.

Koizumi My connection to DOWA Holdings comes from my involvement as a lawyer in the overseas development of Tokyo Heat Treatment, the predecessor of Dowa Thermotech. In that role, I provided support for projects related to M&A and the Environmental Management & Recycling Business, and in 2015 I was appointed as an outside director.

Looking from the outside and witnessing the transition from DOWA Mining to DOWA Holdings also made me regard DOWA as a dynamic company. However, after inquiring about the Company's corporate culture and business policies in my role as outside director, my impression has shifted and I see DOWA as much more well-grounded. In particular, I think DOWA has shown exceptional foresight by commercializing resource recycling from urban mining ahead of their competitors.

I have visited almost all of the DOWA Group's factories, both in Japan and overseas, as well as museums related to the Company, and I get a true sense that the same reverence for nature held by the people of DOWA's past has been passed down to the employees of DOWA today, thereby becoming an important part of DOWA's Values.

Sato My father worked for DOWA Mining, so I lived in the town of Kosaka in Akita Prefecture, where the Company's main business office was located, until my first year of junior high school. Kosaka Town was a company town for DOWA Mining, and I remember that about half of the elementary and junior high school students who attended school had some connection to



KOIZUMI Yoshiko

DOWA Mining. Thanks to growing up in this kind of environment, I have had a feeling of familiarity with DOWA Mining from the time I was little. Drawing from this experience, in addition to my previous position at Nittetsu Mining, which has a relationship with DOWA Holdings as a company also in the nonferrous metals industry, I am of the opinion that DOWA Holdings is a reliable company.

I also watched as DOWA Holdings made a stellar turnaround. I think most ordinary business models involve vertical integration with a horizontal division of labor, but DOWA Holdings has built its own unique business model based on resource recycling rooted in technology cultivated in the mining business. I imagine that there were several twists and turns along the way toward realizing this circulatory business model, but I did watch with a touch of envy, since the shift has not only heightened profitability but also improved the Company at a social level.

Could you share your thoughts on the Company's issues in terms of governance?

Hosoda I think there are two approaches to governance. The first is to establish a governance system that is in line with the trends created by corporate governance reforms. To put this in a negative way, Japan's governance reforms could be seen as imitations of those in the United Kingdom and the United States. However, it is still important to have these systems in place, since the very soul of an organization can lie in its governance system.

The other approach, is to emphasize an organization's unique culture and mindset. Let me give an example. Within DOWA, there is an organization of retired employees called the Dohokai. DOWA Holdings maintains a point of contact with the Dohokai and every year senior management personnel update the organization on their

latest happenings, ensuring a close relationship with the Dohokai. There are not many companies in Japan that would put this much effort toward caring for their retired employees. I think this is a reflection of the corporate culture that puts a priority on unity, something which comes from the Company's many years in the mining and smelting business.

So, one issue I feel companies need to be mindful of, even when it comes to corporate governance reforms, is how they reflect their unique culture. As part of that process, I would like DOWA to build a system of governance that is unique to the Company—one that is not totally based on the pursuit of shareholder interests but also geared toward the benefit of society, leveraging the Environmental Management & Recycling Business and other businesses with high levels of social contribution.

Sato My opinion is quite similar, in that I believe DOWA Holdings should make sure that its governance stays in tune with reforms around the world, although the Company should also take advantage of its distinct culture and history. I would like the Company to rally all of its stakeholders—its employees, local communities, customers, shareholders, and other parties—and pursue a type of governance that exemplifies DOWA.

Koizumi DOWA operates several businesses in emerging nations, where there is often a greater risk of corruption. I think it goes without saying that DOWA is strongly committed to preventing corruption in Japan and overseas, but it can still occur due to local malpractices or other factors. This means that it is not enough to leave anti-corruption monitoring to the individual sites in each country of operation. The head office needs to be involved and must do so with a sense of urgency. I would like to be actively involved in the Company's anti-corruption efforts in my role as an outside director.

What sorts of discussions take place during meetings of the Board of Directors?

Hosoda When an overseas investment project is put on the agenda, for example, we examine the reasons and methods for investing or providing funds. In addition, when a company that DOWA has invested in or provided funds to grow and a capital increase is proposed, we take an objective look at the proposal from both an economic and environmental perspective. I put a particular emphasis on the environmental side.

Koizumi The Los Gatos Mine development project has been one of the biggest investment projects undertaken by the Company, so it has garnered significant attention. When this matter was proposed by the

Board of Directors, I suggested, from the standpoint of a lawyer, that it would be necessary to take collateral when providing funds to a partner company.

Now, my eyes are on the Indian market. The Company currently operates seven heat treatment plants in India, but there are few human resources dispatched from Japan. With the COVID-19 pandemic making it even more difficult to dispatch personnel from Japan, I am concerned about whether the Company can cultivate engineers and successors to local executive personnel who understand DOWA's culture and Values. Therefore, I provide recommendations and ask questions about the matter of local succession.

What areas need to be discussed or strengthened to improve the effectiveness of the Board of Directors?

Sato What I have been doing day-in-day-out since becoming an outside director is trying to find ways to preserve the open communication among members of the Board of Directors, which I believe will improve its effectiveness. It is important to have an environment in which senior management encourages a variety of opinions. This allows attendees at meetings of the Board of Directors to voice their opinions freely.

Although I have not been an outside director for long and have only attended a few Board meetings, I have noticed that YAMADA Masao, the chairman, actively



SATO Kimio

Foundation for Creating Value

A Discussion between the DOWA Group's Outside Directors

seeks the opinions of outside directors. I believe that his making sincere efforts in this regard ensures a very positive atmosphere at these meetings. On the other hand, when there is sufficient deliberations and exchanges of opinion at Board meetings, it is important to also maintain communication between directors on a regular basis, and I think the Company should focus on finding ways to create more opportunities for this.

Koizumi Having Mr. Sato join the Company as an outside director has made a big difference to the atmosphere at Board meetings. We each have different areas of expertise, which enables a variety of discussions.

However, I do have concerns about how few women there are in management roles at the DOWA Group. I enjoy reading the annual introductions of new employees in the Company's newsletter, and I am always impressed by the variety of personalities DOWA employs. That being said, I have yet to meet a single female general manager. The Company hires a number of excellent female employees every year, and I think it is such a waste that they retire before they can attain the position of general manager. In my opinion, DOWA needs to give female employees a career road map that leads them toward director and executive officer positions. The Company also needs to discuss ways to create an environment that will both keep female employees motivated and allow them to continue working.

Hosoda So far, the DOWA Group has strengthened functions that increase the accountability of its directors to shareholders, including establishing and conducting reviews of the Nominating Committee and the Remuneration Committee. However, companies also need to make sure their business activities help benefit society and support regional revitalization; this is especially true for companies that meet the standards for being listed in the Prime Market section of the Tokyo Stock Exchange. When companies become listed in this section, they must become more accountable to society. For example, DOWA has declared its intention to become carbon neutral by 2050, but it needs to be held accountable for the policies and initiatives it will implement to achieve this goal. Nevertheless, the Company has not necessarily been quick to adhere to regulations and respond to requests in this regard. Thus, I think it needs to speed up this process a little and become more accountable to society, as I have mentioned.

While DOWA has also committed to achieving the targets set forth in the Sustainable Development Goals (SDGs) by 2030, it is also required to show it has policies for going beyond the SDGs. Assuming accountability for realizing these long-term goals is a major undertaking

for the Board of Directors, and one of the challenges it faces will be how to ensure its effectiveness in this task.

How would you evaluate the activities of the Nominating Committee and the Remuneration Committee?

Hosoda The establishment of the Nominating Committee has provided us with opportunities to discuss the cultivation of human resources, which will ensure DOWA can preserve its culture and spirit in the future. It is very clear to me that introducing different perspectives to discussions regarding the hiring and cultivation of human resources has added variety and a sense of liveliness, while significantly changing the topics of these discussions compared with when decisions on human resources were made solely in-house. I think this has really helped make DOWA more accountable when it comes to hiring and other human resource-related processes.

As for the Remuneration Committee, while it does engage in broad discussions about the various means and the adequacy of remuneration, I cannot help but feel that DOWA Holdings still has to do more in terms of its remuneration policy. The committee therefore has an urgent task in being accountable toward this policy and other matters.

As the chair of both of these committees, I have placed an emphasis on process-making, and by following a PDCA cycle, I hope these committees will be able



HOSODA Eiji

to suit DOWA's needs and conduct activities that help it prosper.

Koizumi There are five operating companies under the DOWA Holdings umbrella, and each one has provided a highly convincing breakdown of their business strategies. I believe that one issue facing DOWA, the holding company, is figuring out how to overcome the dividing lines of each operating company and make them interconnect. This endeavor will warrant deeper discussion in the future.

Another issue is that all of DOWA Holdings' directors and executive officers are Japanese. If we are going to think about the future, then the time of officers being exclusively Japanese has passed. There is a concern that the DOWA Group may lose its appeal among its highly talented non-Japanese employees working actively at overseas locations, unless such employees are also given a career path toward executive positions.

Sato It is important for the Nominating Committee to know about the character of executive candidates. However, the COVID-19 pandemic has made it difficult to interact face-to-face with people. Normally, my role as a committee member would be to visit several Company sites to ascertain the kind of mindset the person in charge has as they carry out their duties, to confirm whether the work that takes place at the site in question is in line with the organization's goals, and to find answers to other questions. Because this is not possible, we have asked executives from each operating company to provide briefings every month. I wish to use these briefing sessions to gain an understanding of each operating company and of the approach each takes toward carrying out their initiatives, and I would like to use my experience in corporate management to offer advice and suggestions.

Could you share your thoughts on the Company regarding carbon neutrality?

Hosoda Although there are some uncertainties about trends going forward, DOWA needs to provide a road map of the actions it can take leading up to 2050. Overseas institutional investors are paying particular attention to the measures being taken toward carbon neutrality, so I have strongly suggested that the Company establish such a road map, as well as a concrete action plan, and this includes times when the Board of Directors makes resolutions on climate change response policies and long-term goals.

Koizumi DOWA has several technologies in its possession that could help resolve social issues, one of

which is climate change. My hope is that DOWA will meet the expectations of overseas institutional investors by showing them the fields where these technologies can be applied to help.

Sato We are in an age when the ability to address environmental issues is a must. This means that it is imperative that DOWA Holdings produce a road map demonstrating what it can do for the environment as a company. What I want to see as part of this road map are forward-looking efforts based on the idea that a company can resolve social issues and improve economic value at the same time.

What should DOWA do going forward to meet the expectations of society?

Hosoda DOWA possesses several materials that can assist with reaching carbon neutrality and creating circular economies, and it also has the materials and expertise needed to put all solid-state batteries and other technologies that will be vital to society going forward into practical use. Using these materials and this expertise to increase the Company's market shares will have the added benefit of helping resolve social issues. For this reason, I always make a point at Board meetings to say the Company should constantly be mindful of both shareholder and social interests and maintain a presence in the effort toward achieving carbon neutrality and circular economies.

Sato Looking at how DOWA utilized its technology for refining black ore to develop other subsequent technologies, one can tell that it has a history of diversifying its business. That said, it is not very realistic for DOWA to enter into an entirely new field that has no association with these technologies. Instead, I think the Company should take advantage of its unique strengths and develop its products and technologies in sectors and areas where it boasts a high market share and push for worldwide appeal that way. If DOWA continues to take on challenges in this fashion, its corporate value will naturally increase.

Koizumi As DOWA has a number of technologies that can help reduce environmental impact in society, I believe it should leverage this fact to become a company trusted worldwide in each field in which it operates. For this to happen, DOWA needs to formulate a global strategy—one that goes beyond framing things in terms of single companies to take into account different countries and industries. This is a difficult challenge, but I think DOWA is the company to take it on.

Safety

Policy

- All employees will independently take part in activities to improve the level of health and safety based on our basic philosophy of “safety takes the priority over everything.”
- We will prevent accidents at work and will support the health of our employees

Safety Management System

The DOWA Group’s environmental and safety management activities are led by the director of DOWA Holdings in charge of environment & safety. Moreover, these activities are promoted in cooperation with the Environment & Safety Department and with safety and environment personnel appointed by each operating company that conducts environmental conservation activities. While arranging and coordinating among all operating companies, DOWA Holdings implements safety promotion activities for the entire Group.

Development of Policy at Business Locations

Occupational health and safety is a top priority when it comes to the development of DOWA’s businesses. The DOWA Group Health and Safety Policy is implemented at each business location as part of the CSR Management Plan, a document shared Groupwide detailing plans for occupational health and safety management. As a new initiative, in fiscal 2020 the Environment & Safety Department started directly monitoring the implementation and fulfillment of the DOWA Group Health and Safety Policy at each business location. Activities based on the policy target all workers involved, including those from partner companies as well as contractors.

Safety & Environment Personnel Council

The Safety & Environment Personnel Council comprises a representative from the Environment & Safety Department and a representative from each operating and technical support company. It convenes every month for discussing the promotion of Companywide safety activities, sharing the activities of each Group company, and providing mutual support. In the event of an accident, the council confirms the facts surrounding the situation, investigates the causes, discusses emergency and permanent measures to deal with it, and then provides feedback. For matters such as agenda items or measures decided by the council, instructions are

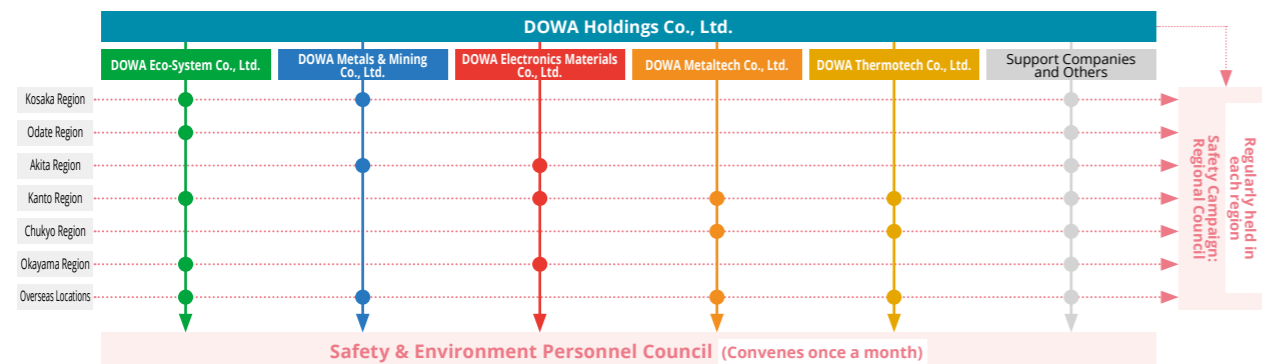
delivered by those in charge to each operating subsidiary, with a mechanism in place for prompt information sharing.

Regional Safety Council

The Regional Safety Council has been set up as a place for communication, allowing members from each region to share examples of safety-related activities and ideas and consult with one another. The council is endeavoring to boost the level of safety-related activities by helping establish cooperative ties among different business fields.

Safety Audits for New Businesses

The DOWA Group conducts safety audits for newly established businesses. Additionally, we perform design and construction for new businesses based on the DOWA Technical Manufacturing Standard (DTMS), a facility procurement manual containing standardized rules for each stage of the process, including construction conceptualization and both basic and detailed design. Furthermore, once a plant is completed, but prior to the commencement of operations, we use a checklist to evaluate the status of necessary systems in order to ensure any anticipated environmental and occupational health and safety risks have been dealt with and to ascertain whether there is a proper understanding of residual risks, with proper countermeasures put in place. After this process, confirmation and guidance are provided.



We make sure to follow up on any issues that have been highlighted and confirm that steps are being taken to improve the situation. In fiscal 2020, this process was carried out at three business locations.



Human Resource Development through Safety Education

The Environment & Safety Department strives to provide human resource development that will boost employees’ capabilities and improve compliance and risk assessments.

In order to improve the safety level of companies, plants, and workplaces, it is important to have an understanding of what employees need to know in terms of safety according to their position and responsibilities. Therefore, the Environment & Safety Department has worked with the Human Resources Department to review and improve the safety education contained in the Group’s training program and to make sure the content is better suited to each employee rank.

Work-Related Accidents

Work-Related Accidents

The number of work-related accidents at the DOWA Group as a whole has been on the decline over the long term. The frequency rate of accidents in fiscal 2020 was lower than in the previous fiscal year and lower than the average for companies of a similar size, according to statistics from the Ministry of Health, Labour and Welfare. However, due to an increase in major accidents overseas, the degree of accident severity in fiscal 2020 was higher than that of the previous fiscal year.

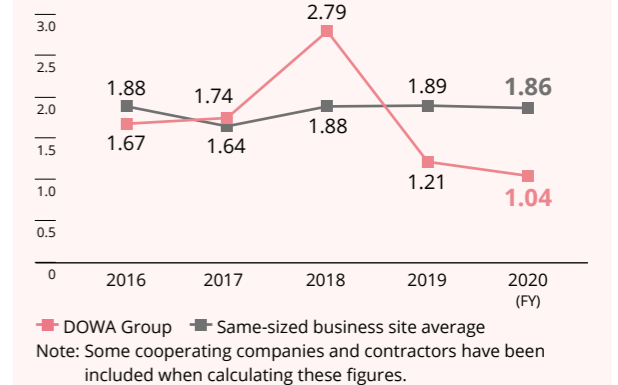
The Environment & Safety Department conducts an analysis of accidents to determine what types of work, what age demographics, and which locations are prone to work-related accidents and then gives guidance as a priority task. In fiscal 2020, we ramped up our efforts to conduct safety audits and engage in safety education with the goal of preventing serious accidents during activities necessary for proper operations. As a result, the number of serious accidents requiring four or more days of leave was the lowest it has been in 10 years.

The accident category with the largest number of incidents in fiscal 2020, including accidents not requiring the taking of any leave, occurred under the category “contact with harmful substances,” which accounted for nearly 30% of the total. The only category of accidents requiring over four days of leave that increased compared with fiscal 2019 was “falls,” with many of the injuries being suffered by employees aged 50 years or older. We are focused on preventing recurrences of such incidents.

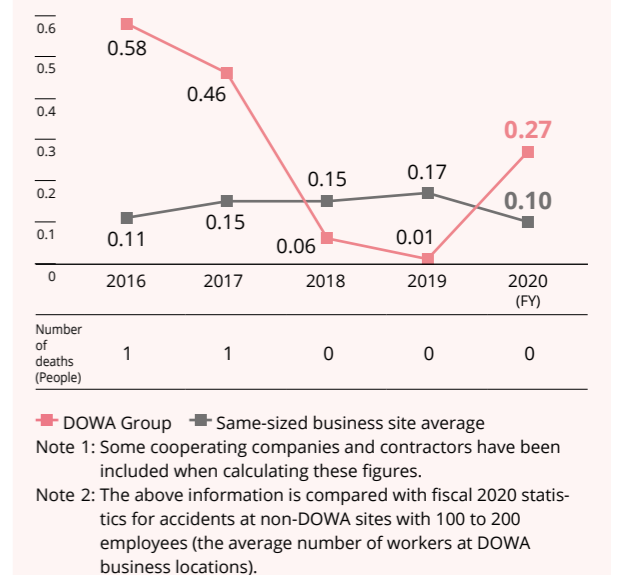
Priority Guidance for Locations with High Numbers of Accidents

The Safety & Environment Personnel Council provides support and guidance to business locations with a high frequency of work-related accidents to help improve their safety systems. The committee incorporates the objective perspectives of outside consultants as it carries out safety audits, performs diagnostics on health and safety, promotes improvements, and strives to raise safety levels.

Change in the Frequency Rate of Accidents at Work



Change in the Severity Rate of Accidents at Work



Frequency rate: Indicator showing the frequency of accidents by the number of dead and injured people due to accidents at work per 1 million total working hours
Severity rate: Indicator showing the degree of accident severity by the number of working days lost per 1,000 total working hours

Environmental Initiatives

The DOWA Group recognizes the impact of its business activities on the environment, and 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.

Policy

- We will provide customers (clients and regions) with products and services that contribute to building a recycling-oriented society.
- We will reduce environmental impacts and risks in our business activities.
- From managers to employees, we will be unified in working on environmental conservation activities.
- We will promote business activities that consider biodiversity.

Material Balance

Material Balance in fiscal 2020

The DOWA Group is promoting business activities while considering material balance by quantitatively determining the “input” of necessary resources and energy at each stage of the business life cycle as well as the “output” of CO₂ and waste generated from these activities.

In fiscal 2020, we added four domestic business locations to these calculations. However, calculations for the fiscal year under review also excluded some overseas business locations owing to the suspension of operations from the COVID-19 pandemic and other factors.

Environmental Management System

The DOWA Group’s environmental management activities are conducted by the Environment & Safety Department, which works with the planning office at each operating company in charge of environmental conservation activities. DOWA Holdings coordinates between these operating companies and oversees environmental management and compliance for the entire Group.

Furthermore, certain major production bases in Japan and overseas business locations have acquired ISO 14001 certification. To ensure that environmental management is conducted in a proper manner, we also conduct regular internal and external audits supplemented with training courses for internal auditors.

The DOWA Group currently has 47 business locations—accounting for approximately 70% of major production bases—that hold either ISO 14001 certification or Eco-Action 21 certification and which have established an environmental management system that is in operation. In terms of our

transportation operations, we have also been certified under the Green Management Certification System established by Japan’s Foundation for Promoting Personal Mobility and Ecological Transportation, under the jurisdiction of the Ministry of Land, Infrastructure and Transport, for promoting environmental conservation in the trucking industry. These actions, combined with the PDCA cycle used in the Groupwide environmental management system, are part of our ongoing efforts to improve the environment.

Obtained Environmental Management System Certification

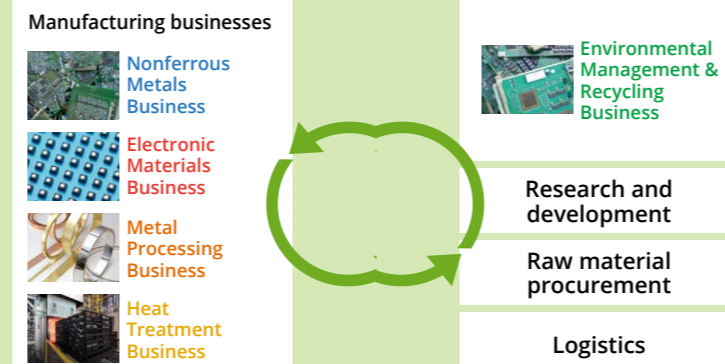
Certification acquired	Number of locations with certification
ISO 14001	30 domestic locations, 13 overseas locations
Eco-Action 21	4 domestic locations
Green Management Certification	1 domestic location

Input

	FY2019	FY2020	Versus previous FY
Total energy input (PJ)	18.2	17.4	-4%
Fossil fuel consumption (Thousand kL)	121	115	
Purchased electric power (GWh)	1,352	1,296	
Thermal power generation (GWh)	4.6	1.3	
Hydroelectric power generation (GWh)	38.7	47.9	
Solar power generation (MWh)	335	388	
Purchased steam flow (Gj)	388	300	
Water resources (Million m ³)	106	100	-5%
Seawater (Million m ³)	93	88	
Besides seawater (Million m ³)	13	13	

	FY2019	FY2020	Versus previous FY
Raw material use (Thousand tons)	1,058	953	-10%
Raw materials (Thousand tons)	806	715	
Auxiliary materials (Thousand tons)	162	160	
Heat treatment of items received (Thousand tons)	89	77	
Packaging materials (Thousand tons)	1.7	1.4	
Amount of waste received (Thousand tons)	1,556	1,440	-7%
Waste (Thousand tons)	1,420	1,304	
Statutory recycled items received (Thousand tons)	96	98	
Contaminated soil (Thousand tons)	40	38	
Fluorocarbon throughput (Thousand tons)	552	604	

The DOWA Group Business Activities



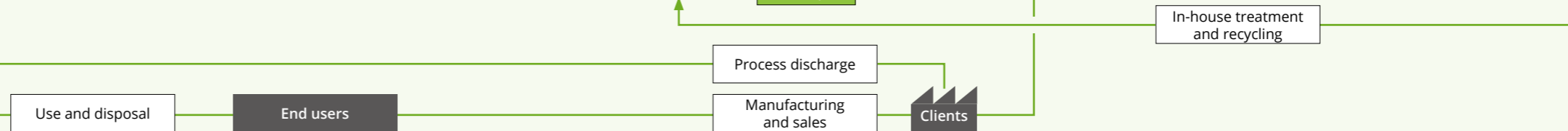
Within business areas

	FY2019	FY2020	Versus previous FY
Waste heat power generation (GWh)	83	80	-4%
Waste heat utilization (TJ)	427	443	+4%

Output

	FY2019	FY2020	Versus previous FY
Total greenhouse gas emissions (Thousand tons (CO ₂ equivalent))	1,788	1,695	-5%
Electric power source (Thousand tons (CO ₂ equivalent))	716	670	
Fossil fuel source (Thousand tons (CO ₂ equivalent))	342	327	
Waste source (Thousand tons (CO ₂ equivalent))	730	698	
Chemical substance emissions (Thousand tons)	1,773	1,542	-13%
Drainage water discharge (Million m ³)	117	114	-2%
Amount of waste (Thousand tons)	367	473	+29%
Amount of electric energy sold (GWh)	0.8	1.2	+62%
Product quantity (Thousand tons)	945	881	-7%
Recycled amount (Thousand tons)	634	612	-3%
Thermal recycling (Thousand tons)	352	344	
Material recycling (Thousand tons)	282	269	

Note: With regard to CO₂ 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 Law Concerning the Promotion of Measures to Cope with Global Warming. Regarding CO₂ emissions derived from waste received, because the calculation terms are at the time this report is prepared, numbers may not necessarily match those reported to government agencies, which are calculated at a different time. In addition, 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 CO₂ emissions originating from waste from domestic business locations is given. Some of the figures stated in this report have also been revised to coincide with revisions to aggregate numbers.



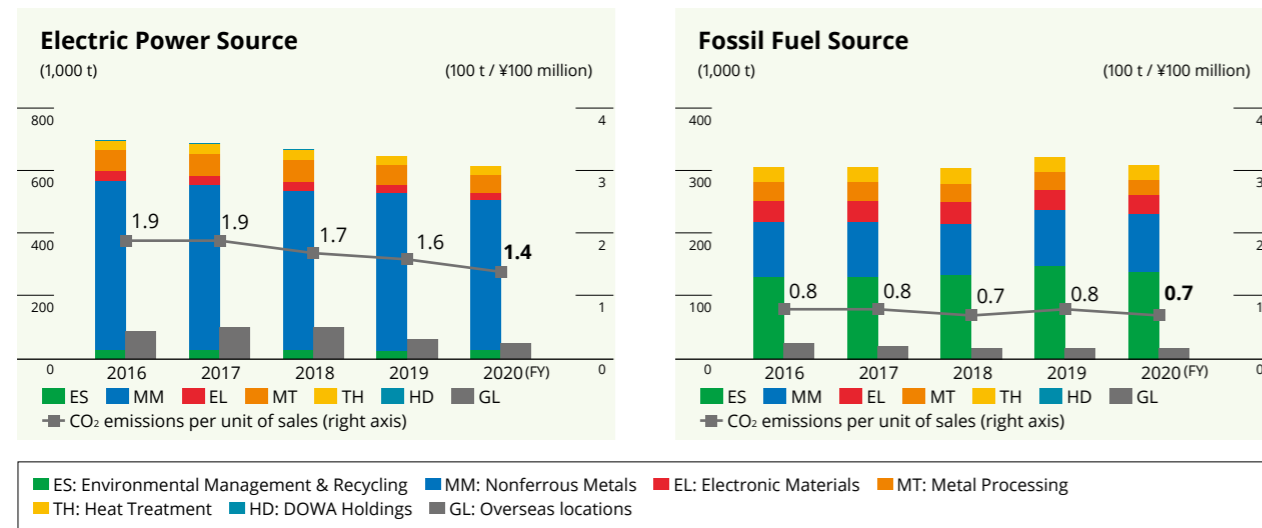
Climate Change

Climate change is a major social issue on a global scale, and there is a growing worldwide movement toward a decarbonized society. The DOWA Group places the utmost importance on efforts to reduce CO₂ emissions, and it believes that the risks and opportunities presented by climate change could potentially affect its profits and costs.

Trend in CO₂ Emissions

Greenhouse gas emissions for the entire DOWA Group in fiscal 2020 decreased by approximately 1,695 thousand tons, a reduction of about 5% from the previous fiscal year. Emissions from electric power and emissions from waste each accounted for approximately 40% of total emissions, whereas fossil fuels accounted for roughly 20% of emissions.

CO₂ emissions can fluctuate greatly depending on the volume and composition of waste from outside the Company disposed of via incineration. Since it is difficult to control externally generated waste, we are working to prevent global warming by promoting thermal recycling that uses the heat generated during incineration for power generation and steam production.



Renewable Energy Use

Hydroelectric Power

The DOWA Group is working to combat global warming with measures that include using privately generated power derived from renewable energy sources and leveraging its businesses to spread renewable energy use.

Kosaka Smelting & Refining Co., Ltd., based in Akita Prefecture, started operation of its second domestic hydroelectric plant in 1897 for use in mine development. The company has continued to maintain and expand its facilities as its business grows, and it has since increased the number of hydroelectric plants in Akita Prefecture to six. In fiscal 2020, these plants generated 47.9 GWh of electricity and serve as an important power source for Kosaka Smelting & Refining.

Solar Power

DOWA Thermoengineering Co., Ltd. Ota plant (Gunma Prefecture), Meltec Ltd. (Tochigi Prefecture), DOWA Hightech Co., Ltd. (Saitama Prefecture), Eco-System Sanyo Co., Ltd. (Okayama Prefecture), and Act-B Recycling Co., Ltd. (Kumamoto Prefecture) have each introduced solar power generation systems at their business locations.

In fiscal 2020, the systems at these five companies generated a total of 388 MWh of electricity, which will either be used for business activities or sold.

Thermal Power

Thermal power generation involves the use of heat released into the atmosphere to produce high-temperature, high-pressure steam, which turns a turbine to generate electricity. In the case of DOWA, this heat is mainly generated from incinerating waste. Since thermal power generated in this manner utilizes combustible waste as fuel, it does not require fossil fuels, as is usually the case for thermal power generation. Treating waste with heat is therefore an efficient use of energy because it leads to more energy being produced.

Currently, the DOWA Group produces thermal power at five domestic locations and one overseas location, for a total of six. In fiscal 2020, 80 GWh of thermal power was generated.

Climate Change Countermeasures

DOWA has positioned climate change countermeasures as one of its important management issues and has taken steps to create new business opportunities by enhancing products and services that contribute to reducing greenhouse gas emissions.

Establishment of Climate Change Committee

In fiscal 2021, the Company established the Climate Change Committee, an investigative body intended to ramp up efforts to combat climate change. This committee, which is chaired by a director on the Board, comprises the directors in charge of the environment and safety and of technologies and members selected from the planning office of each operating company, from the Technology Department of DOWA Holdings.

The committee investigates important matters on a Groupwide scale. Such matters include the formulation of policies to address the risks and opportunities presented by climate change and goals and initiatives for reducing greenhouse gas emissions.

When performing these investigations, the committee utilizes a scenario analysis based on recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD).

The DOWA Group's Climate Change Policy and Long-Term Target

In August 2021, DOWA set a Groupwide climate change policy as well as a 2050 target for reducing greenhouse gas emissions, the latter of which is aimed at decarbonization within the Group.

Climate Change Policy

- The DOWA Group positions climate change countermeasures as an important management issue and will work to reduce greenhouse gas emissions. It will also contribute to the realization of a carbon-free society through various businesses, leading to continued growth of the Group.

Long-Term Target

- The DOWA Group aims to achieve carbon-neutral status by 2050.

In addition, the Climate Change Committee is currently investigating medium-term targets that will guide the Group toward achieving carbon-neutral status by 2050. The announcement of details regarding these targets will coincide with the announcement of the next Midterm Plan at the beginning of fiscal 2022.

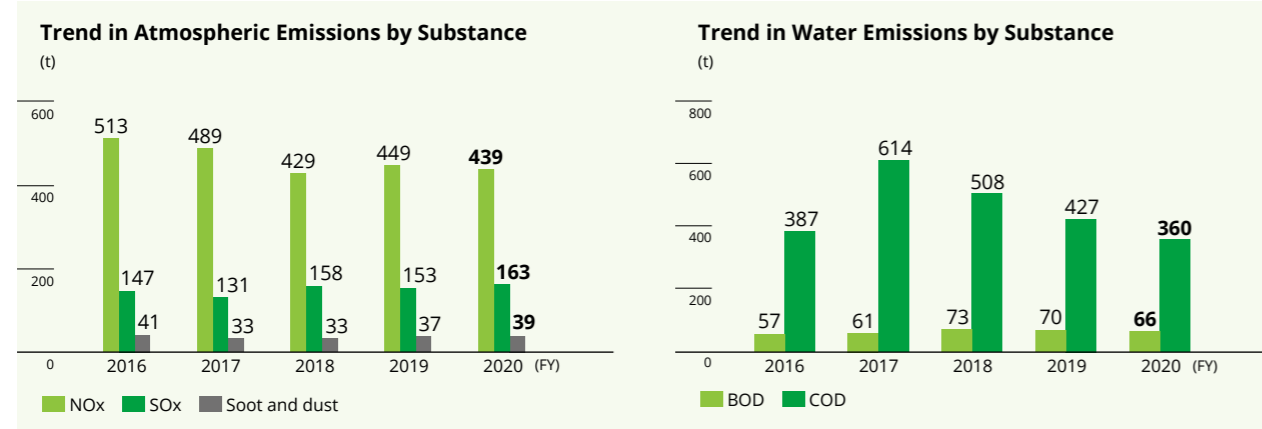
TOPIC Launch of Biogas Power Generation Business Using Food Waste as Raw Materials

Reducing the amount of food waste and using whatever food waste is produced efficiently are major global issues to overcome in the effort to create a sustainable society. In April 2021, Biodiesel Okayama Co., Ltd., a subsidiary of the DOWA Group, began biogas power generation using food scraps and waste produced by food-related business operators as raw materials. The company's biogas power generation plant is the first large-scale commercial plant of its kind in the Chugoku region of Japan, which spans five prefectures. This plant will accept approximately 16,000 tons of food waste annually, which corresponds to the annual power consumption of roughly 1,600 households. The plant has preprocessing equipment for removing packaging, containers, and food waste that are otherwise difficult to recycle into fodder or fertilizer, which will be used as a source for renewable energy.



Atmosphere and Water Management

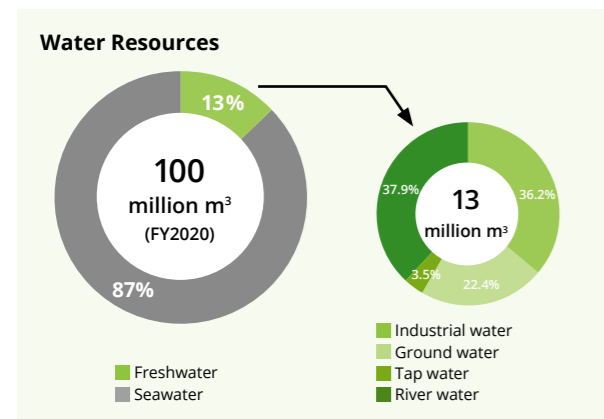
The DOWA Group's impact on the atmosphere and water is greatly affected by the composition of waste received by the Environmental Management & Recycling Business. Therefore, we are working to reduce said impact by enhancing our management systems at each business location and implementing standards that are more stringent than national regulations.



Use of Water Resources

In fiscal 2020, water resource input amounted to 100 million m³, a year-on-year decrease of approximately 5%. The DOWA Group worked to reduce water consumption via thorough efforts to curtail use, which included changing processes to promote the recirculation of water and installing flow meters.

The majority of the water resources used by the Group is seawater that the Nonferrous Metals Business utilizes for cooling purposes. Freshwater comprised 13% of all water use, with use on a par with fiscal 2019, at 13 million m³.



Drainage Water

In fiscal 2020, total drainage water amounted to 114 million m³, a year-on-year decrease of approximately 2%.

Similar to other water use, the majority of drainage water is used by the Nonferrous Metals Business for cooling purposes. After being checked for quality, this water is returned to its original source.

The DOWA Group is committed to water quality, and its efforts to do so include water management at each business location and compliance with strict, self-imposed standards in addition to drainage water regulations.

Biodiversity

The DOWA Group draws from its Basic 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.

Basic Biodiversity Policy

We at the DOWA Group shall recognize the importance of biodiversity conservation to sustainably enjoy the blessings of nature, which are derived from biodiversity and from which our business activities are benefiting, and shall voluntarily and continuously strive to conserve and sustainably use biodiversity as a member of society.

Conserving Biodiversity during Mine Development

We promote mineral exploration and development projects for zinc mines to ensure a long-term zinc supply. Since mine development and operations have a large impact on the natural environment and local communities, we give careful consideration to the ecosystem and the water environment. 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 that includes ecosystem surveys and water quality assessments.



Water quality and biodiversity monitoring (overseas exploration project)

Conserving Biodiversity during Procurement

The supply of paper, a forest-based resource, is one of the most important ecosystem services available, and securing this supply has implications in terms of climate change and waste. Since the DOWA Group's manufacturing businesses are centered on nonferrous metals, excluding water it does not use biological resources as its main raw materials. However, as we do use paper at all of our domestic and overseas business locations, the entire Group purchases large amounts of paper each year. For this reason, we use paper made from a mixture of old paper and forest-certified wood pulp for photocopy paper and pamphlets while making every effort to use sustainable biological resources.

When selecting paper suppliers in fiscal 2020, the Group not only confirmed that the paper itself was environmentally friendly but also verified that said suppliers carried out sustainable paper procurement based on its CSR Procurement Policy.

Maintaining Stability at Suspended or Closed Mines and Tailing Dams

We have established voluntary standards that are stricter than mining laws and regulations for the management of over 20 closed mines and over 30 tailing dams, most of which have suspended operations or closed down. By doing so, the DOWA Group is working to prevent mine pollution and maintain and improve safety.



Managing Water Resources

At suspended or closed mines, mine water, including acidic water or water containing heavy metals, may flow out of the pithead; thus, there is the risk of wastewater flowing into rivers and harming water quality and agricultural land. Accordingly, we have established voluntary management standards that are stricter than mining laws and regulations for the suspended or closed mines and tailing dams that we currently operate. By doing so, the DOWA Group is working to maintain healthy water circulation and an environment conducive to sustainable water use.

Maintaining Stability at Suspended or Closed Mines and Tailing Dams

Mine wastewater treatment plants and tailing dam facilities are inspected on an irregular basis by public safety and inspection departments in each region. Most of the suspended or closed mines and tailing dams that we manage are facilities that ceased operations by 1980. These mines and dams are in very stable condition, with soil covering, mine pollution prevention work in place, and greening through the planting of flora.

We set the items for inspection and the frequency thereof by location, including tailing dams still in use, with qualified people doing patrol inspections of such things as blocked pitheads, and check the slopes and culverts of tailing dams in order to quickly detect and repair points of deterioration and keep conditions stable.

Resource Recycling Initiatives

The DOWA Group is endeavoring to help create a sustainable society by curbing the consumption of natural resources and promoting the reuse of spent resources.

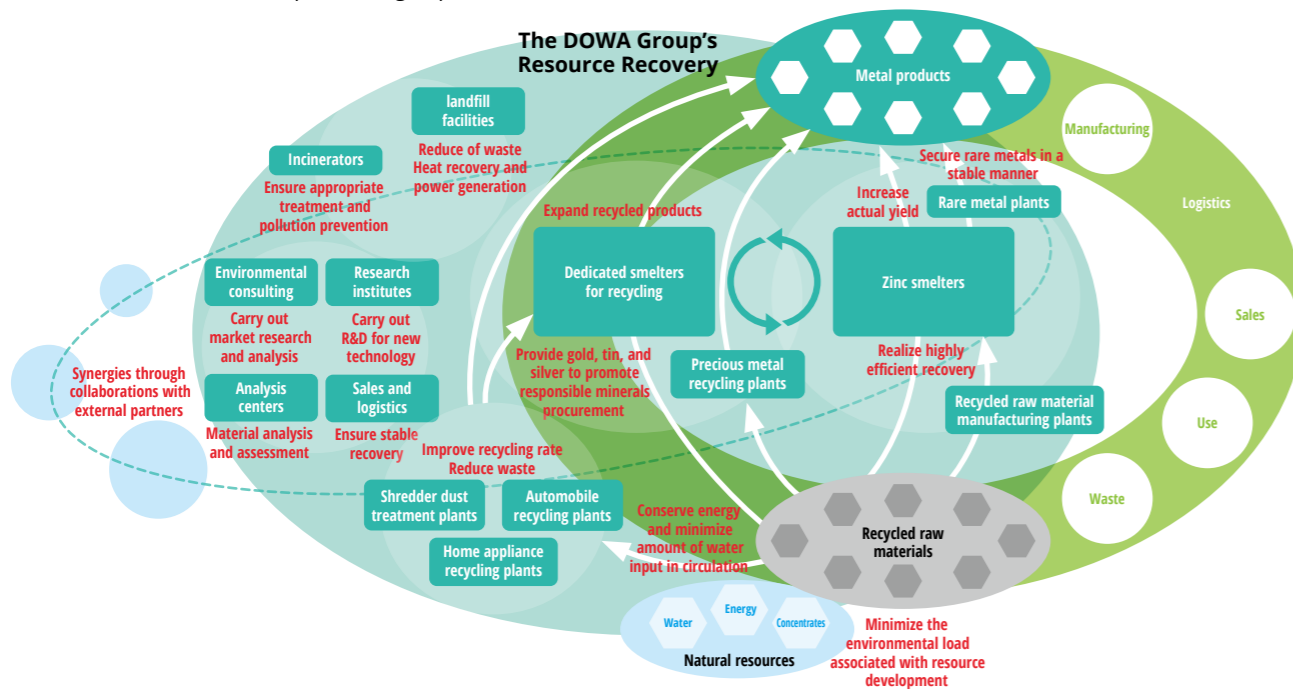
Issues Related to Resource Recycling and Related DOWA Group Initiatives

Continued consumption of ore and similar natural resources will inevitably cause them to run out. Recycling is one solution that can promote the effective use of such resources. However, this requires technology to recover metals efficiently as well as the technology and infrastructure for safely processing harmful and non-useful substances generated in the recycling process. Recycling also brings with it other technological and economic issues that need to be addressed, such as the need to create an efficient collection system for recycling raw materials and a means for addressing the labor and costs associated with processing this wide variety of raw materials. Bearing this in mind, the DOWA Group is striving to promote the

sustainable use of metal resources while taking on the various challenges present in resource recycling.

We operate a broad range of recycling businesses that deal with precious metals, home appliances (including discarded small household appliances), and automobiles. Rather than recycling each type of object in a fragmented chain, we improve resource efficiency by combining processes, taking into account our facilities, technological characteristics, and the geographical conditions of our bases.

In addition, the Company's departments—which incorporate its waste treatment facilities, transportation, and research institutes—coordinate with one another to ensure that we promote the effective use of resources in a way that is compatible with environmental conservation and safety.



Input

- Raw Materials**
In fiscal 2020, raw material use amounted to 953 thousand tons, a year-on-year decrease of approximately 10%. Of this amount, approximately 25% was recycled raw materials.
- Waste Received**
In fiscal 2020, the amount of waste received by the Company came to 1,440 thousand tons, of which approximately 86% was waste received from outside of the Company. Although a 7% reduction from fiscal 2019, this can be mainly attributed to the impact of the COVID-19 pandemic, which caused a decrease in waste received from customers at waste treatment businesses overseas.

Output

- Recycling**
In fiscal 2020, thermal recycling amounted to 344 thousand tons, a year-on-year decrease of roughly 2%, while material recycling totaled 269 thousand tons, a contraction of approximately 5%.
- Waste Generated**
In fiscal 2020, the Company treated 473 thousand tons of waste, a year-on-year increase of approximately 29%. This increase is due to a waste treatment facility being newly included in total figures and to a rise in the amount of contaminated soil treated by the soil remediation business. The amount of in-house waste produced by manufacturing processes (excluding the Environmental Management & Recycling Business) decreased by approximately 4%.

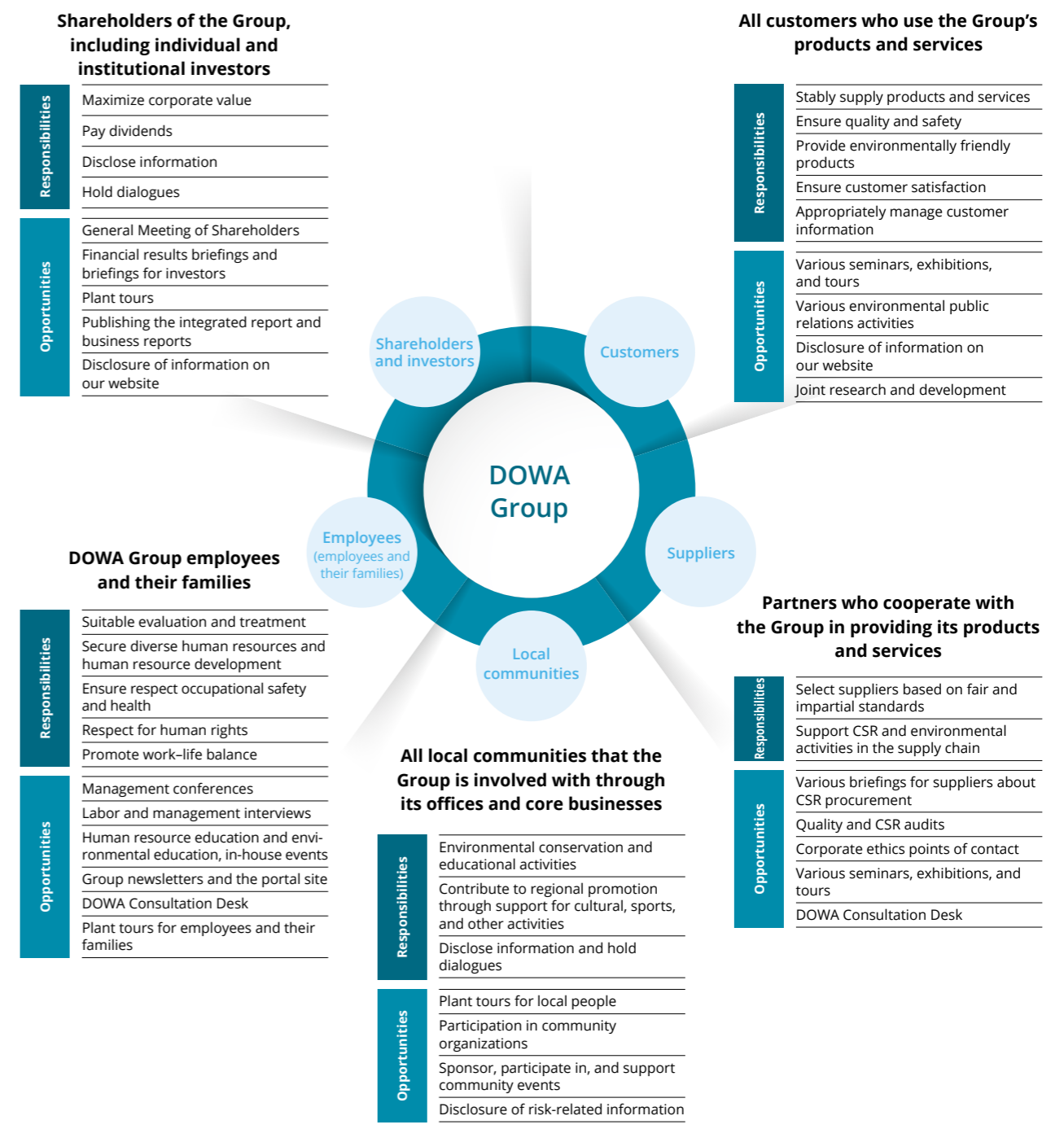
Social Initiatives

Policy

- We will aim to create a workplace where diversity and the human rights of employees are respected, and each person can demonstrate their abilities to the fullest with satisfaction and pride.
- In unity with local communities, we will promote social contributions that reflect their unique characteristics.

Relationships with Stakeholders

At the DOWA Group, at each office and department, we communicate with our major stakeholders through various methods, including customers, shareholders, investors, suppliers, local communities, and employees.



Customers

Quality Control

At the DOWA Group, we position “quality” as an important management standard for manufacturing. Major manufacturing plants have obtained ISO 9001 certification for our quality management systems, the international standard for such systems.

Locations That Have Acquired Certification for Quality Management Systems

Number of bases with ISO 9001 certification	
Domestic	24
Overseas	13

In addition, as an initiative to strengthen quality control, we endeavor to confirm the quality of procured items. In cooperation with suppliers, we aim to ensure that raw materials and auxiliary materials are suitable from quality and technological standpoints by implementing supplier surveys and inspections at appropriate intervals.

Enhancing the Quality Assurance System

The DOWA Group has established a quality assurance system tailored to each base. However, to enhance quality risk management on a Groupwide basis, we established the Quality Assurance Department at DOWA Holdings in April 2021 and have transitioned toward integrated risk management led by the head office.

Regarding employee education, we have created a Companywide education system that includes governance and compliance training, which is in contrast to our previous approach to education, via which quality-related education was handled by operating companies and plants on an individual basis. In addition, we have introduced cross-sectional quality-related education to quality assurance managers as well as quality-related compliance training to new employees hired by DOWA Holdings.

Suppliers

CSR Procurement

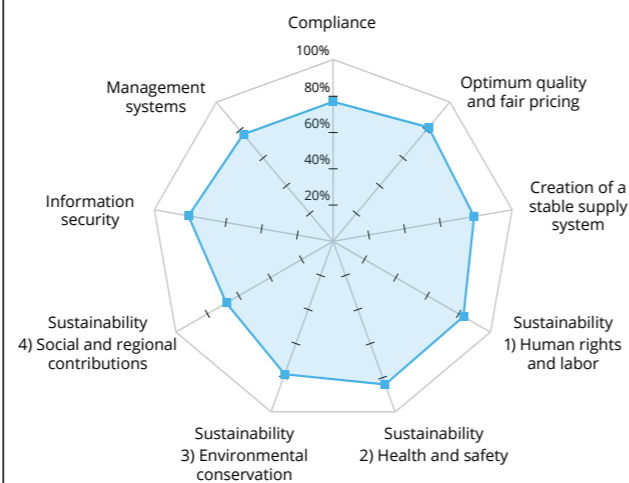
The DOWA Group promotes CSR throughout the whole supply chain by distributing to business partners and suppliers the DOWA Group CSR Procurement Guidelines, which combine elements of its CSR Procurement Policy and Code of Conduct, and by confirming understanding about its approach to CSR. In addition, as a supplier ourselves, we may receive requests for CSR-conscious procurement from customers. However, in order to correctly understand and respond promptly to such requests, the Sustainability Department and the Procurement Department collaborate to implement internal explanation and follow-up.

Self-Check Assessments

In fiscal 2020, the DOWA Group distributed self-check questionnaires to approximately 90 major business suppliers to confirm the status of their CSR-related activities, with a response rate of over 90%. We send reports to all respondents with feedback and our evaluation of their current status. Compared with fiscal 2019, several of our business partners managed to achieve our required standard score of 80%. That being said, these questionnaires also highlighted that social contribution efforts in each sector are rather lackluster.

Going forward, DOWA will continue to stress the importance of CSR throughout the supply chain to its business partners, thereby strengthening these partnerships. At the same time, we will work to improve CSR at the Company.

Self-Check Questionnaire Results



Local Communities

Among its society-focused initiatives, the DOWA Group places extra emphasis on those that contribute to local communities. At each of our domestic and overseas bases, we are working actively to develop such community-based CSR activities as holding plant tours, providing internships, hosting sports events, and communicating with local communities in order to progress and develop alongside these regions.

The DOWA Group's Social Contribution Activities

Due to the impact of COVID-19 on activities that involve direct interaction with people, events typically held every year in Kosaka Town in Akita Prefecture were canceled in fiscal 2020, among which were a tree-planting festival and plant tours. On the other hand, we continued to provide support such as donations to and sponsorship of sports and music organizations as well as educational institutions.

In addition, over 1,500 DOWA employees took part in outdoor cleanup and environmental beautification activities in the areas around over 20 business locations in Japan and overseas, with the greatest consideration given to preventing the spread of COVID-19.

These activities targeted areas along bicycle commuting routes, marathon courses, and other areas often used by local people. During these activities, participants took vigorous infection prevention measures, including wearing double masks, protective glasses, sealed and tethered clothing, and disposable gloves.



Donation of a Biodiversity Bookcase to a Local Elementary School (Okayama Prefecture)

In September 2020, the DOWA Group donated a Biodiversity Bookcase with 100 books on biodiversity to Fukushima Elementary School in Okayama City via a program run by the Nature Conservation Society of Japan.

Under this program, children's books selected by the Japan Committee for United Nations Decade on Biodiversity (UNDB-J) are donated to several parts of Japan, collected as Biodiversity Bookcases. In support of this program, which aims to promote understanding and raise awareness of biodiversity, DOWA Holdings donated a Biodiversity Bookcase to the aforementioned elementary school, which is in the school district where company housing for employees of DOWA Electronics Materials Okayama Co., Ltd. is located.



Cleanup Activities (Akita Prefecture)

At Akita Rare Metals Co., Ltd., a subsidiary of the DOWA Group, all employees take part in annual cleanup activities in the local area. In fiscal 2020, these activities were carried out in small groups as a measure to prevent the spread of COVID-19.

Letter of Appreciation from the Akita Sports Association (Akita Prefecture)

For many years, DOWA Holdings has held the DOWA Cup Junior Cross-Country Ski Tournament at Lake Towada (the DOWA Cup), which had its final event in February 2020. In recognition of its contributions toward popularizing and raising the competitive level of sports in the prefecture through this event, DOWA Holdings received a letter of appreciation from the Akita Prefectural Sports Association (currently, the Akita Sports Association). The DOWA Cup was praised for producing several athletes, including Olympic-caliber athletes to represent Japan, in addition to its contribution toward the development of young people.

Plant Tours

In fiscal 2020, approximately 3,000 people joined tours of DOWA Group plants, with tours conducted of 24 plants in Japan and seven overseas.

Several tours for the general public were canceled or held with reduced numbers as a result of COVID-19. However, tours continued to be held for members of government and educational institutions and customers, in order to promote understanding of our business, products, and our efforts to contribute toward the environment and local communities. During these tours, care was taken to prevent the spread of infection.

Employees

The DOWA Group understands that human resources are the basis of all business activities, and employees are evaluated for their ability to do their jobs, regardless of differences in educational background, seniority, and gender. We have engaged in a variety of initiatives so that employees can exercise their full potential.

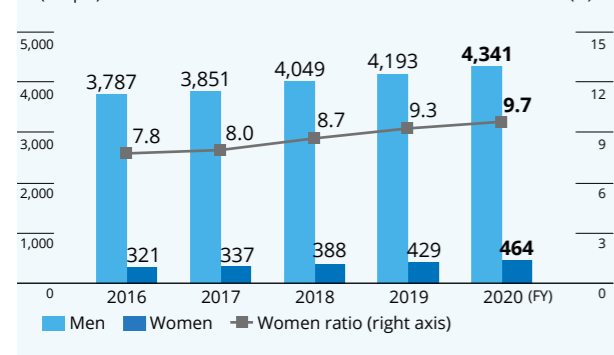
Employment

At the end of fiscal 2020, the number of Group employees in Japan was 6,810, an increase of 319 from the previous fiscal year-end. Of the full-time employees in Japan, 4,341 (roughly 90%) were men and 464 (roughly 10%) were women. As DOWA's business becomes more global, the percentage of employees employed at overseas locations has increased accordingly, accounting for 36% of total employees. Furthermore, the number of the Group's new graduate and mid-career hires decreased 5% from fiscal 2019, comprising 307 men and 70 women.

No. of Employees by Region (People) (including non-consolidated)

Region	FY2016	FY2017	FY2018	FY2019	FY2020
Japan	6,072	6,094	6,359	6,491	6,810
Asia (besides Japan)	2,899	3,092	3,148	3,217	3,558
Europe	23	14	14	12	27
North America	96	131	166	128	128
Latin America	1	4	4	52	68
Overseas	3,019	3,241	3,332	3,409	3,781
Total	9,091	9,335	9,691	9,900	10,591

Employment Situation in Japan (Full-time Employees) (People)



Employment Status (including non-consolidated)

FY2020	Men	Women
Average age (years old)	41	39
Average length of employment (years)	14	12
Number of employees hired (people)	307	70
Number of employees who left Company at own request (people)	90	24
Number of employees who left Company due to retirement (people)	8	1
Employee retention rate: employees employed for 10 years or longer (among employees hired as new graduates for the holding company)	78%	64%

Work-Life Balance

With the aim of harmonizing work and life, we are enhancing our system for supporting work-life balance and are developing a workplace environment where it is easy to work, so that it is possible for employees to maximize their abilities according to their lifestyle.

Supporting a Variety of Workstyles

In fiscal 2020, five men (of 125 eligible) and 33 women took childcare leave, and 76 men and 27 women took time off work to care for their sick children. All of these figures increased from the previous fiscal year. In addition, 100% of employees returned after taking childcare leave during fiscal 2020, and 100% of employees who took childcare leave in fiscal 2019 remained with the Company 12 months after doing so.

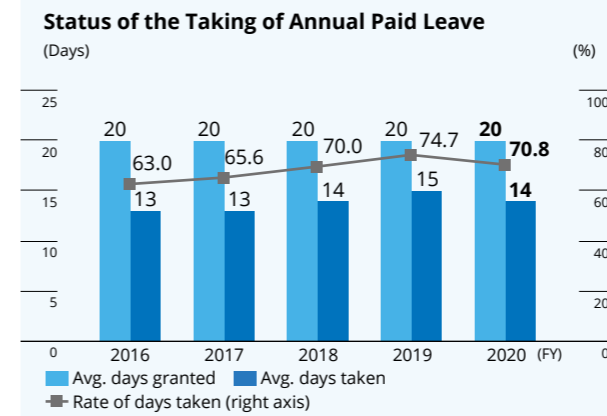
Number of Employees Taking Childcare Leave and Leave for Nursing Sick Children (People)

Type of leave taken		FY2016	FY2017	FY2018	FY2019	FY2020
Childcare leave	Men	0	2	2	0	5
	Women	28	32	31	22	33
Leave for nursing sick children	Men	24	27	35	64	76
	Women	24	26	28	24	27

Optimizing Working Hours

The DOWA Group is working to reduce long working hours and promote the taking of annual paid leave so that employees can work with health and vigor in both mind and body. The average number of overtime hours worked in fiscal 2020 was 19 hours per month, approximately the same as in the previous fiscal year.

With regard to annual paid leave in fiscal 2020, with 20 days on average granted, employees took about 14 days, or 70.8%, of their vacation days, a slight decrease from the previous fiscal year.



Mental Health Initiatives

The DOWA Group has introduced a stress check tool that allows employees to self-evaluate the state of their mental health. This step is intended to promote mental health management among employees by encouraging awareness of their personal stress levels and helping the Group improve areas in the workplace environment that may be causing such stress. We are committed to preventing mental health problems among employees by providing those with high stress levels with consultations and guidance and by formulating and implementing plans to improve workplace environments.

Promoting Diversity

At the DOWA Group, we believe that diversified human resources with various values and viewpoints who can fully demonstrate their individuality and abilities will lead to the growth of the Company. Based on this belief, we engaged in a variety of efforts to expand diversity.

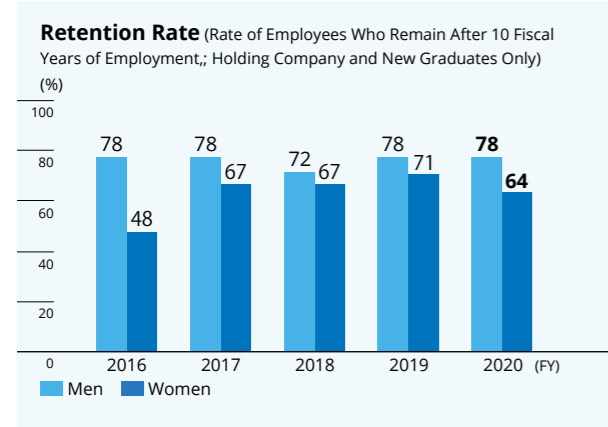
Promoting the Participation and Advancement of Women

At DOWA, there is no gender distinction in terms of workstyle, and female employees are active in a wide range of fields, including manufacturing, R&D, production control, planning, and sales. In matters of hiring, promotion, and advancement, assessments are made purely according to ability. The number of women in management roles is low, at 2.4%, but it is increasing with each year due to changes in the business and work environment. In addition, five female employees were hired in fiscal 2020 for management-track positions at DOWA Holdings, comprising 10% of new employees hired by the Company, and we plan to increase the percentage of female hires in the future.

Percentage of Female Workers by Position (%)

Position	FY2016	FY2017	FY2018	FY2019	FY2020
General employees	9.7	10.0	10.5	11.2	11.4
Management employees	1.2	1.3	1.7	1.4	2.4
Executive officers	0.8	0.8	0.8	0.9	0.9

One problem we face, however, is that our retention rate of women is lower than that of men. Therefore, we are making efforts to raise the percentage of women who remain employed by the Company for over 10 fiscal years to 80%, the same as that for men.



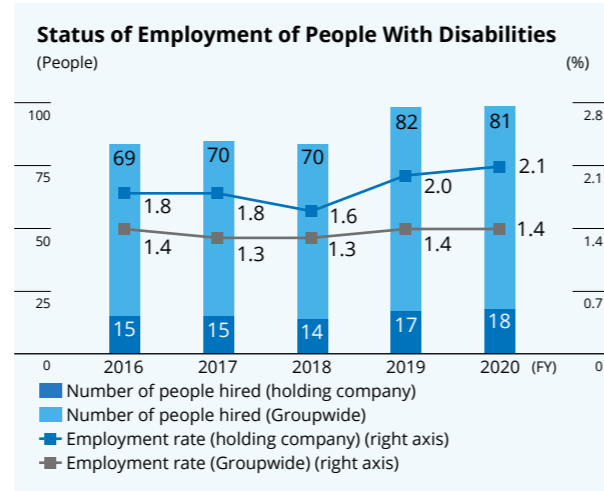
To increase this retention rate, we are developing a system that will support women in both their child-rearing and work duties. This system includes a flextime system and assistance for child-rearing costs and expands the scope of employees who can work shortened hours for child-rearing purposes. In addition, from fiscal 2017 to fiscal 2020 we worked on reforms to expand education and awareness, such as diversity and career training for women and diversity management training for managers. Going forward, DOWA will continue to support the development of women's careers and become a company that anyone, regardless of gender, will want to work for over the long term.

Implementation Status of Training

Training (FY2017–FY2020)	Total time (hours)	Attendance rate (total)
Diversity and career training (for female employees)	218	64%
Diversity management training (for management employees)	80	57%

Employment of People With Disabilities

In fiscal 2020, the employment rate of people with disabilities was 2.1% for DOWA Holdings and 1.4% for the entire Group. We will continue our efforts to create acceptable conditions allowing us to reach the statutory rate of employment of people with disabilities and to create workplace environments where such people can work comfortably and actively.



Re-Employment of Retired Workers

In fiscal 2020, a total of 42 retired workers were rehired, a minor decrease from the previous fiscal year. To address the coming contraction in the working-age population, we have decided to raise the age of retirement from 60 to 65. This decision, which will be in effect from fiscal 2021 to fiscal 2025, was introduced at some Group companies in April 2021 and will be rolled out to other companies in the future.

The DOWA Group is also continuing with an initiative that started in fiscal 2019 to hold life-planning seminars for employees who reach a certain age, with the goal of giving these employees information on embarking on a second, post-retirement career.

No. of Re-Employed (Retired Workers)

	FY2017	FY2018	FY2019	FY2020
Men	44	46	55	40
Women	3	2	2	2

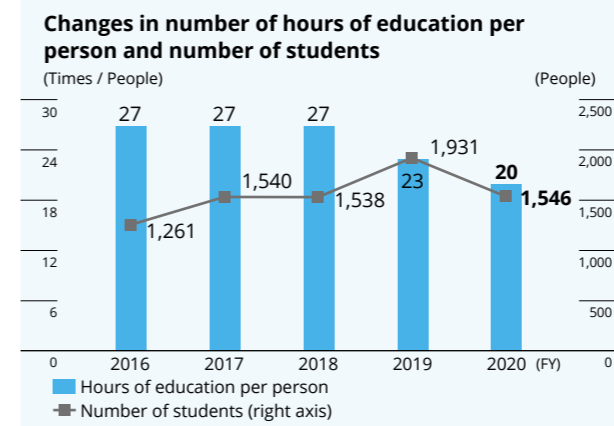
Human Resource Development and Evaluation

As a vision for human resources and the organization, the DOWA Group aims to “foster human resources and an organization that will continue providing new value to society, by respecting a social and free corporate culture and building a foundation for long-term growth.” We are also developing various human resource development and utilization measures for all employees.

Education and Training System

From new employees to managers, the DOWA Group has established stratified education according to job classification and has set up an educational system of selective education in order to nurture the next generation of leaders at each level of the organization.

Although some of our educational programs were can-



celed in fiscal 2020 to prevent the spread of COVID-19, we made an active effort to leverage online events, e-learning, and video distribution to provide programs that were easy to take part in, free from the constraints of time and location. The number of hours of education per person in fiscal 2020 was 20 hours, with 1,546 participants, both of which were down from fiscal 2019.

Fair Evaluation and Treatment

At the DOWA Group, based on the principle of “evaluating employees on their ability to work autonomously,” we are working for fair evaluation and treatment under the following policies.

- For evaluators and those being evaluated, deepen understanding of the standards and structure of the system and utilize appropriate evaluations and training.
- While sharing organizational goals and getting an understanding of the abilities and behavior required of employees' according to their position, try to improve their work performance.

The training of evaluators and those being evaluated is positioned as a Groupwide initiative, and we therefore strive to create opportunities for continued learning, with appropriate evaluation, treatment, and training. In fiscal 2020, we explained our evaluation system using video distribution and switched to an online format for evaluator training. We also expanded the target audience to include employees of Group companies, and more than 500 people took the training course.

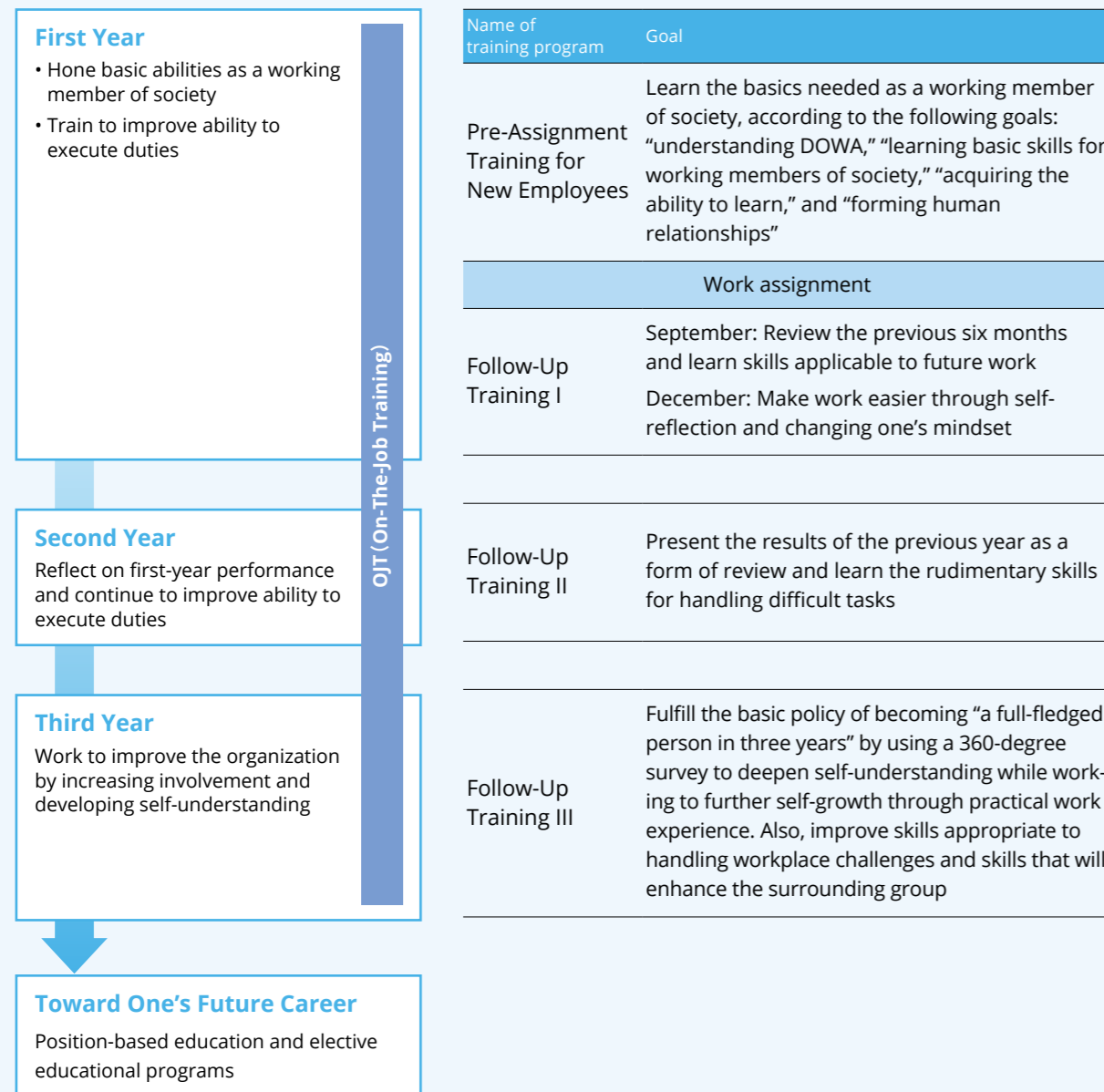
Status of Training System (Fiscal 2020)

Content	Target employees	FY2020	
		No. of participants	Total time
Position-based education and elective education			
Training to strengthen middle management	Managers	19	684
Management training, training to strengthen skills for leading subordinates	Managers	55	2,340
Leadership training	Mid-level employees	46	1,656
New employee training	New employees	48	13,824
Follow-up training for new and young people	1st–3rd year employees	146	4,968
Training for on-the-job-training instructors	On-the-job-training instructors	32	256
New recruiter training	New recruiters	34	272
Field-specific training			
Language support	English-learning methodology seminar New employees (pre-assignment training)	48	384
Global	Preparatory training for overseas assignments Employees receiving new overseas assignments	7	112
Global	Training for overseas base managers Managers of overseas bases	25	400
Human rights	Stress check training All applicable persons	32	64
Organizational development	Meetings of staff members responsible for human resource development for improving on-site capabilities Staff members responsible for human resource development from each base	67	1,608

TOPIC Pre-Assignment Training for New Employees

Every year, DOWA Holdings hires approximately 50 new employees. The first form of education for these employees is new-hire training. This is an important program that forms the basis for our human resource development, a support structure for the Company. Our basic policy for this training is to “cultivate full-fledged people within three years of joining the Company,” with the goal of developing “autonomous human resources.” The Company does not hire for any specific job type or business. Since people joining the Company will branch off into a variety of careers, we treat the first three years of employment as an intensive training period for new employees. To facilitate future career development after this period, we have also systematically established a human resource development system that combines a curated collection of group training programs with on-the-job training (OJT).

Training Program for New Employees and Human Resource Development System



New Employee Training Themes

First Year Hone Basic Abilities as a Working Member of Society and Train to Improve Ability to Execute Duties

The DOWA Group has prepared a program for roughly the first two months of new employee training aimed at giving these employees the knowledge and skills necessary as working members of society and DOWA employees, which covers topics such as business content, work procedures, and the giving of presentations. In Follow-Up Training I, which takes place after work is assigned, new employees reflect on their previous six months since joining the Company and learn skills applicable to future work. After using these acquired skills, these employees receive feedback, self-reflect, and continue to utilize their first year as a time to develop the ability to perform necessary duties through study and practice.

Second Year Reflect on the First Year and Continue to Improve Ability to Execute Duties

Employees taking Follow-Up Training II during their second year hold a “poster session” for new employees (now their juniors). This results presentation conveys what they learned and the issues they faced during their first year. Follow-Up Training II also comprises planning training, which imparts the skills and knowledge for tackling difficult work. After training, these employees develop a plan to improve their work based on the advice of their supervisors and outside lecturers and present this plan to the Human Resources Department. Employees review this plan after two to three months.

Third Year Work to Improve the Organization by Increasing Involvement and Developing Self-Understanding

Follow-Up Training III focuses on having employees learn skills that involve other departments and workers and enhancing their practical skills. During this training program, employees reference a 360-degree survey provided by their supervisors and seniors to encourage them to think of actions that utilize their strengths for contributing to the workplace. After this program is complete, they put these actions into practice. During this practice period, employees also join monthly online meetings with their training group. At the end of a given fiscal year, there is a final group training session that reviews training in its entirety, marking the end of intensive training.

On-the-Job Training (OJT)

During intensive training, employees also take part in OJT, with an emphasis on making a habit of utilizing a PDCA cycle. For the first year, the new employee, an OJT instructor, and a supervisor in charge of training work together in a three-person system to develop an educational plan and goals. Every month, these three individuals will review their annual plan and its implementation. In the second year, the employee and supervisor are in charge of OJT. In addition, a member of the Human Resources Department is assigned to each new employee and confirms records of monthly meetings while providing training support. This member is also available for day-to-day consultations as part of the DOWA Group’s follow-up system.

Financial Review

Financial Performance

Looking at the DOWA Group's businesses in fiscal 2020, the fiscal year ended March 31, 2021, sales of automobile-related products and services, which were affected by the spread of COVID-19, continued to follow a basic trend of recovery from the second quarter. In information and communication-related products, sales of products for 5G applications recorded higher sales, while sales of products related to new forms of energy remained firm. In environmental- and recycling-related services, orders for waste treatment were firm. Looking at the exchange rate and metals prices, in comparison with the previous fiscal year, the average exchange rate appreciation of the yen against the dollar, and the average prices of precious metals and base metals, such as zinc and copper, increased.

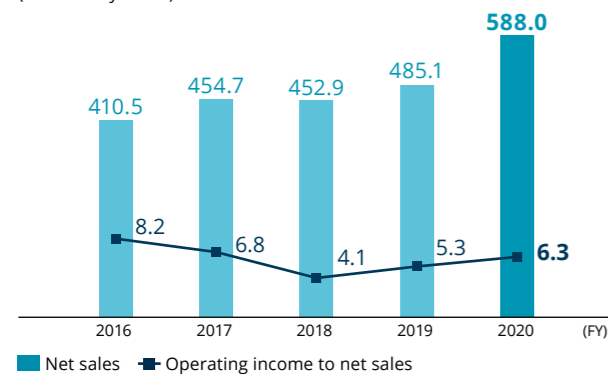
Amid these circumstances, the Group made steady progress with measures to raise corporate value under the basic policies put forth under its Midterm Plan 2020, which are "expand businesses in growth markets" and "increase competitiveness of existing businesses."

As a result, consolidated net sales increased 21.2%, to ¥588,003 million; consolidated operating income was up 44.3%, to ¥37,454 million; and consolidated ordinary income increased 28.3%, to ¥37,200 million. Total income taxes increased 35.3%, to ¥13,636 million, and net income attributable to owners of parent increased 25.5%, to ¥21,824 million.

The principal effects of COVID-19 on the Group's business performance in the consolidated fiscal year under review were as follows. Automobile-related products and services account for high percentages of sales in the Heat Treatment Business and the Metal Processing Business. Sales in these businesses declined significantly in the first quarter due to a worldwide decline in automobile production, but turned to recovery from the second quarter. In addition, looking at equity-method affiliates, business was affected by the temporary suspension of operations from mid-April to the end of May 2020 at the Los Gatos Mine of MINERAPLATAREAL, in Mexico. Also, Fujita Kanko Inc., which is not included in principal segments, was affected by a decline in guests at the lodges and hotels it operates.

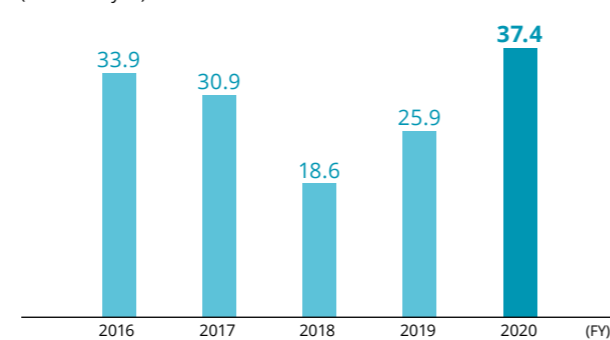
Net Sales / Operating Income to Net Sales

(Billions of yen / %)



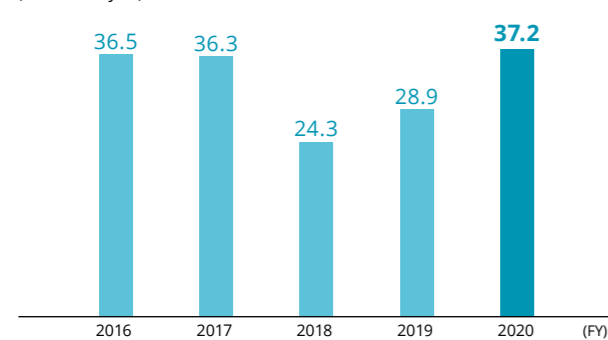
Operating Income

(Billions of yen)



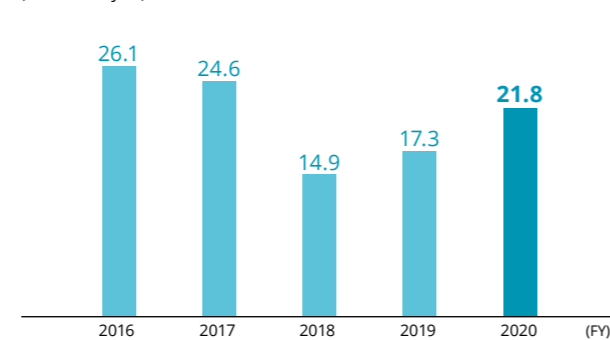
Ordinary Income

(Billions of yen)



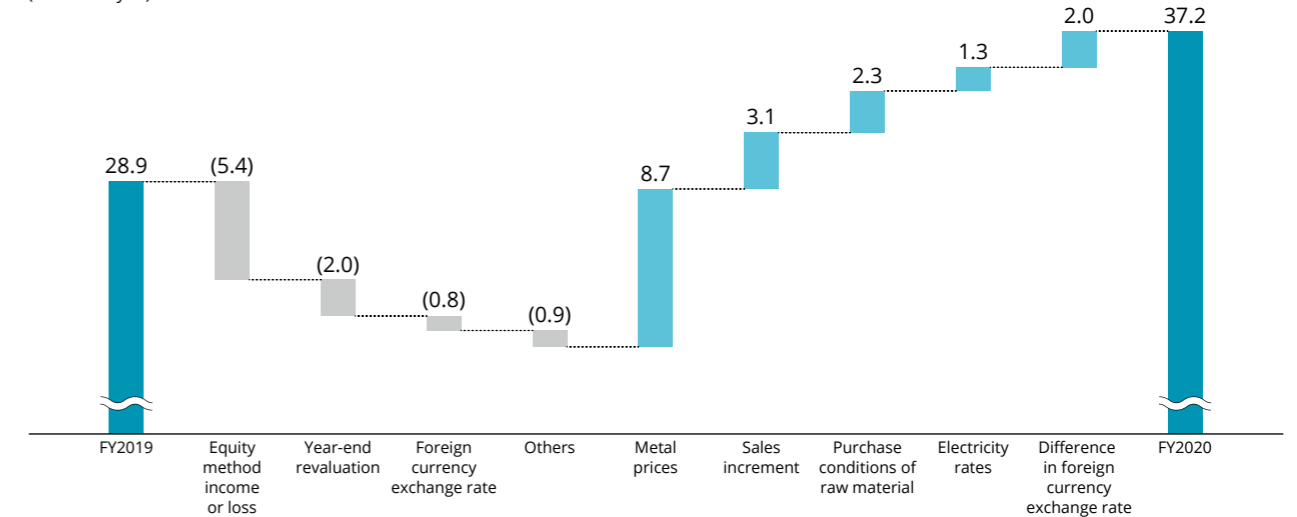
Net Income Attributable to Owners of Parent

(Billions of yen)



Factor Analysis of Ordinary Income

(Billions of yen)



Results by Segment

(Billions of yen)

	FY2019 Results			FY2020 Results			YoY Changes		
	Net Sales	Operating Income	Ordinary Income	Net Sales	Operating Income	Ordinary Income	Net Sales	Operating Income	Ordinary Income
Environmental Management & Recycling	112.1	7.2	6.9	117.6	8.4	8.6	5.4	1.2	1.7
Nonferrous Metals	227.2	10.0	12.2	282.0	20.3	25.9	54.7	10.3	13.7
Electronic Materials	98.2	1.0	2.4	151.2	2.4	3.6	53.0	1.4	1.2
Metal Processing	82.3	5.1	5.1	77.8	4.3	4.6	(4.5)	(0.7)	(0.5)
Heat Treatment	27.9	1.2	1.2	23.1	0.7	0.8	(4.8)	(0.4)	(0.4)
Others / Elimination	(62.8)	1.3	1.0	(63.9)	1.0	(6.5)	(1.0)	(0.3)	(7.5)
Total	485.1	25.9	28.9	588.0	37.4	37.2	102.8	11.4	8.2

Foreign-Exchange Rate and Metal Prices

	FY2019 Results*	FY2020 Results*
Exchange rate: (¥/\$)	108.7	106.1
Copper: (\$/t)	5,860	6,879
Zinc: (\$/t)	2,405	2,419
Indium: (\$/kg)	156	166

* Figures are the average for the full year.

Analysis of Financial Position

Assets

Total assets at the end of the fiscal year under review stood at ¥598,471 million, up ¥85,975 million compared with the end of the previous fiscal year. Total current assets were up ¥84,856 million, while total non-current assets increased ¥1,119 million.

The increase in current assets was due to such factors as a rise of ¥89,924 million in inventories, an expansion of ¥9,002 million in notes and accounts receivable – trade, and a decrease of ¥13,452 million in cash and deposits.

The increase in non-current assets is attributable to such factors as an increase of ¥7,231 million in property, plant and equipment; an increase of ¥937 million in other assets listed under intangible assets; a contraction of ¥5,825 million in long-term loans receivable; and a decrease of ¥1,214 million in other assets listed under investments and other assets.

Liabilities

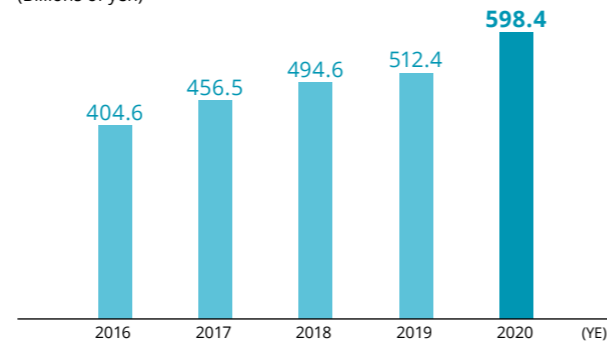
Total liabilities grew ¥67,501 million compared with the previous fiscal year-end. This was due to such factors as an increase of ¥24,809 million in borrowing precious metals, an increase of ¥20,857 million in notes and accounts payable-trade, an increase of ¥13,008 million in short-term borrowings, and an increase of ¥11,000 million in commercial paper.

Equity

Looking at total equity, net income attributable to owners of parent amounted to ¥21,824 million, but payment of cash dividends, etc., resulted in an increase in shareholders' equity of ¥17,554 million. In addition, total accumulated other comprehensive income increased ¥102 million due to such factors as an expansion in valuation difference on available-for-sale securities, and total equity was ¥18,473 million higher than the balance as of the end of the previous fiscal year. As a result, the equity to asset ratio was 44.4%.

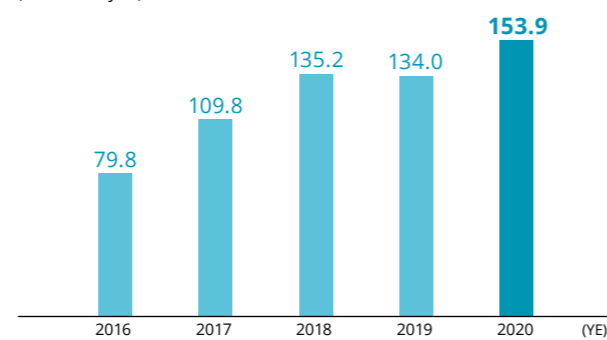
Total Assets

(Billions of yen)



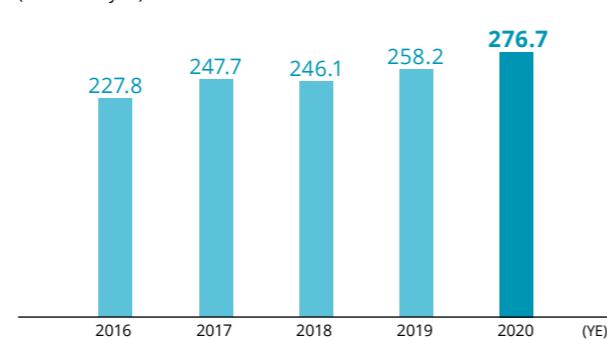
Interest-Bearing Debt

(Billions of yen)



Total Equity

(Billions of yen)



Analysis of Cash Flows

Consolidated cash and cash equivalents (hereinafter, "net cash") at the end of the consolidated fiscal year under review were down by ¥12,911 million compared with the previous fiscal year-end, to ¥17,320 million.

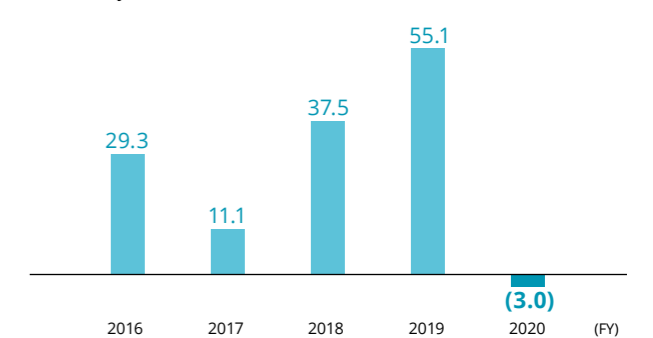
Net cash used in operating activities came to ¥3,088 million, compared with net cash provided by operating activities of ¥55,113 million in the previous fiscal year. This was due to such factors as income before income taxes of ¥38,860 million, a decrease in cash of ¥89,511 million due to an increase in inventories, an increase in cash of ¥24,809 million due to an increase in borrowing precious metals, and an increase in cash of ¥20,690 million due to an increase in trade payables.

Net cash used in investing activities was ¥22,943 million, down ¥14,869 million compared with the previous fiscal year. This was due to such factors as capital expenditures of ¥35,022 million, primarily in the Environmental Management & Recycling Business, and proceeds from sale of shares of subsidiaries and associates of ¥7,754 million.

Net cash provided by financing activities was ¥11,585 million, compared with net cash used in financing activities of ¥6,569 million in the previous fiscal year. This was due to such factors as an increase in interest-bearing debt of ¥19,824 million and cash dividends paid of ¥7,962 million.

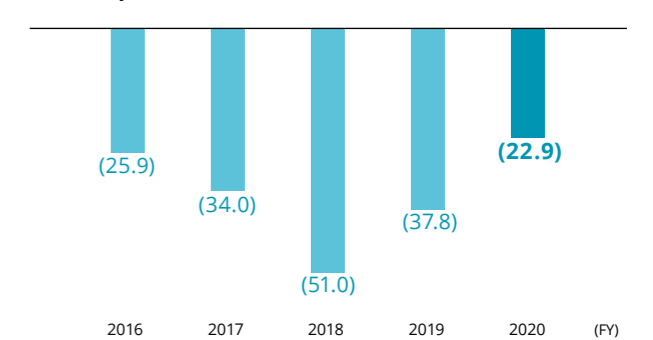
Cash Flows from Operating Activities

(Billions of yen)



Cash Flows from Investing Activities

(Billions of yen)



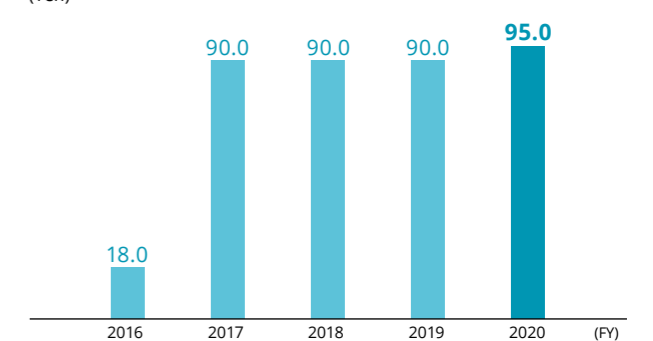
Basic Dividend Policy and Dividends Paid for the Fiscal Year under Review

DOWA views the payment of dividends to shareholders as one of its most important management issues. The Company's fundamental policy is to maintain the stable payment of dividends and, in that light, it pays a dividend commensurate with performance, having appropriated a sufficient amount of retained earnings to bolster the Group's business position and support future business development. In addition, as part of Midterm Plan 2020, we aim to increase dividends according to profit levels, maintaining a stable dividend of at least ¥90 per share.

Based on the above, with consideration for results, future demand for funds, etc., the annual dividend paid for the fiscal year under review was ¥95 per share, an increase of ¥5 per share from the previous fiscal year.

Cash Dividends

(Yen)



Note: On October 1, 2017, the Company conducted a 5-for-1 reverse stock split.

Consolidated Performance Trends

(Millions of yen)

For the years ended March 31	2010	2011	2012	2013	2014	2015	2016	2017	Midterm Plan 2020		
									2018	2019	2020*1
Financial Performance											
Net Sales	¥379,816	¥392,468	¥419,390	¥443,985	¥464,219	¥406,598	¥410,503	¥454,754	¥452,928	¥485,130	¥588,003
Cost of Sales	330,380	343,015	365,963	382,079	391,509	337,314	341,177	387,831	396,495	421,630	512,155
Selling, General and Administrative Expenses	26,511	27,443	28,863	30,111	33,616	34,216	35,335	35,975	37,761	37,544	38,393
Operating Income	22,924	22,009	24,564	31,794	39,094	35,067	33,990	30,948	18,671	25,955	37,454
Operating Income by Segment											
Environmental Management & Recycling (%)	12.22	20.34	26.37	29.86	18.80	18.01	19.50	16.06	30.46	27.76	22.58
Nonferrous Metals (%)	22.56	19.25	19.09	22.20	34.69	38.00	29.58	29.74	3.17	38.54	54.31
Electronic Materials (%)	31.16	24.95	23.58	21.12	22.55	22.89	19.36	18.17	11.66	4.09	6.60
Metal Processing (%)	23.66	20.59	19.89	16.96	14.85	14.01	20.49	23.54	33.74	19.71	11.72
Heat Treatment (%)	6.18	8.95	6.33	7.12	6.02	3.86	7.00	8.47	13.05	4.63	1.97
Others and Elimination (%)	4.21	5.92	4.74	2.74	3.09	3.24	4.06	4.01	7.92	5.27	2.82
Ordinary Income (Loss)	¥23,371	¥20,918	¥27,277	¥35,055	¥42,037	¥35,056	¥36,504	¥36,355	¥24,309	¥28,996	¥37,200
EBITDA*2	41,410	40,354	41,551	48,000	54,667	50,212	49,786	48,160	37,300	45,244	57,505
Net Income (Loss) Attributable to Owners of Parent	8,521	10,610	15,213	23,310	26,543	21,826	26,169	24,693	14,986	17,395	21,824
Capital Expenditures	17,820	15,910	18,422	16,549	17,247	22,936	26,526	24,608	24,087	37,723	37,338
Depreciation	18,486	18,344	16,987	16,205	15,572	15,145	15,796	17,212	18,628	19,288	20,050
R&D Expenses	4,266	4,623	4,604	4,651	5,320	5,594	5,670	5,380	5,888	6,076	6,177
Exchange Rate and Metal Prices											
Copper (Price Quoted, Average)	¥738,200	¥717,817	¥696,375	¥757,633	¥765,775	¥675,483	¥603,917	¥756,683	¥746,608	¥681,592	¥769,500
Zinc (Price Quoted, Average)	231,858	211,683	208,675	240,325	285,983	269,383	305,633	386,733	353,725	313,308	309,400
U.S. Dollar (Average)	85.72	79.08	83.10	100.24	109.93	120.14	108.38	110.85	110.91	108.74	106.06
Financial Position											
Equity	¥113,785	¥121,807	¥142,400	¥166,987	¥195,649	¥203,370	¥227,821	¥247,762	¥246,158	¥258,241	¥276,715
Non-Controlling Interests	6,942	7,999	8,807	8,733	8,528	8,449	8,518	8,946	8,944	10,194	11,010
Total Assets*3	340,161	319,665	349,787	358,717	379,193	364,420	404,604	456,530	494,683	512,495	598,471
Interest-Bearing Debt	138,119	117,670	107,138	99,663	86,668	81,135	79,883	109,827	135,241	134,086	153,951
Per Share** (Yen)											
Basic Net Income (Loss)	¥28.80	¥35.86	¥51.41	¥78.77	¥89.69	¥73.75	¥88.43	¥417.21	¥253.22	¥293.92	¥368.45
Fully Diluted Equity	361.18	384.55	451.41	534.75	632.30	658.66	741.06	4,035.06	4,008.03	4,191.09	4,465.44
Cash Dividends	10.00	10.00	12.00	15.00	18.00	18.00	18.00	90.00	90.00	90.00	95.00
Cash Flows											
Cash Flows from Operating Activities	¥23,955	¥31,499	¥34,970	¥30,189	¥38,345	¥45,751	¥29,389	¥11,125	¥37,555	¥55,113	¥(3,088)
Cash Flows from Investing Activities	(19,257)	(19,491)	(19,354)	(18,689)	(20,321)	(23,486)	(25,954)	(34,010)	(51,025)	(37,812)	(22,943)
Cash Flows from Financing Activities	(15,070)	(24,134)	(14,982)	(12,341)	(16,905)	(11,159)	(7,155)	24,087	15,944	(6,569)	11,585
Free Cash Flow	4,698	12,007	15,615	11,499	18,024	22,265	3,434	(22,884)	(13,470)	17,301	(26,032)
Cash and Cash Equivalents at End of Year	16,741	4,788	6,129	5,823	8,044	18,902	15,126	16,472	19,002	30,232	17,320
Ratios											
Return on Assets*5 (%)	6.97	6.34	8.15	9.90	11.39	9.43	9.49	8.44	5.11	5.76	6.70
Return on Equity*6 (%)	8.01	9.62	12.30	15.97	15.37	11.43	12.64	10.78	6.30	7.17	8.50
Operating Income (Loss) to Net Sales (%)	6.04	5.61	5.86	7.16	8.42	8.62	8.28	6.81	4.12	5.35	6.37
Equity Ratio*7 (%)	31.41	35.60	38.19	44.12	49.35	53.49	54.20	52.31	47.95	48.40	44.40
Operating Income Growth (%)	67.31	(3.99)	11.60	29.43	22.96	(10.30)	(3.07)	(8.95)	(39.67)	39.01	44.31
Interest Coverage (Times)	10.55	11.52	14.82	21.41	34.23	39.04	43.12	55.47	20.71	21.69	43.03
Debt / Equity Ratio*7 (Times)	1.29	1.03	0.80	0.63	0.46	0.42	0.36	0.46	0.57	0.54	0.58
Debt / Capacity Ratio (Times)	1.90	1.83	1.37	1.28	1.06	1.00	0.83	1.05	1.29	1.26	1.50
Return on Invested Capital*7 (%)	3.48	4.58	6.32	9.04	9.70	7.91	8.75	7.08	4.02	4.55	5.20

*1 The years stated in the table above are ended March 31. Thus, "2020" refers to the fiscal year that ran from April 1, 2020 through March 31, 2021.

*2 EBITDA is calculated by adding operating income and depreciation.

*3 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.

*4 On October 1, 2017, the Company conducted a 5-for-1 reverse stock split.

*5 Ordinary income (loss) divided by the average of total assets at the start and end of the year.

*6 Net income (loss) 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 year.

*7 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, 2021)

Company Name	Issued Share Capital (Millions of Yen)	Percentage Owned Directly or Indirectly by the Company*1 (%)	Principal Business	Companies Covered by Sections Reporting on Sustainability*2
DOWA Holdings Co., Ltd.	36,437	—	The holding company of the DOWA Group	●
87 Consolidated Subsidiaries				
Environmental Management & Recycling				
Domestic				
DOWA ECO-SYSTEM CO., LTD.	1,000	100.0	Waste treatment, soil remediation, and recycling	
ECO-SYSTEM HANAOKA CO., LTD.	300	100.0	Soil remediation and landfilling	●
ECO-SYSTEM RECYCLING CO., LTD.	300	100.0	Recycling of precious and nonferrous metals	●
Act-B Recycling Co., Ltd.	200	60.0	Recovery of discarded household appliances and personal computers	●
ECO-RECYCLE CO., LTD.	150	66.7	Recovery of discarded household appliances and personal computers	●
GREEN FILL KOSAKA CO., LTD.	100	100.0	Waste landfilling	●
ECO-SYSTEM OKAYAMA CO., LTD.	100	100.0	Industrial waste treatment, recycling of ferrous and nonferrous metals	●
ECO-SYSTEM SANYO CO., LTD.	100	100.0	Waste incineration and resource recycling	●
E & E Solutions Inc.	100	100.0	Comprehensive technological consulting in environmental management and energy	●
GEOTECHNOS CO., LTD.	100	100.0	Soil surveys and remediation projects and environmental consulting	●
OKAYAMA KOYU CO., LTD.	100	100.0	Industrial waste intermediate treatment, real estate leasing	●
AUTO RECYCLE AKITA CO., LTD.	100	70.0	Collection, scrapping, and recycling of used cars	●
BIODIESEL OKAYAMA CO., LTD.	99	100.0	Manufacture of biodiesel	●
ECO-SYSTEM CHIBA CO., LTD.	90	100.0	Waste incineration	●
MELTEC Ltd.	90	100.0	Waste treatment and metals recovery	●
MELTEC IWAKI Co.,Ltd	90	100.0	Waste treatment and metals recovery	●
ECO-SYSTEM AKITA CO., LTD.	50	100.0	Waste incineration and resource recycling	●
ECO-SYSTEM KOSAKA CO., LTD.	50	100.0	Industrial waste treatment, recycling of ferrous and nonferrous metals	●
Soso Smart Eco-Company Co., Ltd.	50	64.0	Resource recovery of non-combustible waste	●
ECO-SYSTEM JAPAN CO., LTD.	30	100.0	Sale of waste treatment and resource recycling, collection and transportation of waste	●
DOWA-TSUUN CO., LTD.	20	100.0	Vehicle transportation, forwarding, and warehousing	●
Overseas				
EASTERN SEABOARD ENVIRONMENTAL COMPLEX CO., LTD.	275 million Thai baht	100.0	Landfill of non-hazardous waste	●
BANGPOO ENVIRONMENTAL COMPLEX COMPANY LIMITED	420 million Thai baht	100.0	Incineration of hazardous and non-hazardous waste	●
WASTE MANAGEMENT SIAM LTD.	635 million Thai Baht	100.0	Sale of waste treatment, collection and transportation of waste	●
MODERN ASIA ENVIRONMENTAL HOLDINGS PTE. LTD.	1,355 thousand Singapore dollars	100.0	Incineration of hazardous waste, recycling of precious and nonferrous metals	●
PT. PRASADHA PAMUNAH LIMBAH INDUSTRI	49,578 million Indonesian rupiah	95.0	Landfilling of hazardous and non-hazardous waste	●
DOWA ENVIRONMENTAL MANAGEMENT CO., LTD.	13,200 thousand U.S. dollars	90.0	Industrial waste treatment, recycling of precious and nonferrous metals, recycling of discarded household appliances and electronic devices	●
GOLDEN DOWA ECO-SYSTEM MYANMAR COMPANY LIMITED	36,040 thousand U.S. dollars	100.0	Landfilling of hazardous and non-hazardous waste	●
Nonferrous Metals				
Domestic				
DOWA METALS & MINING CO., LTD.	1,000	100.0	Manufacturing and sale of nonferrous, precious, and rare metals	
AKITA ZINC CO., LTD.	5,000	86.0	Refining of zinc, manufacturing of sulfuric acid	●
KOSAKA SMELTING & REFINING CO., LTD.	4,700	100.0	Smelting and refining of copper and lead, recovery of precious metals	●
DMM Palmer Co., Ltd.	3,850	71.7	Nonferrous metal resource development	●
AKITA ZINC SOLUTIONS CO., LTD.	375	100.0	Processing of zinc alloy, zinc wire, and other products	●
NIPPON PGM CO., LTD.	300	60.0	Recovery of platinum group metals from spent catalysts	●
ZINC EXCEL CO., LTD.	200	100.0	Sale of zinc, cadmium, zinc alloy, zinc wire, and other products	●
AKITA ZINC RECYCLING CO., LTD.	100	100.0	Recovery of zinc from steel dust, processing of zinc secondaries	●
AKITA RECYCLE & FINEPACK CO., LTD.	40	100.0	Pretreatment of nonferrous recycling metals	●
AKITA RARE METALS CO., LTD.	20	100.0	Recovery of indium	●

Company Name	Issued Share Capital (Millions of Yen)	Percentage Owned Directly or Indirectly by the Company*1 (%)	Principal Business	Companies Covered by Sections Reporting on Sustainability*2
Overseas				
DOWA METALS & MINING ALASKA LTD.	30,600 thousand U.S. dollars	100.0	Nonferrous metal resource exploration	
NIPPON PGM AMERICA, INC.	1,000 thousand U.S. dollars	51.0	Spent catalyst shredding and sampling	●
DOWA METALS & MINING (THAILAND) CO., LTD.	520 million Thai baht	100.0	Processing and sale of zinc products	●
Nippon PGM Europe s.r.o.	22 million Czech koruna	60.0	Spent catalyst shredding and sampling	
DOWA METALS & MINING AMERICA, INC.	1,500 thousand U.S. dollars	100.0	Spent catalyst collecting and sales	
KEY METAL REFINING, LLC	388 thousand U.S. dollars	51.0	Spent catalyst collecting and sales	
Electronic Materials				
Domestic				
DOWA ELECTRONICS MATERIALS CO., LTD.	1,000	100.0	Manufacture and sale of semiconductors, electronic, and advanced fine materials	
DOWA HIGHTECH CO., LTD. (Conductive materials and battery materials)	450	100.0	Manufacture of metal compounds and chemical products	●
DOWA SEMICONDUCTOR AKITA CO., LTD.	300	100.0	Manufacture of high-purity metals, compound semiconductor wafers, and light-emitting diodes	●
DOWA IP CREATION CO., LTD.	300	70.0	Manufacture of Iron powder and Carrier powder	●
DOWA F-TEC CO., LTD.	300	100.0	Manufacture of Ferrite powder	●
DOWA ELECTRONICS MATERIALS OKAYAMA CO., LTD.	100	100.0	Manufacture of Metal powder and Copper powder	●
Metal Processing				
Domestic				
DOWA METALTECH CO., LTD.	1,000	100.0	Metal processing and metal plating	
DOWA HIGHTECH CO., LTD. (Electroplating)	450	100.0	Metal electroplating	●
DOWA METAL CO., LTD.	400	100.0	Manufacture of copper, brass, and copper alloys	●
DOWA METANIX CO., LTD.	400	90.0	Manufacture of nickel alloys, copper alloys, and electronics parts	●
HOEI SHOJI CO., LTD.	110	100.0	Processing and sale of copper strip and aluminum products	●
DOWA POWER DEVICE CO., LTD.	100	100.0	Manufacture of metal-ceramics substrates	●
NEW NIPPON BRASS CO., LTD.	100	100.0	Manufacture of brass bars and forged products	●
Overseas				
DOWA ADVANCED MATERIALS (SHANGHAI) CO., LTD.	2,500 thousand U.S. dollars	100.0	Processing and sale of copper strip products	●
DOWA METALTECH (THAILAND) CO., LTD.	475 million Thai baht	100.0	Processing and sale of copper strip products	●
DOWA NEW MATERIALS (SHANGHAI) CO., LTD.	1,000 thousand Chinese yuan	100.0	Sale of copper strip products	
Dowa Precision (Thailand) Co., Ltd.	70 million Thai baht	100.0	Processing of copper strip products	
DOWALI PRECISION CO., LTD.	8,500 thousand Taiwanese dollars	80.0	Processing and sale of copper strip products	
DOWA METALTECH MEXICO, S.A.de C.V.	328,031 thousand Mexican pesos	100.0	Metal electroplating and sales	
Heat Treatment				
Domestic				
DOWA THERMOTEC CO., LTD.	1,000	100.0	Heat treatment processing	
DOWA THERMOENGINEERING CO., LTD.	100	100.0	Design, manufacturing, and maintenance of heat treatment equipment, heat treatment processing, surface processing, and surface improvement	●
CEMM CO., LTD.	55	100.0	Heat treatment processing and surface processing	●
TONETSU KOHSAN CO., LTD.	30	100.0	Heat treatment processing	
Overseas				
KUNSHAN DOWA THERMO FURNACE CO., LTD.	21,000 thousand U.S. dollars	100.0	Design, manufacturing, and maintenance of heat treatment equipment, heat treatment processing, and surface processing	●
DOWA THT AMERICA, INC.	5,000 thousand U.S. dollars	100.0	Heat treatment processing, surface processing, maintenance of heat treatment equipment	●
Dowa Thermotech (Thailand) Co., Ltd.	270 million Thai baht	100.0	Heat treatment processing, surface processing, maintenance of heat treatment equipment	
PT. DOWA THERMOTEC INDONESIA	278,256 million Indonesian rupiah	100.0	Heat treatment processing and surface processing	●
PT. DOWA THERMOTEC FURNACES	11,666 million Indonesian rupiah	100.0	Import and sale and maintenance of heat treatment equipment	
HIGHTEMP FURNACES LTD.	90 million Indian rupees	93.3	Design, manufacturing, and maintenance of heat treatment equipment, heat treatment processing, surface processing, and processing of machine components	●*3
DOWA THERMOTEC MEXICO S.A. de C.V.	18,916 thousand U.S. dollars	100.0	Heat treatment processing, surface treatment and maintenance of heat treatment equipment	

Company Name	Issued Share Capital (Millions of Yen)	Percentage Owned Directly or Indirectly by the Company*1 (%)	Principal Business	Companies Covered by Sections Reporting on Sustainability*2
Others				
Domestic				
DOWA TECHNO ENGINEERING CO., LTD.	400	100.0	Plant construction	●
DOWA KOSAN CO., LTD.	100	100.0	Management of golf courses and real estate	
DOWA MANAGEMENT SERVICE CO., LTD.	100	100.0	Provision of general business services	
AKITA ENGINEERING CO., LTD.	95	100.0	Construction of machinery and maintenance of plants	
YOWA ENGINEERING CO., LTD.	20	100.0	Construction and maintenance of machinery, heavy weight concrete work	
DOWA TECHNOLOGY CO., LTD.	10	100.0	Technological development support, provision of analysis and evaluation services	
DOWA TECHNO RESEARCH CO., LTD.	10	100.0	Provision of analysis and evaluation services, environmental measurement	●
DOWA INTERNATIONAL CORPORATION	300 thousand U.S. dollars	100.0	Sales and back-office work, marketing	
DOWA HD EUROPE GMBH	25 thousand Euros	100.0	Sales and back-office work	
DOWA HOLDINGS (SHANGHAI) CO., LTD.	3,000 thousand U.S. dollars	100.0	Sales and back-office work	
DOWA HOLDINGS (THAILAND) CO., LTD.	30 million Thai baht	100.0	Sales and back-office work, technical support	
Three other companies				

18 Affiliates Accounted for by the Equity Method

Company Name	Issued Share Capital	Percentage Owned	Principal Business
KOWA SEIKO CO., LTD.	1,000	50.0	Industrial waste treatment, recycling of ferrous and nonferrous materials
AKAGI KOUYU CO., LTD.	99	20.0	Waste treatment
OKAYAMA RINKO CO., LTD.	98	32.7	Warehousing
ONAHAMA SMELTING & REFINING CO., LTD.	7,000	31.6	Copper smelting and refining, waste treatment
Acids Co., Ltd.	150	50.0	Sale of sulfuric acid
Cariboo Copper Corporation	9,100 thousand Canadian dollars	25.0	Mining and sale of products from mines
MINERA TIZAPA, S.A. DE C.V.	3,405 thousand U.S. dollars	39.0	Nonferrous metal resource mining
ARRENDADORA MINERA ZACAZONAPAN, S.A. DE C.V.	2,649 thousand U.S. dollars	39.0	Nonferrous metal resource mining
EXPLORACIONES Y DESARROLLOS MINEROS TIZAPA, S.A. DE C.V.	56 thousand U.S. dollars	39.0	Nonferrous metal resource mining
MINERA PLATA REAL, S. DE R.L. DE C.V.	174,102 thousand U.S. dollars	30.0	Nonferrous metal resource mining
OPERACIONES SAN JOSÉ DE PLATA, S. DE R.L. DE C.V.	97,265 thousand U.S. dollars	30.0	Nonferrous metal resource mining
SERVICIOS SAN JOSÉ DE PLATA, S. DE R.L. DE C.V.	1,317 thousand U.S. dollars	30.0	Nonferrous metal resource mining
CONSTANTINE MINING LLC.	21,345 thousand U.S. dollars	49.9	Nonferrous metal resource development
KYOTO ELEX CO., LTD.	80	49.9	Manufacture and sale of conductive pastes
TOKUYAMA-DOWA POWER MATERIALS CO., LTD.	250	35.0	Manufacture of ceramic plain substrates
JAPAN COPPER CASTING CO., LTD.	200	30.0	Manufacture and sale of copper products
FUJITA KANKO INC.*4	12,081	31.8	Lodging and hotel management, real estate agent
NIPPON ANFO MANUFACTURING Co., Ltd.	91	29.1	Manufacture and sale of industrial explosives

*1 The ratios for the percentage owned by the Company include indirect ownership by the Company.

*2 In addition to the companies stated in this table, "Companies covered by sections reporting on sustainability" includes the non-consolidated subsidiary Unekura Mining Co., Ltd., which has a high degree of involvement with the Company's operations.

*3 The Bangalore Plant, Nelamangara Plant, Gurgaon Plant, Chennai Plant, and Pune Plant are the areas of operation covered by sections reporting on sustainability.

*4 The shares of this company are listed on the Tokyo Stock Exchange.

Company Data and Stock Information (As of March 31, 2021)

Company Data	Company Name	DOWA HOLDINGS CO., LTD.
	Founded	September 18, 1884
	Incorporated	March 11, 1937
	Number of Employees	10,591 (including part-time employees)

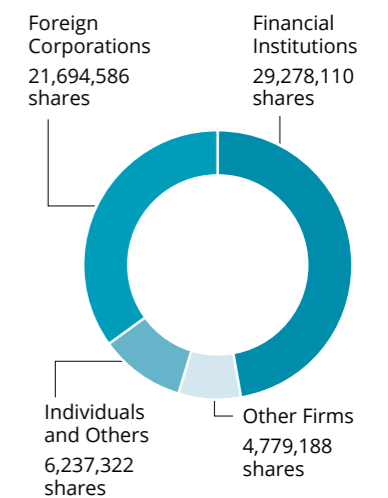
Stock Information	Authorized Shares	200,000,000 shares
	Shares Issued	61,989,206 shares
	Number of Shareholders	9,619
	Stock Listing	Common stock is listed on the Tokyo, Nagoya, and Sapporo stock exchanges and the Fukuoka Securities Exchange.
	Fiscal Year-End	March 31
	General Meeting of Shareholders	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)	13.13
Japan Trustee Services Bank, Ltd. (Trust Account)	9.92
NORTHERN TRUST CO. (AVFC) RE SILCHESTER INTERNATIONAL INVESTORS INTERNATIONAL VALUE EQUITY TRUST	6.43
NORTHERN TRUST CO. (AVFC) RE U.S. TAX EXEMPTED PENSION FUNDS	3.53
Fujita Kanko Inc.	3.12
National Mutual Insurance Federation of Agricultural Cooperatives	3.06
NORTHERN TRUST CO. (AVFC) SUB A/C NON TREATY	2.22
STATE STREET BANK AND TRUST COMPANY 505103	1.79
Mizuho Bank, Ltd.	1.60
Nippon Life Insurance Company	1.54

Note: The Company holds 1,888 thousand shares of treasury stock.

Shareholder Distribution



Financial Section of DOWA Report 2021

Please refer to "Financial Section" of *DOWA Report 2021* for detailed Fiscal information on the fiscal year ended March 31, 2021.

<https://ir.dowa.co.jp/en/ir/library/annual.html>

Inquiries

DOWA HOLDINGS CO., LTD. Corporate Strategy Dept., Public Relations & Investor Relations Sec.

Address: 14-1, Sotokanda 4-chome, Chiyoda-ku, Tokyo 101-0021, Japan

Tel.: +81-3-6847-1106

Website: https://www.dowa.co.jp/index_e.html