

2020

DOWA HOLDINGS CO., LTD.

For the year ended March 31, 2020



DOWA HOLDINGS CO., LTD.

DOWA REPORT 2020

DOWA HOLDINGS CO., LTD.

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



DOWA's Origins



The Successful Development of a Black Ore Refining Technology

Through the purchase of the Kosaka mine from the Meiji government, DOWA was established as a nonferrous metal mining and smelting company in 1884. At the end of the nineteenth century, the Company developed a technology for refining a complex sulfide ore known as “black ore” and began the effective utilization of non-ferrous metal resources, which led to the Company’s present-day operations.



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 technologies and materials that underpin society.



FUTURE PROSPECTS

Helping Build a Sustainable Future

PRESIDENT'S MESSAGE



SEKIGUCHI Akira
President and Representative Director

With reaffirmed confidence in the soundness of our existing approach, we will advance it even more effectively and thereby achieve medium- to long-term growth.

SEKIGUCHI Akira

President and Representative Director

COVID-19 Countermeasures

On behalf of the DOWA Group, please allow me to begin by expressing our profound sympathy with those who have lost their lives as a result of COVID-19. Furthermore, our thoughts are with those suffering from the disease. We would also like to express our deep respect for and gratitude to medical professionals, essential workers, and members of the public for their selfless frontline efforts.

With respect to the COVID-19 pandemic, I will now provide an overview of the DOWA Group's countermeasures. At the time of the initial outbreak of COVID-19 in China, we enabled our employees working in the country and their families to return immediately to Japan. Further, as the situation in Japan deteriorated, we promptly canceled events that we hold every February and March in Akita and Okayama prefectures for local residents. Regarding our organizational response to the pandemic, at the beginning of March

we launched an emergency task force headed by the director in charge of occupational health.

This task force has been ascertaining the impact of COVID-19 at the Group's bases in Japan and overseas, exchanging information with other companies, and implementing measures to prevent the spread of infection at operating sites. When the Japanese government declared a state of emergency in April, the task force provided all Group employees with detailed information on countermeasures, which included the prohibition, in principle, of domestic and overseas business trips and the holding of all in-house meetings online.

Directly after the state of emergency declaration, we lacked sufficient capabilities for telecommuting. Therefore, while establishing conditions to facilitate telecommuting, we staggered working hours and took measures to ensure our employees avoided crowded places, close-contact settings, and confined and enclosed spaces. After the lifting of the state of emergency in May,



The DOWA Holdings head office in September 2020, after the lifting of the state of emergency declaration in Japan

we eased certain restrictions, explored new work-styles, and devised additional countermeasures. For example, we have limited the number of participants in and introduced simultaneous web conferencing to monthly meetings of the Committee of the Operating Officers, attended by the senior management teams of respective business divisions.

The pandemic primarily affected our automotive businesses, which saw clients reduce or halt automotive production. At present, however, the trajectory of automotive demand is one of robust recovery, which is mitigating the pandemic's impact.

Meanwhile, we have been advancing initiatives in accordance with Midterm Plan 2020, which identifies the automotive, information and communication, environment and energy, and healthcare fields as growth markets. Although, as I mentioned, the market in the automotive field has been temporarily affected by the pandemic, markets in the other three fields are expanding, reaffirming my confidence in their capacity for growth and their burgeoning potential. If we heighten the quality and cost-competitiveness of the materials, components, and technical services that we offer in these priority fields, our growth will outpace that of the markets therein.

Given that all of the DOWA Group's businesses are directly engaged in the provision of basic materials required for the realization of sustainable,

enriched lifestyles, the Group will be able to adapt its strategies so that they cater to society's needs during the pandemic. Certain business divisions will have to make minor adjustments to reflect changes in their target markets and fields, but this is unlikely to entail major business restructuring.

Impact on Supply Chains

The principal production bases of our five business divisions are in Japan. Fortunately, thanks to sound anti-infection measures, the pandemic has had almost no effect on supply chains.

Currently, we have overseas production bases in China, Thailand, Indonesia, Myanmar, Singapore, India, the United States, Mexico, and other countries. The authorities in each country imposed different restrictions, and some of our bases had no option but to temporarily suspend operations due to lockdowns. Although bases conducted operations in accordance with the restrictions of respective countries, the effect on the Group's overall business results was not particularly large. With all overseas production bases having restarted operations as of September 2020, the impact of the pandemic on the DOWA Group as a whole was during the six-month period from March through August.

The Company's five core businesses are engaged in global operations. However, rather than adopting an approach based on monopolar concentration, whereby gigantic hubs are established at single locations that supply markets worldwide, our method is to establish bases in each region that mainly supply materials, components, or services to local clients. In other words, while sustained growth in the global market is the overriding goal of our businesses, each overseas base views the domestic market as its principal battleground. Accordingly, we have invested in each region in light of its characteristics and the scale of our operations. This method of business development has produced risk dispersion benefits that heighten the Group's resilience to the type of business environment created by the COVID-19 pandemic. In this way, the experience of the COVID-19 crisis has deepened our confidence regarding how best to approach business development—emboldening us to advance existing initiatives even more effectively.

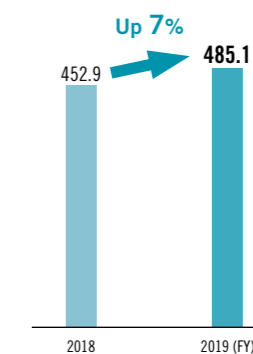
Business Conditions in Fiscal 2019

In fiscal 2019, ended March 31, 2020, we continued steadily implementing a range of initiatives in accordance with the basic policies of Midterm Plan 2020, which calls on us to expand businesses in growth markets and increase the competitiveness of existing businesses.

As a result, we grew revenues and profits across the board, posting year-on-year increases of 7% in consolidated net sales, to ¥485.1 billion; 39% in consolidated operating income, to ¥25.9 billion; 19% in consolidated ordinary income, to ¥28.9 billion; and 16% in net income attributable to owners of the parent, to ¥17.3 billion. Profits rose because a rise in precious metal prices,

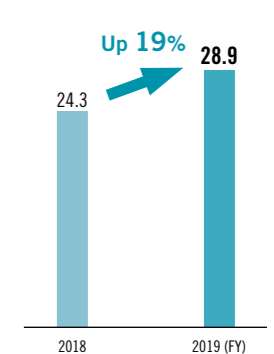
Net Sales

(Billions of yen)



Ordinary Income

(Billions of yen)



higher waste treatment unit prices in Japan, a pickup in demand for Silver powder, the benefit of improved purchasing conditions for zinc raw materials, and other positive factors outweighed such negative factors as a decline in the profits of affiliates accounted for by the equity method and lackluster demand for automotive components.

Extension of Midterm Plan 2020

On August 7, 2020, we announced a one-year extension to Midterm Plan 2020 based on the belief that forecasting demand for our products would become difficult due to such factors as the effect of the pandemic.

In fiscal 2019, we largely completed preparations for the plan's measures, and the intention was to reap the benefits in fiscal 2020. However, we rescheduled certain overseas projects owing to physical impediments resulting from the pandemic, such as delays in transporting equipment or dispatching technical personnel to the overseas regions in question. Moreover, demand for some products was sluggish. Particularly with respect to demand trends, there was a need for careful analysis of fluctuations going forward.

While at the moment demand is expected to stay on a modest recovery track, we realized that it

could become necessary not only to reexamine the scales of markets and ascertain whether demand was likely to recover to the levels envisioned when preparing the plan in 2017 but also to revise the numerical targets themselves. Therefore, we decided to extend the plan by one year because—rather than blindly adhering to the initial plan and hastily moving on to the next one—a steadfast review of the plan that includes the aforementioned careful analysis of demand trends is important for stable growth over the medium to long term.

Further, in relation to Midterm Plan 2020, I have mainly been focusing attention on the Los Gatos Mine, our largest investment. Plans called for an investment of approximately ¥30.0 billion to develop the mine, which is in Mexico. Thanks to the cooperation of our joint venture partner

and a favorable relationship with the local community, the development project was able to be completed largely on time and on budget, starting up production in July 2019. In 2020, the mine suspended operations in April but was able to restart them at the beginning of June. Moreover, since July metal prices have been recovering. At the moment, we are just relieved that the mine has gotten off to a good start.

A Measures-Focused Medium-Term Plan

With the aim of sustaining the growth of its businesses, the DOWA Group's medium-term business plan places emphasis on the content of measures to be implemented. For example,

under the plan we are concentrating on which measures we should take when making forays into new markets. Further, we are focusing on how to differentiate ourselves from competitors and grow market shares. If the measures we implement enable us to reach all of our numerical targets, that is excellent. Sometimes, however, we only achieve certain targets. As the significant effect of exchange rates and metal prices on our business results is unavoidable, we believe that emphasizing the content of measures when setting targets makes sense. We set numerical targets as a way of gauging the benefits of measures, but rather than only paying attention to these targets, I urge stakeholders to focus on the types of measures that the five business divisions are advancing for medium- to long-term growth.

The Progress of Core Businesses

With respect to waste treatment, in addition to the reduction and detoxification of hazardous waste, recycling initiatives are being seen as increasingly important. In response, the Environmental Management & Recycling Business has made the recycling of lithium-ion batteries a new focus of efforts. The Group has already established commercial operations for the detoxification of used lithium-ion batteries and scrap arising from lithium-ion battery manufacturing processes. We have established a safe, highly economic process by utilizing a heat treatment process that is used in the commercial operations of our industrial waste incinerators. Further, we have completed proving tests of a process for recovering resources from detoxified materials, and we are currently accumulating know-how at facilities engaged in commercial operations. With

a market for lithium-ion battery recycling expected to take shape in the near future, we are at the stage of building an original recycling model that will put us in a strong position when the market is established.

In addition, the melting and recycling business increased the capacity of its two bases, which are in Tochigi and Fukushima prefectures, respectively. We aim to increase treatment volumes even further by proceeding with a plan to construct facilities for the pretreatment of raw materials and to enhance treatment efficiency. Also, with a view to expanding the overseas businesses, we are conducting in-depth analysis of the particular waste treatment and recycling needs of each country and investing resources in markets where we can take advantage of our expertise.

Meanwhile, the Nonferrous Metals Business has stopped pursuing scale and is instead concentrating efforts on a strengthening of the competitiveness of the zinc smelting business and on smelting that recovers precious metals from recyclable raw materials. As the precious metals and copper smelting business has switched entirely to recyclable raw materials, it boasts gold and silver production ratios far superior to those of other companies' smelting operations. Further, the DOWA Group's platinum group metals business, which uses superior original technologies to recover platinum group metals from spent catalysts, is the only business of its kind in Japan and enjoys a 30% share of the global market, making the business an international leader in the field. As a field, spent catalysts have potential for further growth. In fiscal 2019, we reached Midterm Plan 2020's target of collecting and treating 1,000 tons of spent catalysts per month ahead of schedule. Going forward, we will increase collection bases overseas and improve treatment technologies so that we consistently surpass 1,000



The Los Gatos Mine

tons per month, thereby boosting profitability.

As for the Electronic Materials Business, the business results of Silver powder for solar panels remain extremely favorable. The Group has sought differentiation by developing high-performance Silver powder that cater to client needs and by establishing capabilities for the stable supply of these products in large volumes. I believe favorable evaluation of our commitment and capabilities has enabled us to keep a large share of the market for these products. An increase in demand for solar panels is forecast, and we will maintain our current market share and accelerate growth.

Turning to LEDs, conditions in this field are challenging as LEDs come to the end of their life cycles due to changes in smartphone models. That said, the short-wavelength infrared LEDs that we are currently developing for next-generation devices have been well received by clients. Consequently, we believe that we will be able to create highly promising finished products. In the LED field, we will maintain the pace of our quality improvement and development efforts and move forward proactively to realize the inclusion of our short-wavelength infrared LEDs in leading-edge devices ahead of other companies.

The Metal Processing Business will meet client needs by anticipating trends in the automotive market and developing products that are thinner, stronger, and have greater bending workability.

Due to the COVID-19 pandemic, the automotive market began flagging in February 2020, but it has been mounting a rapid recovery recently. While the speed of recovery varies depending on the company, automotive manufacturers have not shown any sign of wavering from the pursuit of the strategic goals they had prior to the emergence of the pandemic. Further, automotive manufacturers' overriding goal of

realizing connected, autonomous, shared, and electric (CASE) automobiles—which are set to revolutionize the automotive industry—is unlikely to change significantly, even though the pandemic may affect the emergence of “shared” automobiles. Accordingly, the DOWA Group's strategy of supplying advanced automotive components will also remain unchanged. For this reason, we have been augmenting processes that were creating bottlenecks in our facilities' production of high-performance components. These measures are progressing as planned, and once they have heightened our manufacturing capabilities, we will be ready to advance with the market when it begins moving forward.

Unfortunately, the Heat Treatment Business was affected by lower automotive unit production. In 2020, the Group experienced a drop in demand between February and June. Since July, however, demand has been picking up and is in fact recovering more quickly than expected. In the current fiscal year, this core business will record a year-on-year decline in profits but should be able to avoid incurring a loss.

ESG Initiatives

Since our establishment, we have viewed the provision of solutions that address environmental, social, and governance (ESG) issues as a central task of our business activities. Also, we fully understand that in the current era companies must take measures focused on climate change, energy saving, and other environmental issues. As I mentioned, we have extended Midterm Plan 2020 by one year. In the meantime, we are reviewing and preparing to redefine the status of our five core businesses in terms of their engagement with ESG issues. Moreover, the preparation

of a new medium-term plan that clearly shows how measures in each core business relate to ESG issues will heighten employees' motivation.

As for corporate governance, our businesses and measures are making good progress, and we will continue evolving and enhancing measures with our sights set on an ideal form of corporate governance that continues to underpin growth going forward.

Further, we will continue our endorsement of the United Nations Global Compact, which we have been participating in since 2009. In cooperation with our suppliers and clients, we will strengthen corporate social responsibility measures throughout supply chains.

To Our Shareholders and Investors

The COVID-19 pandemic has made the future uncertain. As I stated earlier, however, we are of

the opinion that major changes to the strategies that we have been pursuing are not necessary. Also, as many of our businesses perform extremely important roles in society, our pursuit of appropriate profits is in itself beneficial to society. With this in mind, we will continue steadily implementing the measures of Midterm Plan 2020, thereby forging ahead toward the realization of a sustainable society.

As we move forward, I would like to ask all of our shareholders and investors for their continued support.

September 2020



SEKIGUCHI Akira

President and Representative Director



Corporate Mission

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

Based on technologies and experience accumulated through the mining and smelting business, the DOWA Group operates unique, recycling-oriented businesses ranging from the production of metals and the manufacturing of high-value-added materials to the recycling of waste.

• **The Scope of Coverage**

The companies included in the section "Subsidiaries and Affiliates" on page 98 to page 100

• **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), and the Guidance for Collaborative Value Creation, published by the Ministry of Economy, Trade and Industry

DOWA's Goals

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COVER PHOTO
Built in 1905 in the town of Kosaka in Akita Prefecture, the Kosaka Mine Office was gifted to the town in 1997 for use as a sightseeing attraction, and was designated a nationally important cultural property in 2002. The building features a beautiful renaissance-style exterior, and the balcony's latticework design incorporates the former name of the Company.

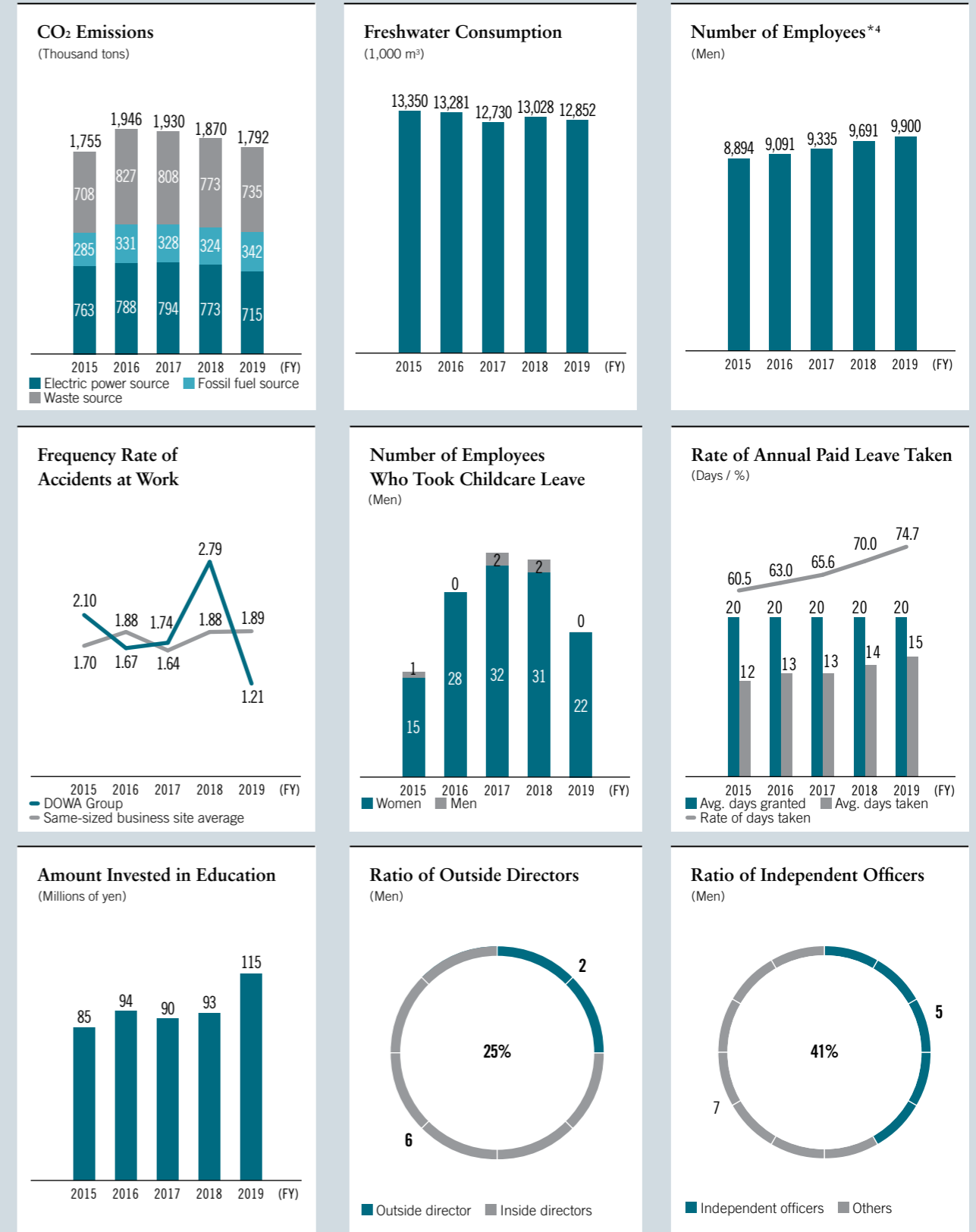
Financial and Non-Financial Highlights

Financial Highlights*1



*1 The years stated in the table are ended March 31. Thus, "2019" refers to the fiscal year that ran from April 1, 2019 through March 31, 2020.
 *2 Net income attributable to owners of the 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

Non-Financial Information



*3 Ordinary income divided by the average of total assets over the course of the fiscal year
 *4 Figures for the entire Group, including part-time employees

DOWA'S HISTORY:

Adapting to Change



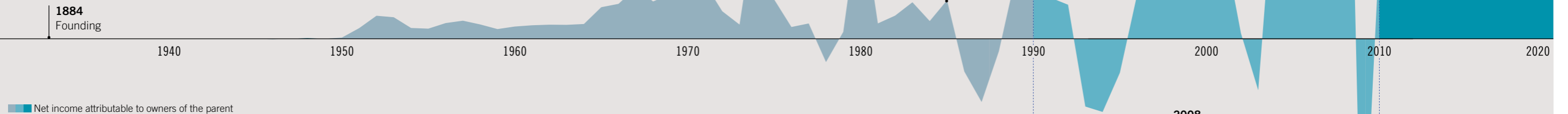
Since its founding in 1884, the DOWA Group has worked in the field of basic materials to support the economic development of Japan. Over the course of its more than 130-year history, the Group has transformed its business and improved and developed its corporate structure while being subject to the variety 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.

1884-1989

Phase 1

Evolving Beyond a Mining Business

The Company was established with the purchase of the Kosaka mine in Akita Prefecture from the 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.



Business Transition

1884 Nonferrous Metals Business

1965 Electronic Materials Business

1919 Metal Processing Business

1958 Heat Treatment Business

1977 Environmental Management & Recycling Business

1990-2009

Phase 2

Diversification and Corporate Structure Reform

□ P.16

2010-

Phase 3

Stabilization of Profits and Strengthening of Earnings Power

□ P.17

1990–2009

Phase 2

Diversification and Corporate Structure Reform

Diversification

Upon having to change our 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 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 current core businesses, they did not serve to drastically improve profit levels. 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

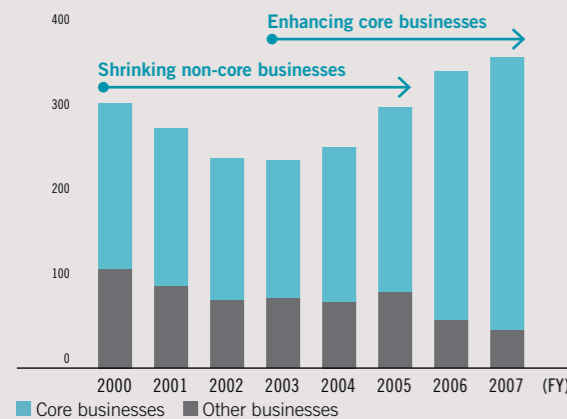
cultivated to date and showcase our competitiveness going forward. Moreover, asset efficiency improved greatly as we simultaneously expanded profits and reduced interest-bearing debt by cultivating highly profitable businesses.

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.

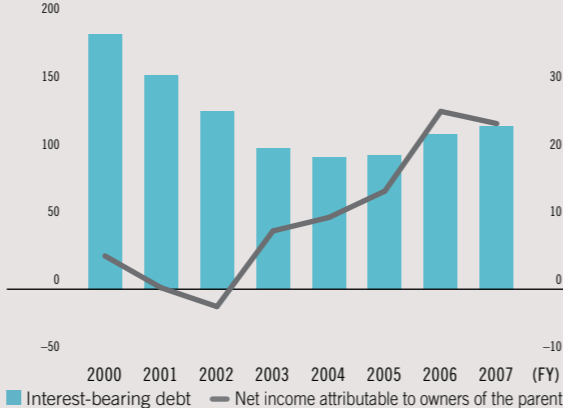
Total Assets

(Billions of yen)



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

(Billions of yen)



2010–

Phase 3

Stabilization of Profits and Strengthening of Earnings Power

Stabilization of Profits and Strengthening of Earnings Power

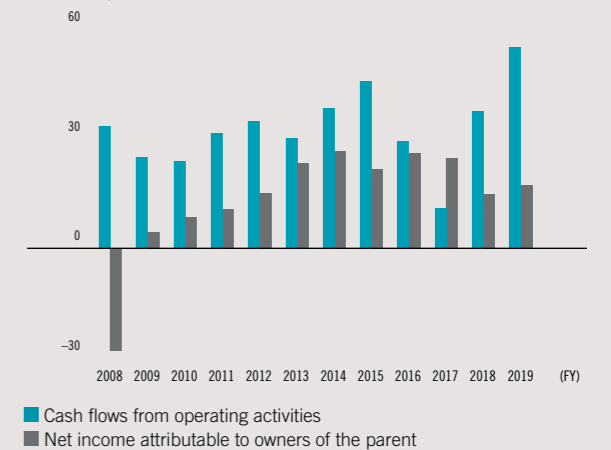
Metal prices continued to fall in the aftermath of the 2008 global financial crisis as the yen continued its sharp rise. The Company, which had previously benefited from booming metal prices, posted a large deficit due to the decline in domestic prices of nonferrous metals and valuation losses on inventories. 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 after 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 reinvest in our core businesses. The effect of these efforts gradually bore fruit, and we achieved record high profits in fiscal 2014.

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

(Billions of yen)



Accumulation of Strengths and Building Up of Management Capital

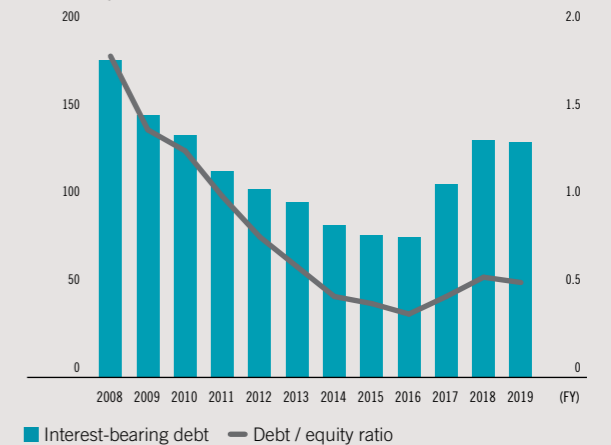
Since our founding and across the course of our history, we have overcome various difficulties by transforming our business and both developing and improving our corporate structure. Presently, we have built a smelting and recycling complex to operate a business that combines proper waste treatment and 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 a 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.

Interest-Bearing Debt, Debt, Equity Ratio

(Billions of yen / Times)



SPECIAL FEATURE

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

Until now, DOWA has addressed social issues by conducting corporate activities in accordance with its Corporate Mission, which calls on the Company helps to create an affluent, recycling-oriented society through its business activities worldwide. Recent years, however, have seen marked changes in society's expectations. To meet these expectations, we revised our Corporate Mission, Vision, Values, and Code of Conduct based on a medium- to long-term viewpoint, announcing these revisions to the core guidelines of our corporate activities in November 2020. By embodying the guidelines in its advancement of corporate activities, the Company will tirelessly contribute to the creation of a reassuring, sustainable society.

Revision Process

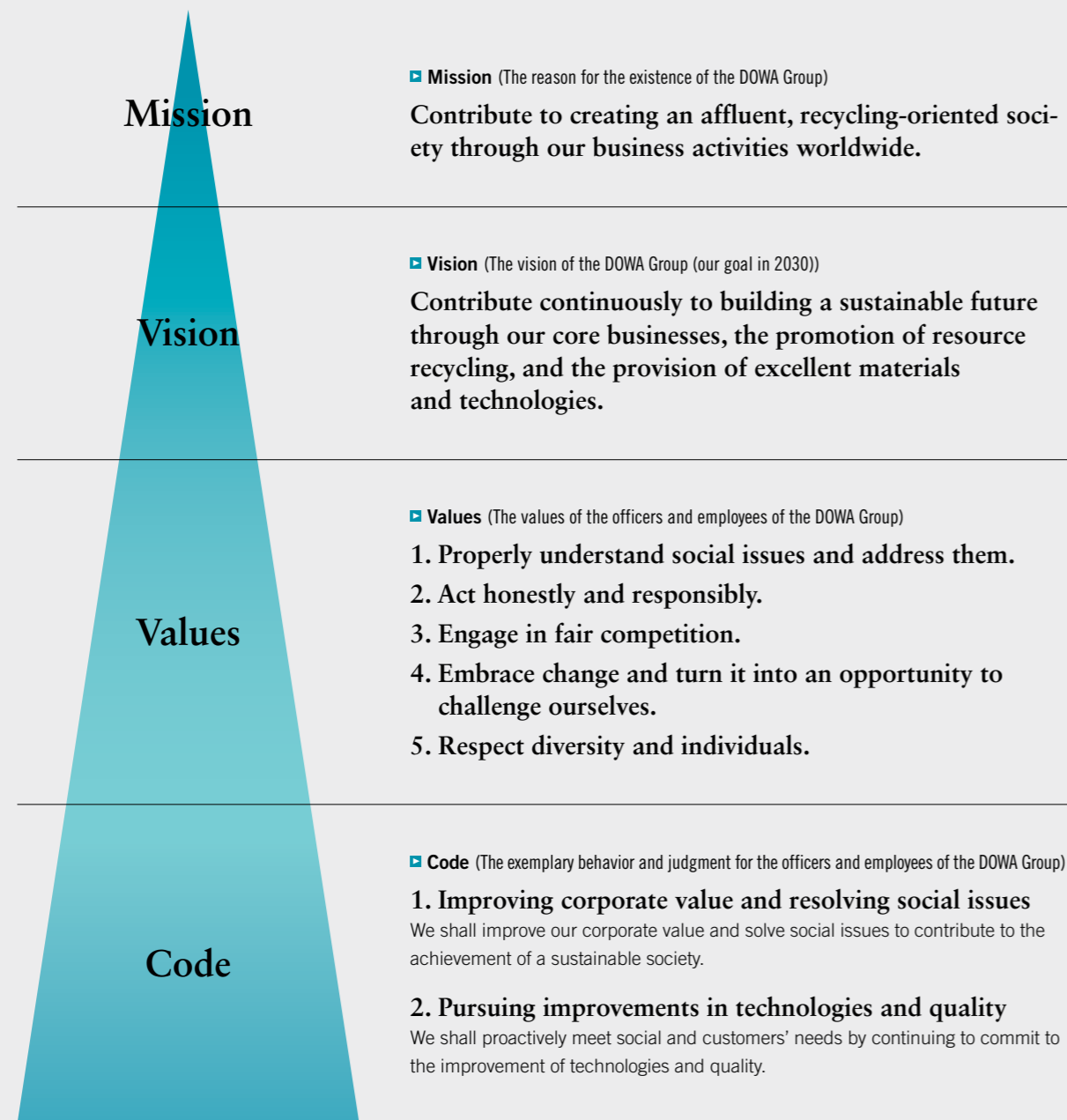


In February 2020, we formed a project, mainly comprising members of the Strategic Planning & Public Relations Department, and began revising our core guidelines.

In updating the guidelines, the team referred to a range of external guidelines, such as the United Nations Global Compact, the Sustainable Development Goals (SDGs), and the Charter of Corporate Behavior of the Keidanren (the Japan Business Federation). Moreover, we reflected the needs of respective stakeholders and took into account our history as well as the corporate culture that we have developed.

After being reviewed by inside officers and outside directors, the revised guidelines were approved by the Company's Board of Directors and announced.

Revising Our Corporate Mission, Vision, Values, and Code of Conduct



3. Promoting occupational health and safety

We shall act with full recognition of "safety first" and strive to prevent occupational accidents and injuries. We shall also maintain and improve the working environment in order to safeguard the health and safety of all people involved in our business activities.

4. Reducing environmental loads

We shall strive to reduce the environmental impact of our business activities. Moreover, all officers and employees shall be united in promoting the reduction of greenhouse gas (GHG) emissions and addressing biodiversity, among other initiatives. We shall proactively disclose relevant information.

5. Implementing governance practices

We aim to create an open and transparent organization by establishing and operating a framework that brings discipline to our business activities with high ethical standards. Moreover, 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.

6. Complying with laws, regulations, rules, and procedures

We comply with laws, regulations, rules, and procedures. We shall engage in fair competition, fair transactions, and responsible procurement activities. We shall block all relations with antisocial forces.

7. Adopting comprehensive risk management

We shall take steps to ensure we are prepared for large-scale disasters, while practicing risk management and crisis management. We shall also strictly control information assets and intellectual property, including management information and personal information.

8. Changing, taking on challenges, and growing

We shall transform ourselves by focusing on changes in society and learning humbly, while placing value on our own history. Moreover, we shall maintain our corporate culture of quickly and boldly taking on challenges and continuing to grow. We shall support the autonomous growth of individuals through the delegation of authority and the provision of quality education.

9. Respecting individuals

We respect the rights of all people and shall avoid discrimination on any grounds, such as race, age, gender, gender identity, sexual orientation, physical characteristics, disability, ethnicity, nationality, birthplace, religion, political affiliation, group activity, marital status, pregnancy, and family situation. Moreover, we shall never engage in any unlawful or unreasonable act, such as forced labor including child labor, inhumane treatment, and harassment.

10. Encouraging teamwork

We shall trust each other and promote teamwork in order to achieve maximum results. We shall remain a free and open organization that enriches communication.

11. Engaging in constructive dialogues with all stakeholders

We shall disclose information in a timely, appropriate, and fair manner to all stakeholders, including shareholders, customers, partner companies, creditors, local communities, administrative agencies, and employees, and conduct constructive dialogues with them.

12. Contributing to local communities

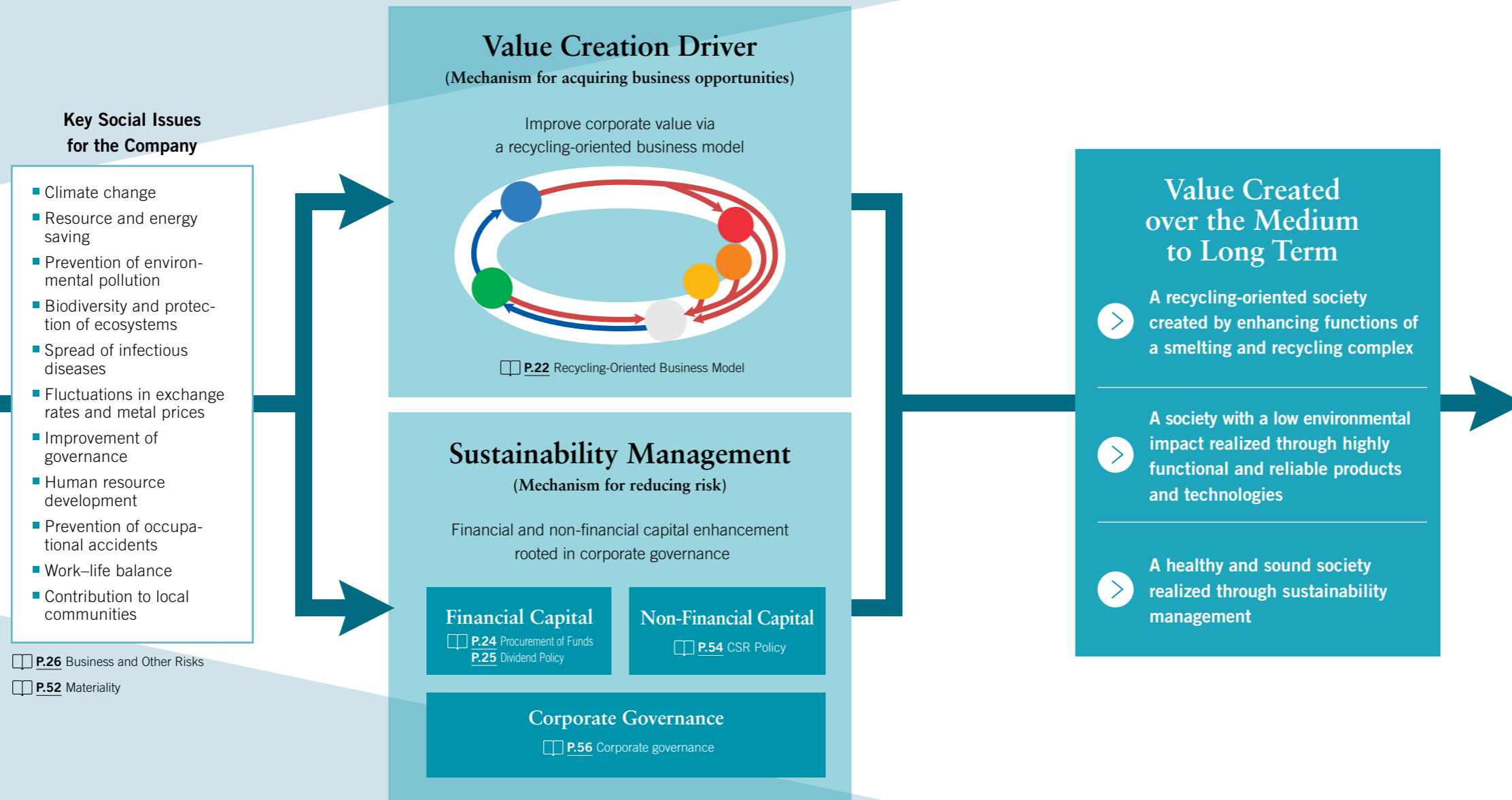
We are aware that we are a member of local communities and shall engage in business activities with due attention to corporate social responsibility (CSR). Moreover, we shall contribute to community development by proactively promoting social contribution activities in line with regional characteristics. We shall also strive to promote education, sports, and culture and protect cultural assets.

DOWA'S VALUE CREATION

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.”



Realization of 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.



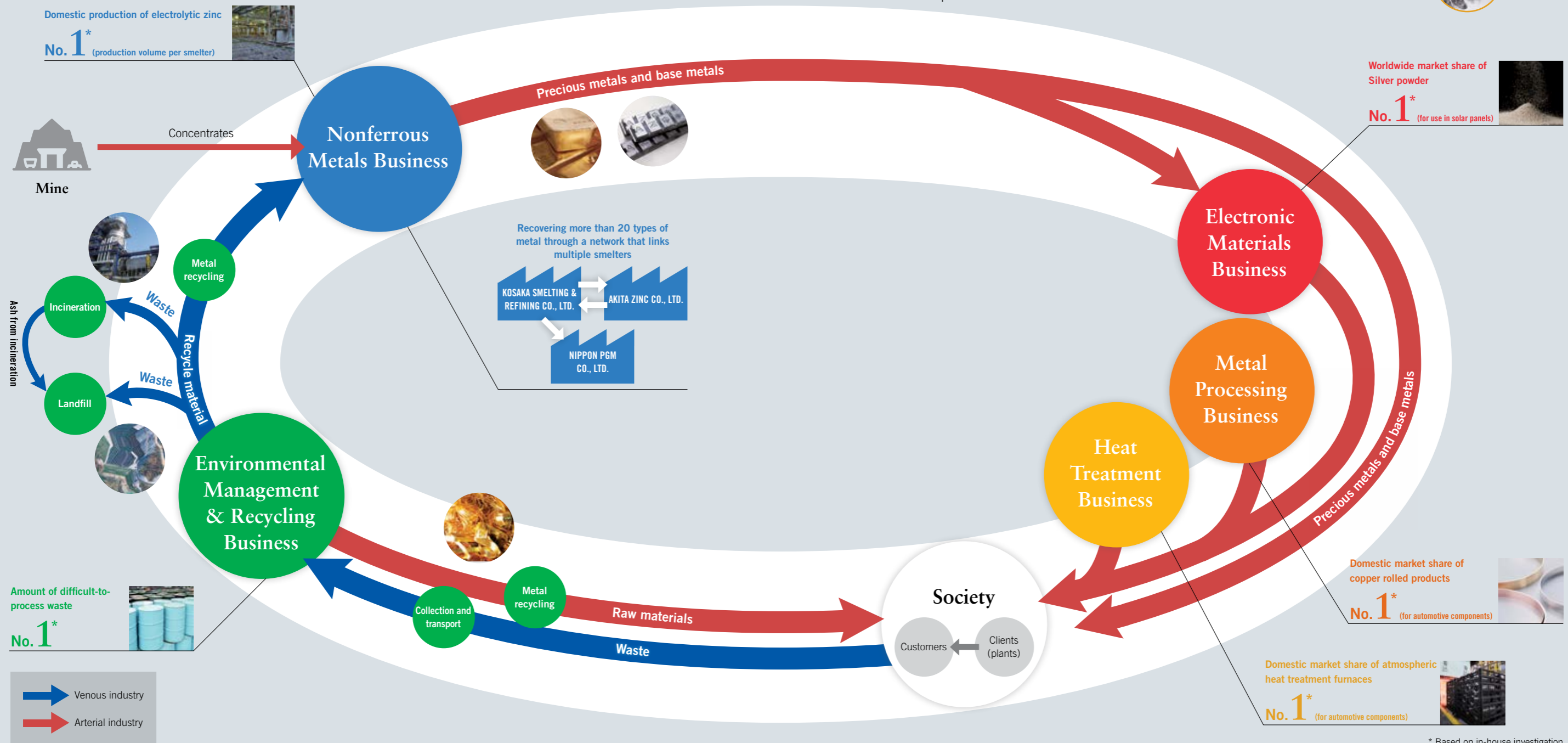
Recycling-Oriented Business Model

DOWA's Strength

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.



DOWA's Strength

Development and Manufacture of High-Value-Added Materials

The Electronic Materials Business, Metal Processing Business, and Heat Treatment Business develop and manufacture high-value-added materials primarily composed of metal.

Utilizing our abundant knowledge and high technological capabilities in fields such as semiconductors, conductive materials, copper rolled products, and surface heat treatment, we develop and manufacture highly functional materials and provide services in markets with rapid technological innovation including automobiles, smartphones, and solar panels.



Worldwide market share of Silver powder
No. 1*
(for use in solar panels)

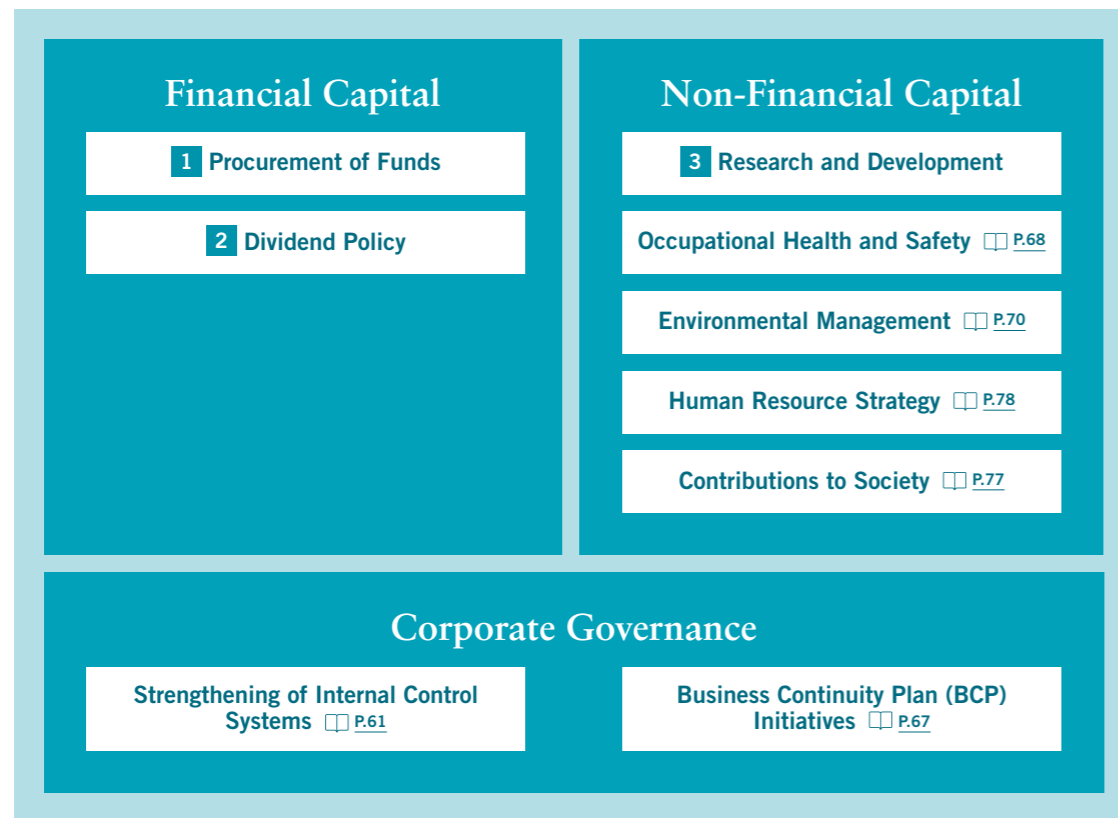
Domestic market share of copper rolled products
No. 1*
(for automotive components)

Domestic market share of atmospheric heat treatment furnaces
No. 1*
(for automotive components)

* Based on in-house investigation

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

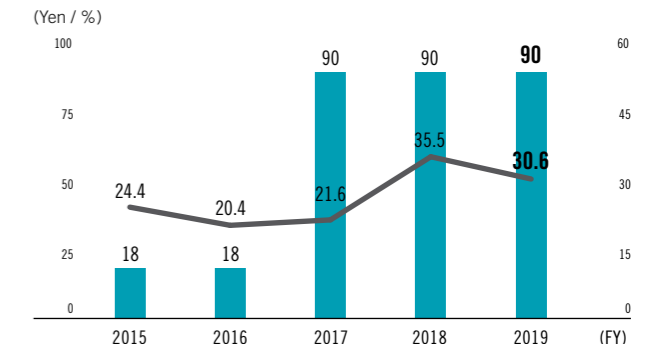
have concluded commitment line agreements with multiple financial institutions. Moreover, we issue short-term corporate bonds in the form of electronic commercial paper up to a limit of ¥35.0 billion. To secure flexible long-term funding, we have registered for the issuance of ¥30.0 billion in corporate bonds between March 30, 2019 and March 29, 2021. 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 per share.

Based on the above, the annual dividend paid for the fiscal year under review was ¥90 per share, the same amount as in the previous fiscal year.

Basic Net Income per Share / Cash Dividends



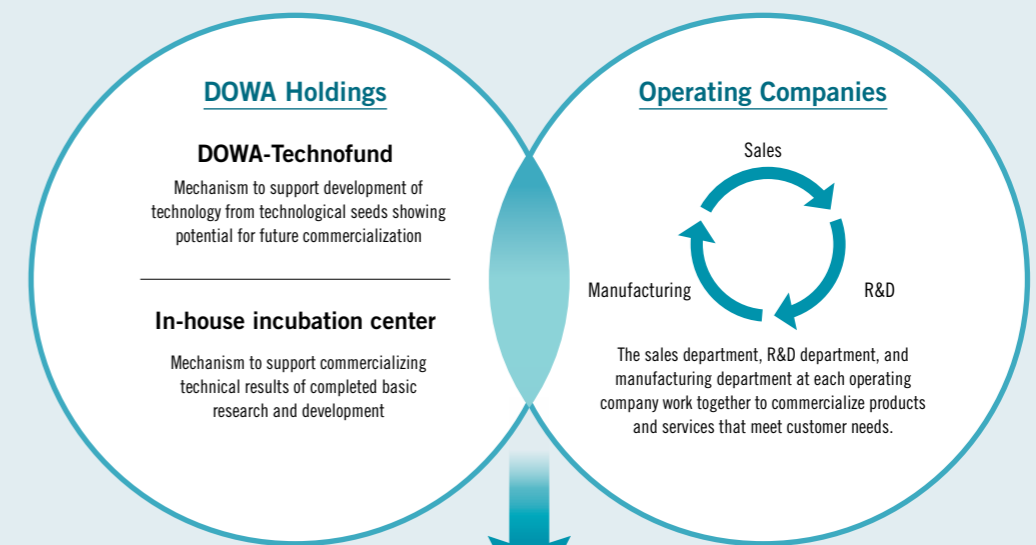
Note: On October 1, 2017, the Company conducted a 5-for-1 reverse stock split.

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.

Research and Development System



Create new products and services and strengthen competitive advantage

Business and Other Risks

The DOWA Group faces a variety of risks such as those described below that could potentially and adversely impact its operating results, stock price, and financial position. We strive to stabilize our financial results and position by responding to each risk in a timely and appropriate manner.

1. Economic Fluctuation Risks and Risks Related to Changes in Industrial Structure

Details	Response
Fluctuations in major markets, changes in industrial structure and accompanying fluctuations in demand	<ul style="list-style-type: none"> Mitigate risks related to economic fluctuations and changes in industrial structure by having multiple businesses

Major market fluctuations with potential to affect core businesses

Environmental Management & Recycling Business

- Fluctuations in volume of waste generated due to changes in production of companies in Japan and Southeast Asia
- Fluctuations in global production of discarded electronic circuit boards and other recycled materials containing valuable metals

Nonferrous Metals Business

- Fluctuations in procurement conditions for smelting of raw materials due to changes in mine operational status
- Fluctuations in the amount and ratio of valuable metals and impurities in raw materials used in smelting, such as ores or discarded electronic circuit boards

Electronic Materials Business

- Fluctuations in the global market and changes in the industrial structure for information and communication equipment and solar panels

Metal Processing Business

- Fluctuations in the global market and changes in the industrial structure for automobiles and information and communication equipment

Heat Treatment Business

- Economic fluctuations in the global automobile market and changes in the industrial structure

2. Price Fluctuation Risks

Fluctuations in global metal markets and foreign exchange rates	<ul style="list-style-type: none"> Avoid and reduce effects of price fluctuation risks during risk periods through measures that include nonferrous metal commodity forward contracts and foreign exchange contracts
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3. Public Regulation Risks

Legal regulations put in place that cannot be predicted at the present time	<ul style="list-style-type: none"> Protect the rights of the DOWA Group through legal means
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4. Operational Risks

Natural disasters, power outages, accidents, or infectious diseases leading to difficulty in maintaining operations as planned and causing a significant drop in production capacity	<ul style="list-style-type: none"> Develop a business continuity plan (BCP) for natural disasters and emergency situations Prevent accidents by formulating standardized rules for conceptualization, overall design, and detailed design stages for major construction projects Implement safety guidance and carry out equipment inspections at major business sites Establish a system for sharing information on safety and operations
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5. Environmental Risks

Occurrence of environmental pollution	<ul style="list-style-type: none"> Develop environmental management systems at major domestic and overseas plants Monitor impact of activities on air, water, soil, etc., utilizing internal standards stricter than those put forth in environment-related laws and regulations Conduct periodic inspection of suspended or closed mines and related facilities and prevent environmental pollution stemming from mine wastewater, depression, landslides, and other mine-related damage
Revisions to environment-related laws and regulations	

6. Risks Related to Quality

Incidents of serious quality defects or abnormalities	<ul style="list-style-type: none"> Obtain ISO 9001 certification at major manufacturing plants Maintain thorough compliance with the quality assurance guidelines established by the Japan Mining Industry Association and other groups Ensure quality of procured products and prevent the occurrence of quality defects and abnormalities through supplier surveys and audits
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7. Financial Risks

Fluctuations in the stock prices of cross-shareholdings	<ul style="list-style-type: none"> Regularly verify the suitability of holding shares at meetings of the Board of Directors
Increased funding costs	<ul style="list-style-type: none"> Reduce risks related to rising interest rates by limiting interest-bearing debt subject to floating interest rates within a determined range Reduce financing risks and procurement costs by optimizing balance of financing methods and suppliers
Impairment losses on assets	<ul style="list-style-type: none"> Compare periodic future cash flow estimates of target assets with investment amounts

Mine-Related Investments

Projected recoveries from mining-related investments are affected by changes in various forecasts, including estimated reserves of valuable metals, metal price quotes, foreign exchange rates, operating costs, and discount rates.

As of March 31, 2020, the Company's investment ratio in the Los Gatos Mine stood at 48.5%. The book value of this asset as it relates to investments recorded on the consolidated balance sheet amounts to ¥6.2 billion under investments in securities and ¥30.7 billion under long-term debt. Therefore, it represents a significant mining-related investment among the consolidated total assets of the DOWA Group.

As a result, one member of the Board of Directors works at the company operating the Los Gatos Mine and three Group employees have been dispatched to work locally. We are also working to strengthen management and supervision over mine management by participating in regular meetings held by our joint venture partners, Dowa Metals & Mining Co., Ltd., and the operating company.



Progress of Midterm Plan 2020

The DOWA Group is moving forward with Midterm Plan 2020, a three-year medium-term business plan running from fiscal 2018 to fiscal 2020. Drawing from the policies presented below, we aim to become a company with both stability and growth potential by strengthening our business base and aggressively investing management resources 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

Review of Fiscal 2019

Earnings for fiscal 2019 improved compared with the previous fiscal year, but unexpected changes in the operating environment, such as global stagnation in automobile production and an end to demand for LEDs for smartphones, have made achieving the profit-based goals of our medium-term business plan a difficult prospect.

However, our investments, as well as R&D expenses related to the development of new products in the Electronic Materials Business, were in step with the medium-term business plan's goals overall. Therefore, we believe that steady progress has been made toward achieving the goals of the plan.

Initiatives for Fiscal 2020

Amid the global spread of COVID-19, the Company has found it difficult to make forecasts about future demand as trends for its products continue to be extremely uncertain. As a result, we have implemented basic policies for fiscal 2020: "identify the impact of COVID-19 and take appropriate measures" and "steadily implement the measures put forth in Midterm Plan 2020."

In addition, the Company needs to consider reviewing and revising certain initiatives presented in the plan partly

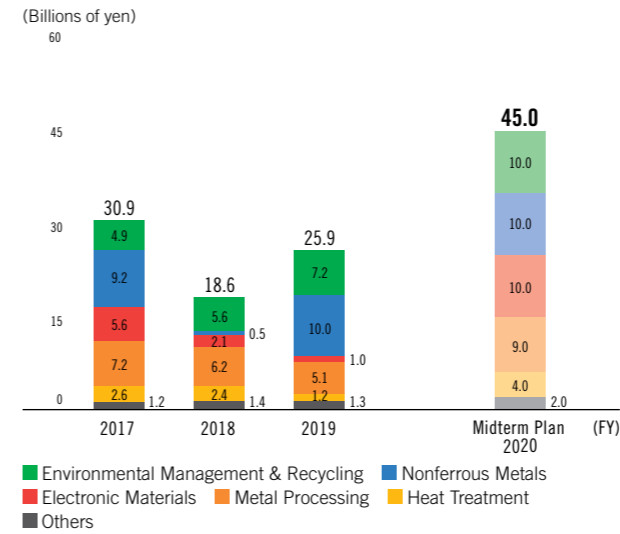
due to the delay in investment plans occurring caused by the impact of COVID-19. In light of the circumstantial changes, the Company has decided to extend the period of Midterm Plan 2020 for one year and strive to accomplish the respective initiatives presented therein through the extended period, while focusing on reviewing and revising the plan flexibly according to the current situation and to future developments.

Scope of Midterm Plan 2020

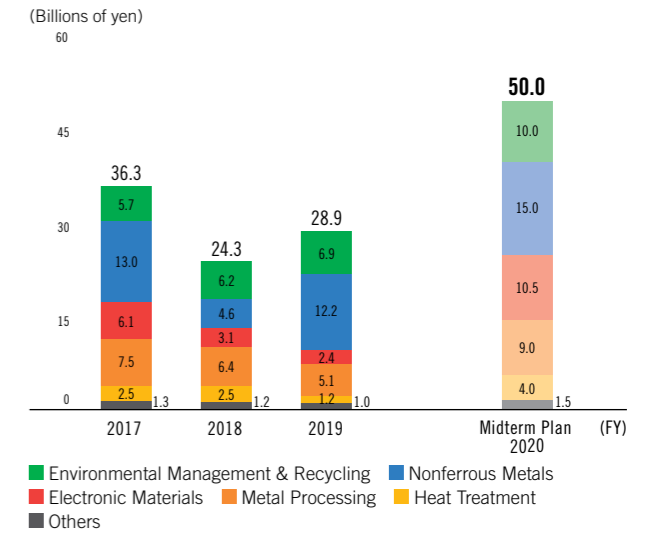


Status of Key Performance Indicators

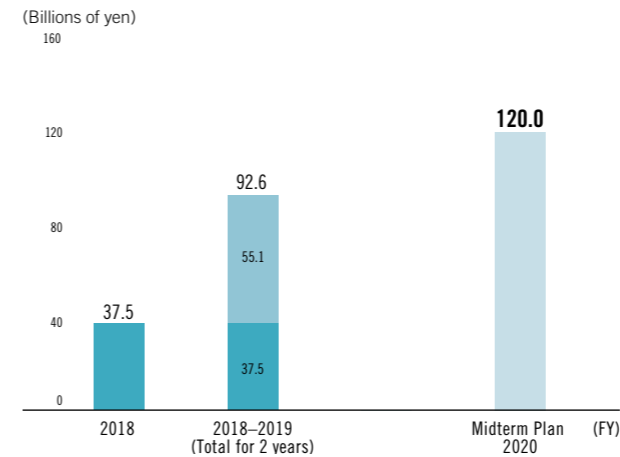
Operating Income



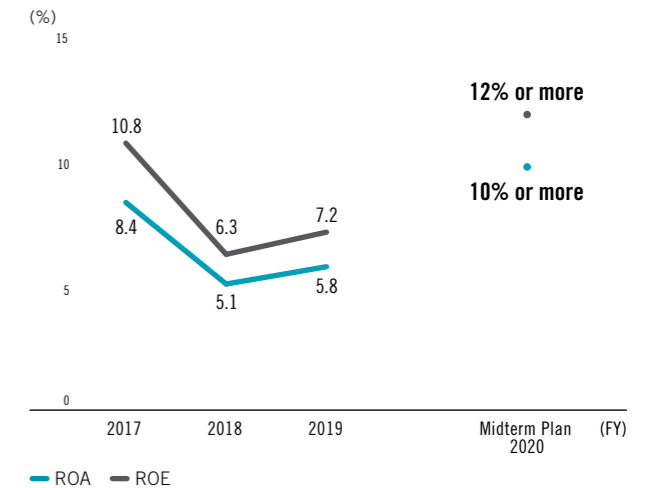
Ordinary Income



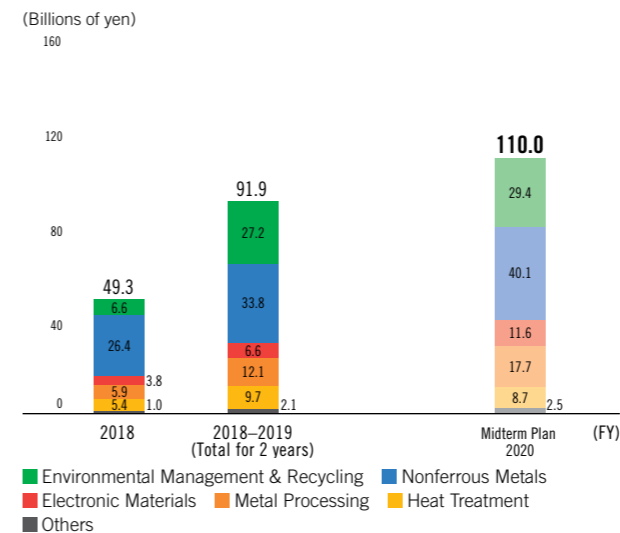
Cash Flows from Operating Activities



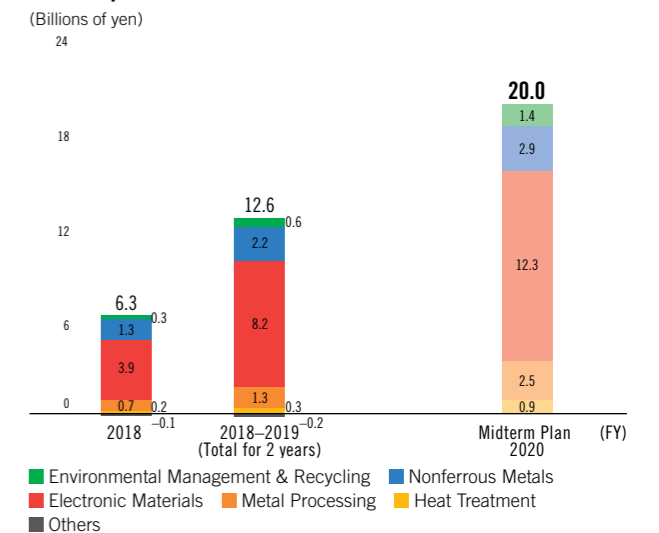
ROA / ROE



Investment



R&D Expenses



Results by Segment



Environmental Management & Recycling Business

DOWA ECO-SYSTEM CO., LTD.

Business Strategies

- ▶ Increase competitiveness of existing businesses to establish a position as No.1 in Asia and accelerate increase in market share and launch new businesses in each field and region
- ▶ Build the foundation of new businesses that will be the next mainstay businesses in light of global trends in environmental management

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



Overseas

Main Products and Services

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

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)

Message from the President



TOBITA Minoru

President and Representative Director

Dowa Eco-System Co., Ltd., offers one-stop services that enable high levels of traceability for clients. These services range from the collection and transport of waste, contaminated soil, and recycled raw materials through to incineration that reduces and detoxifies waste, the recycling of metal, and land-filling. Moreover, through the provision of environmental impact assessments and other consulting services, we help address various environmental problems in Japan and overseas.

Going forward, we 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. Anticipating global environmental trends, we will also lay the foundations of new mainstay businesses.

Business Conditions in Fiscal 2019

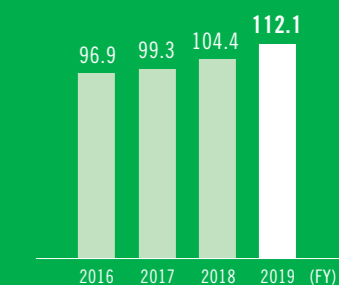
In Japan, volumes of industrial waste, automotive shredder dust, and discarded household appliances trended upward due to such factors as stricter environmental regulations in China. In the melting and recycling business, there was a growing trend among local governments toward outsourcing treatment to private companies. As for Southeast Asia, competition over waste collection intensified in Thailand and Singapore.

Reflecting these conditions, in fiscal 2019, ended March 31, 2020, volumes of waste incineration, melting, and recycling rose in the waste treatment business. In the soil remediation business, treatment volume was approximately unchanged year on year. Further, the recycling business recycled a greater volume of discarded household appliances while focusing efforts on the collection of recycled raw materials. Meanwhile, overseas businesses saw waste treatment revenues decline due to intensified competition over waste collection.

Results

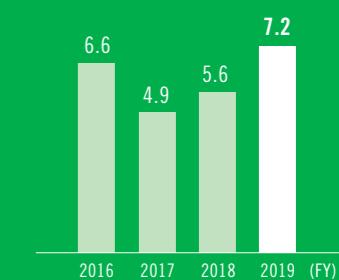
Net Sales

(Billions of yen)



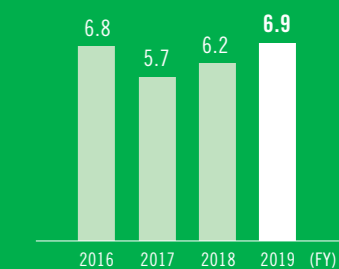
Operating Income

(Billions of yen)



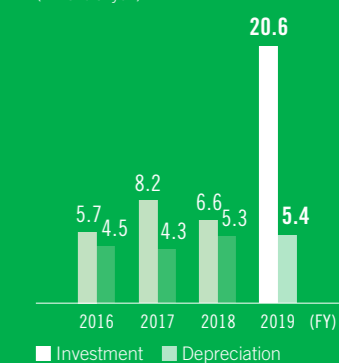
Ordinary Income

(Billions of yen)



Investment / Depreciation

(Billions of yen)



Medium- to Long-Term Initiatives for Corporate Value Enhancement

Business Conditions (Opportunities and Risks)

- Upward trend in waste and waste recycling volumes in Japan due to China's stricter environmental regulations
- Reduction of waste generation and increased use of recycled raw materials as a resource-recycling society forms
- Rising waste volumes in Southeast Asia as its collective population and economy grow
- Diversifying demand for waste treatment and recycling



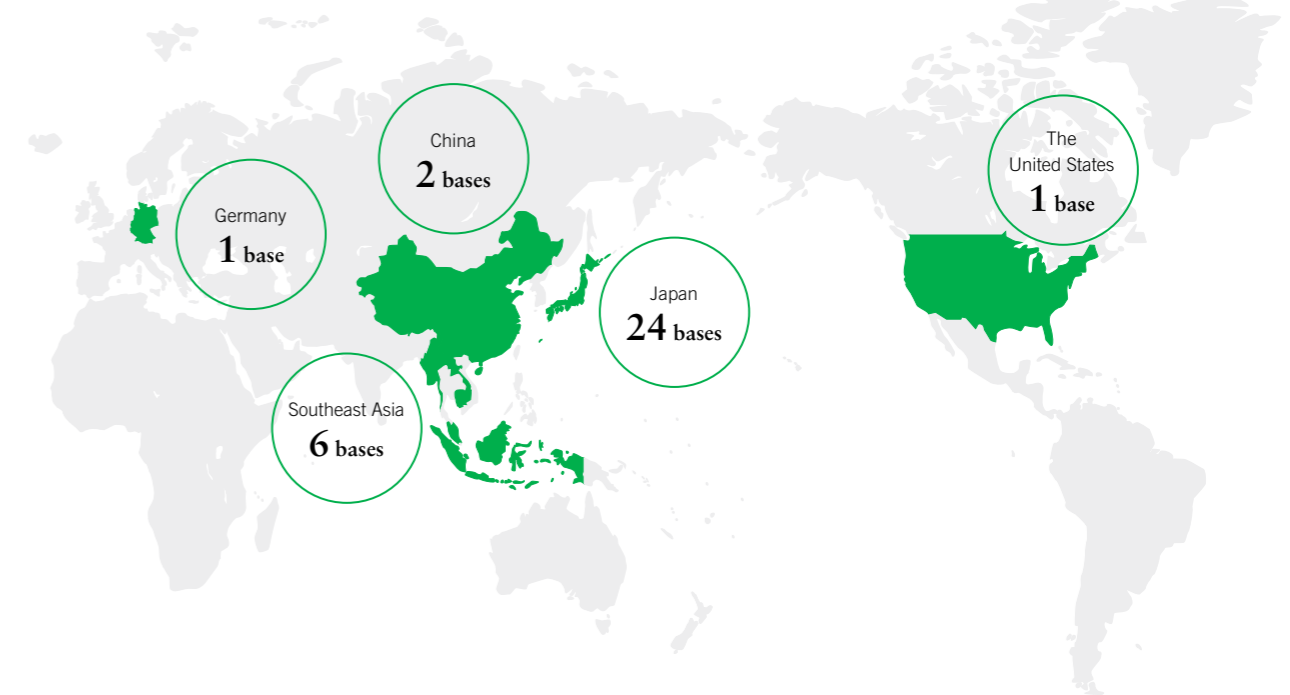
Medium- to Long-Term Initiatives

- Leverage the Group's advantages to maximize waste treatment and recycling volumes
- Increase waste melting and recycling that realizes the recycling of incinerated ash from municipal waste incineration
- Establish new bases and extend lineup of treatment services in Southeast Asia
- Advance new businesses (biomass power generation, lithium-ion battery detoxification, etc.)

Progress and Measures

	Progress in Fiscal 2019	Initiatives Beginning from Fiscal 2020
Waste Treatment	Our treatment of refractory waste was up. Also, Meltec Ltd. and Meltec Iwaki Co., Ltd., stepped up waste collection to increase the melting and recycling of waste.	We will continue increasing the treatment of refractory waste. In addition, with the aim of melting and recycling more waste, we will ramp up collection and build facilities for the pre-treatment of raw materials.
Soil Remediation	We expanded and established landfill sites in Japan.	We will expand and establish landfill sites in Japan.
Recycling	We concentrated efforts on increasing our worldwide collection of discarded electronic substrates, which is a recyclable material for our smelting operations. Further, we maintained high levels of capacity utilization in operations for the recycling of automobiles and household appliances.	We will increase our worldwide collection of recyclable materials. Also, we will advance treatment in relation to the recycling of automobiles and household appliances.
Overseas	We focused efforts on increasing the collection of hazardous waste in Indonesia and Thailand. Also, we expanded and established landfill site and expanded business lines.	We will focus efforts on increasing the collection of hazardous waste in Thailand and building new incinerator and landfill site in Indonesia.

Business Network (including sales offices)



ECO-SYSTEM CHIBA CO., LTD.



Act-B Recycling Co., Ltd.



PT. PRASADHA PAMUNAH LIMBAH INDUSTRI

TOPIC Scaling Up the Environmental Management & Recycling Business in Thailand

In 2019, Dowa Eco-System increased incineration of hazardous waste and began recycling discarded batteries from hybrid and electric cars at three subsidiaries in Thailand: Waste Management Siam Ltd., Bangpoo Environmental Complex Ltd., and Eastern Seaboard Environmental Complex Co., Ltd. Also, we began supplying fuel for waste power generation.

Based on the aforementioned initiatives, the Environmental Management & Recycling Business will significantly increase its scale in Thailand and cater to diversifying waste treatment and recycling demand.



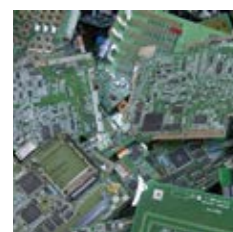
Nonferrous Metals Business

DOWA METALS & MINING CO., LTD.

Business Strategy

- ▶ Strengthen the business by improving the functions in the recycling and smelting complex

Business Lines



Precious Metals and Copper Smelting

Main Products and Services

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



Platinum Groups 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 of interests in mines

Advantages

01

Capabilities of our recycling and smelting 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

02

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

Message from the President



SUYAMA Toshiaki

President and Representative Director

Utilizing mining and smelting technologies garnered over many years, Dowa Metals & Mining Co., Ltd., has established a proprietary recycling and smelting complex, which is mainly engaged in the smelting of copper and zinc. Through a network that organically links these smelting processes, we efficiently recover approximately 20 types of metal from a wide range of raw materials, such as concentrates and recycled raw materials.

Going forward, we will continue to evolve the capabilities of our recycling and smelting complex and increase the resilience of businesses by enhancing our ability to handle impurities included in raw materials and by advancing the development of mines overseas.

Business Conditions in Fiscal 2019

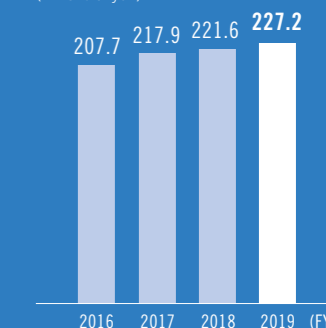
In fiscal 2019, ended March 31, 2020, although copper demand was largely in line with the projections of Midterm Plan 2020, zinc demand declined year on year. With respect to exchange rates, the yen appreciated slightly through the end of fiscal 2019. As for metal prices, increasing uncertainty over the international situation triggered hikes in the prices of gold and platinum group metals and sharp decreases in the prices of zinc, copper, and other base metals. Further, the procurement environment for zinc concentrates and spent catalysts improved.

Against the aforementioned backdrop, in fiscal 2019 the copper production volume of the precious metals and copper smelting business was largely unchanged year on year. Meanwhile, the platinum group metals business recovered a greater volume of metals from spent catalysts. Further, losses in the zinc smelting business shrank due to improved conditions for the purchasing of zinc concentrates and to reduced loss on devaluation of zinc inventories, which outweighed falls in the prices of zinc and indium and an increase in the unit price of electricity.

Results

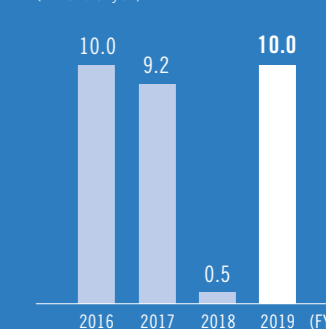
Net Sales

(Billions of yen)



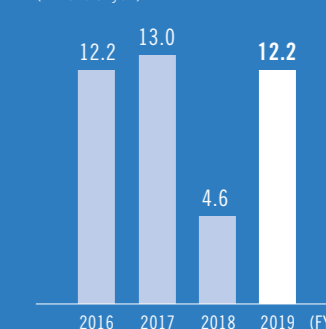
Operating Income

(Billions of yen)



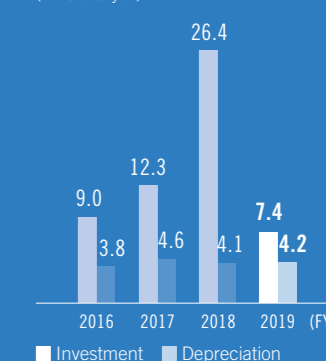
Ordinary Income

(Billions of yen)



Investment / Depreciation

(Billions of yen)



Medium- to Long-Term Initiatives for Corporate Value Enhancement

Business Conditions (Opportunities and Risks)

- Instability and increases in the fluctuation ranges of exchange rate and metal price trends
- Stagnant demand for copper and zinc in Japan
- Procurement environment where competition intensifies over the acquisition of all types of smelting raw materials
- Greater availability of spent catalysts as environment-friendly cars scrapped at the end of their service lives



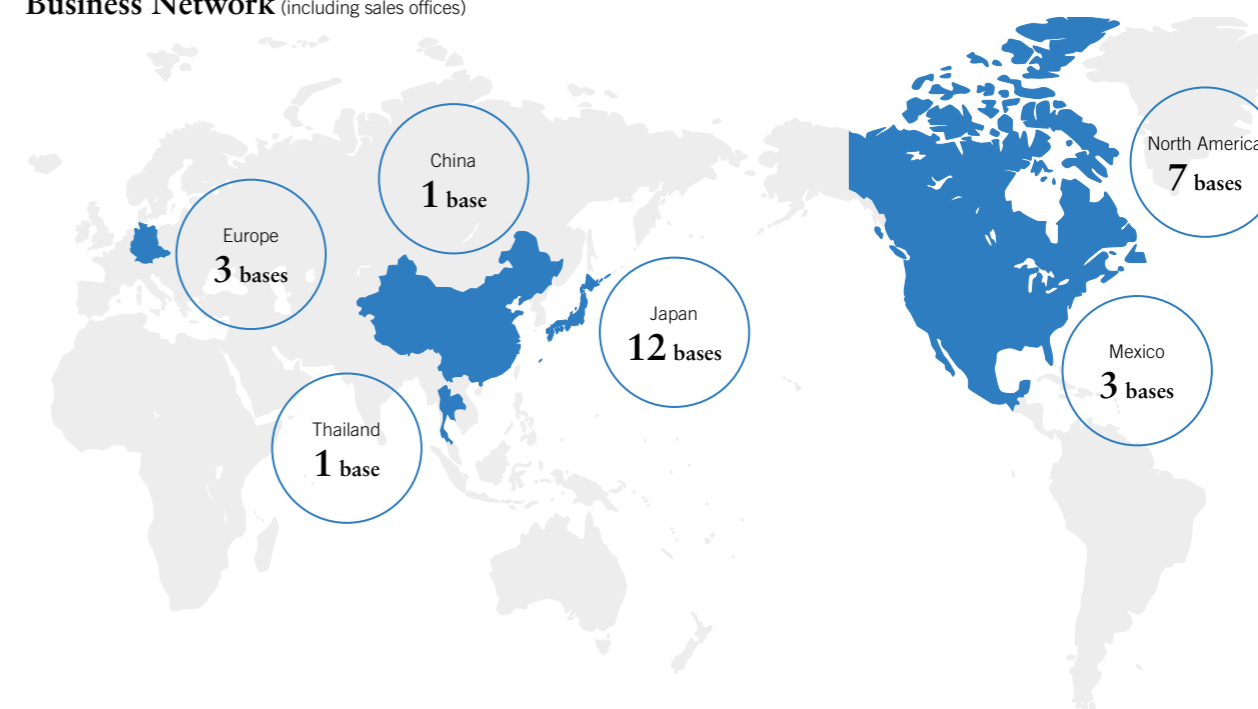
Medium- to Long-Term Initiatives

- Diversify and optimize by-product metals produced by Kosaka Smelting & Refining
- Establish the capacity to produce 220,000 tons of zinc annually by enhancing ability to handle the impurities included in raw materials
- Raise the rate of procurement from our own mines to secure long-term, stable supplies of zinc concentrates
- Increase the collection of spent catalysts by increasing overseas bases

Progress and Measures

	Progress in Fiscal 2019	Initiatives Beginning from Fiscal 2020
Precious Metals and Copper Smelting	Kosaka Smelting & Refining advanced the treatment of various raw materials, including recycled raw materials. Further, we began production of high-purity tin.	Kosaka Smelting & Refining will advance the treatment of various raw materials, including recycled raw materials. Also, we will grow sales of high-purity tin.
Platinum Groups Metals Smelting	We leveraged our bases in Europe and the United States to collect more spent catalysts.	We will concentrate efforts on increasing overseas collection bases and acquiring new clients.
Zinc Smelting	With the aim of boosting zinc production, Akita Zinc proceeded with the construction of facilities for the separation of impurities from raw materials.	We will start up operations of facilities for the separation of impurities from zinc concentrates as well as facilities that augment our treatment of secondary raw materials.
Resource Development and Raw Material Procurement	The Los Gatos Silver, Zinc, and Lead Project in Chihuahua, Mexico, completed construction and began mine operations, which will provide long-term, stable supplies of raw materials for our zinc smelting operations. Meanwhile, the Palmer Zinc and Copper Project continued mineral exploration in Alaska, the United States.	The Los Gatos Mine will increase production of concentrates. Also, the Palmer Zinc and Copper Project will continue mineral exploration.

Business Network (including sales offices)



KOSAKA SMELTING & REFINING CO., LTD.



NIPPON PGM CO., LTD.



AKITA ZINC CO., LTD.

TOPIC Starting Up Operations at the Los Gatos Mine

In July 2019, the Los Gatos Silver, Zinc, and Lead Project began producing zinc concentrates in Chihuahua, Mexico. Dowa Metals & Mining is advancing this project in partnership with Sunshine Silver Mining & Refining Corp. (currently Gatos Silver, Inc., in Colorado, U.S.A.).



Dowa Metals & Mining has the right to offtake total production of zinc concentrates, which the company plans to supply to Akita Zinc, a member of the DOWA Group. By approximately doubling the percentage of zinc concentrates procured from Group-owned mines compared with the current level, the project will contribute significantly to the zinc smelting business.

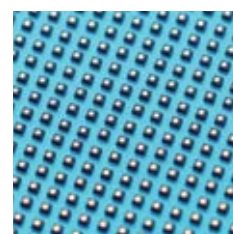
Electronic Materials Business

DOWA ELECTRONICS MATERIALS CO., LTD.

Business Strategies

- ▶ Launch new businesses, develop new niche, leading products, and make them major sources of earnings
- ▶ Expand business domains further to growth markets such as automobiles and healthcare

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

Message from the President



SUZUKI Koji

President and Representative Director

In the fields of semiconductors, electronic materials, and advanced fine materials, Dowa Electronics Materials Co., Ltd., has leveraged its technological competence to establish an extensive lineup of products that have leading shares of niche markets. Moreover, we sustain this product lineup's competitive superiority through the continuous investment of management resources in R&D that reflects the ever-changing needs of the electronic materials market.

By stepping up the pace of new-product development, we will create products that establish leading shares of niche markets and become earnings mainstays in the coming generation. Also, we will extend our business fields to include the automotive and healthcare fields, which promise market growth.

Business Conditions in Fiscal 2019

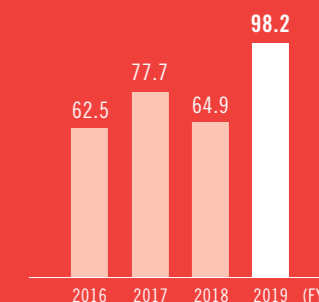
While smartphone LEDs approached the end of their life cycles, there were signs that higher demand for multifunctional products will, in turn, spur demand for wearable device LEDs. Also, new solar panels that enable highly efficient power generation drove expansion of the renewable energy field.

Due to the aforementioned conditions, in fiscal 2019, ended March 31, 2020, the semiconductor business faced flagging demand for smartphone LEDs. Meanwhile, the Electronic Materials Business saw a continuing recovery in demand for solar panel Silver powder in China's market. As for the advanced fine materials business, demand for magnetic powder for data storage tapes declined due to inventory adjustments by clients. In addition, we increased investment in new-product R&D, focusing on product property enhancement and the establishment of mass production for Conductive atomized powder, Nano silver powder, and other products.

Results

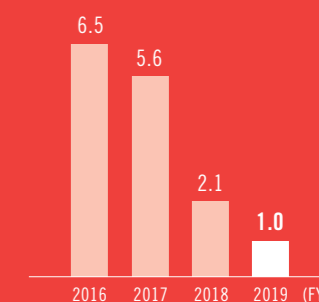
Net Sales

(Billions of yen)



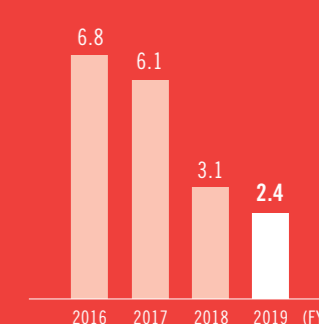
Operating Income

(Billions of yen)



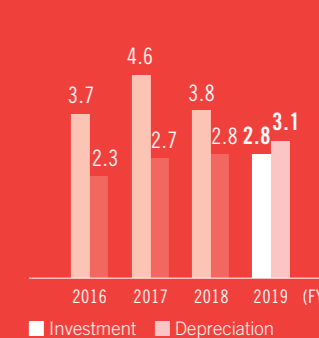
Ordinary Income

(Billions of yen)



Investment / Depreciation

(Billions of yen)



Medium- to Long-Term Initiatives for Corporate Value Enhancement

Business Conditions (Opportunities and Risks)

- Higher demand for multifunctional wearable devices amid increased health consciousness among consumers
- Expansion of the renewable energy field driven by new solar panels that enable highly efficient power generation
- Expansion of the market for electronic components for terminals and telecommunication devices as 5G-related demand commences



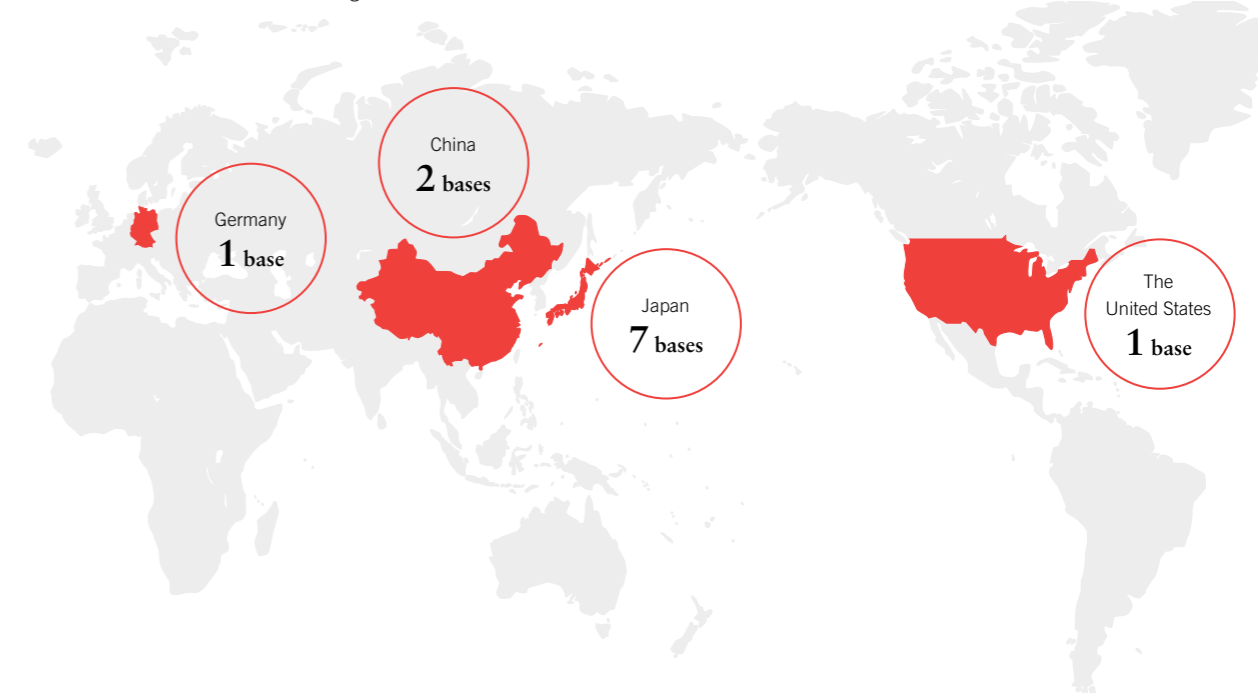
Medium- to Long-Term Initiatives

- Develop and establish mass production for new LEDs for healthcare sensors
- Keep a large share of the market for solar panel Silver powder
- Increase market share and production capacity for recording materials, Carrier powder, and Ferrite powder
- Grow sales of deep ultraviolet LEDs for healthcare and sterilization and expand and enhance conductive materials lineup

Progress and Measures

	Progress in Fiscal 2019	Initiatives Beginning from Fiscal 2020
Semiconductors	We concentrated efforts on developing new applications for LEDs. For example, we enhanced properties and increased sample work for short-wavelength infrared LEDs for healthcare devices and freshness sensors.	We will acquire client accreditation for short-wavelength infrared LEDs for wearable devices and build facilities for mass production of such LEDs.
Electronic Materials	We increased sales of Silver powder for new solar panels that enable highly efficient power generation. In addition, we began establishing mass production of Conductive atomized powder for capacitors and other electronic components.	We will continue increasing sales of silver powders for new solar panels. We will also grow sales of Conductive atomized powder.
Advanced Fine Materials	We focused efforts on enhancing the properties of magnetic powder for next-generation data storage tapes and grew sales of fuel cell materials.	We will boost sales of magnetic powder for next-generation data storage tapes. In addition, we will promote sales of fuel cell materials.
New Development	We increased R&D investment with a view to acquiring client accreditation in relation to Nano silver powder for the electromagnetic wave shields of electronic components. Further, we concentrated efforts on the early establishment of commercial operations for new products.	We will concentrate efforts on growing sales of Nano silver powder and the early realization of commercial operations for new products.

Business Network (including sales offices)



DOWA SEMICONDUCTOR AKITA CO., LTD.



DOWA HIGHTECH CO., LTD.



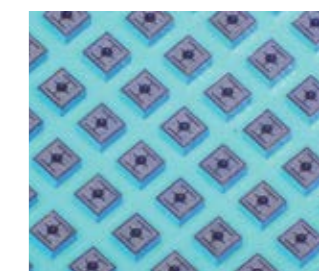
DOWA ELECTRONICS MATERIALS OKAYAMA CO., LTD.

TOPIC Developing Short-Wavelength Infrared LED Chips with World-Leading Output

Dowa Electronics Materials has successfully developed short-wavelength infrared LED chips that have world-leading output for a peak wavelength of 1,300 nm and begun delivering sample products.

As short-wavelength infrared light with a wavelength range of between 800 nm and 2,000 nm is highly penetrative to organisms, it is being used to develop applications for crop and food analysis as well as healthcare. Particularly in healthcare—a market that promises to expand—sensors equipped with LEDs are expected to enable the measurement of blood glucose levels without the need to draw blood.

Going forward, we will use our technology for short-wavelength infrared LED chips to develop products with peak wavelengths of 1,450 nm and 1,650 nm, thereby expanding our product lineup.



Metal Processing Business

DOWA METALTECH CO., LTD.

Business Strategies

- ▶ Expand businesses by focusing efforts on the automotive and Internet of Things (IoT)-related fields
- ▶ Increase earnings potential further by establishing a business base that is resistant to changes in the business environment

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

Message from the President



SUGAWARA Akira

President and Representative Director

Catering to a wide range of demand, the mainstay products and services of Dowa Metaltech Co., Ltd.—copper alloy strips, electroplating, and metal-ceramics substrates—are used for automobiles and smartphones, among other products. Also, we are further expanding businesses by developing new products, increasing production capacity in Japan, and expanding our production bases in Asia, whose economy continues to grow.

We will continue to focus on the automotive and IoT-related fields and heighten profitability even further through the establishment of a solid business base that can withstand changes in the business environment.

Business Conditions in Fiscal 2019

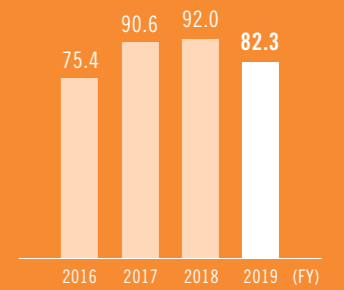
Trade friction between the United States and China led to sluggish automotive sales worldwide. As the market for environment-friendly cars expanded, demand grew for power modules—key components of electric cars. Further, demand for smartphones and consumer devices was lackluster throughout fiscal 2019, ended March 31, 2020. However, expectations rose in relation to products for 5G-compatible ICT devices. Meanwhile, demand for products for railcars trended modestly upward thanks to such factors as replacement demand in developed countries and projects for the construction of new railway lines in emerging countries.

Amid the aforementioned conditions, in fiscal 2019 the copper rolled products business saw a continued decline in demand for automotive products but a recovery in demand for smartphone products. Also, the electroplating business captured demand accompanying the introduction of in-vehicle electronics. As for the metal-ceramics substrates business, demand for products for industrial machinery decreased, but sales of products for rail transport equipment and automobiles were up.

Results

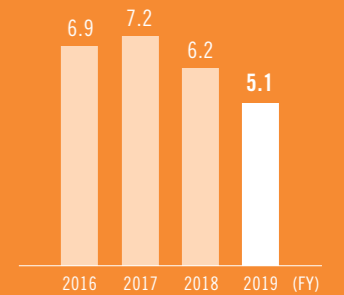
Net Sales

(Billions of yen)



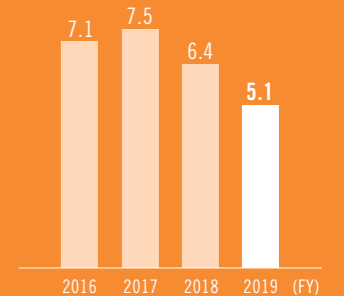
Operating Income

(Billions of yen)



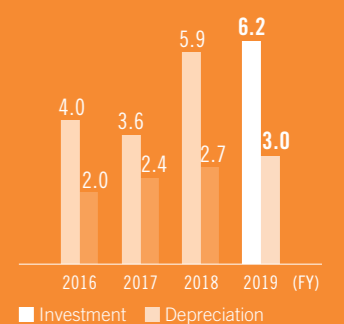
Ordinary Income

(Billions of yen)



Investment / Depreciation

(Billions of yen)



Medium- to Long-Term Initiatives for Corporate Value Enhancement

Business Conditions (Opportunities and Risks)

- Projected increase in worldwide automotive unit production over the medium to long term
- Significant growth of the market for environment-friendly cars and the increasingly rapid spread of electric cars and smart cars
- Increase in demand for higher-performance and higher-speed communication as a result of the transition to 5G smartphone models
- Modest rise in demand for products for railways due to replacement demand in developed countries and projects for the construction of new railway lines in emerging countries



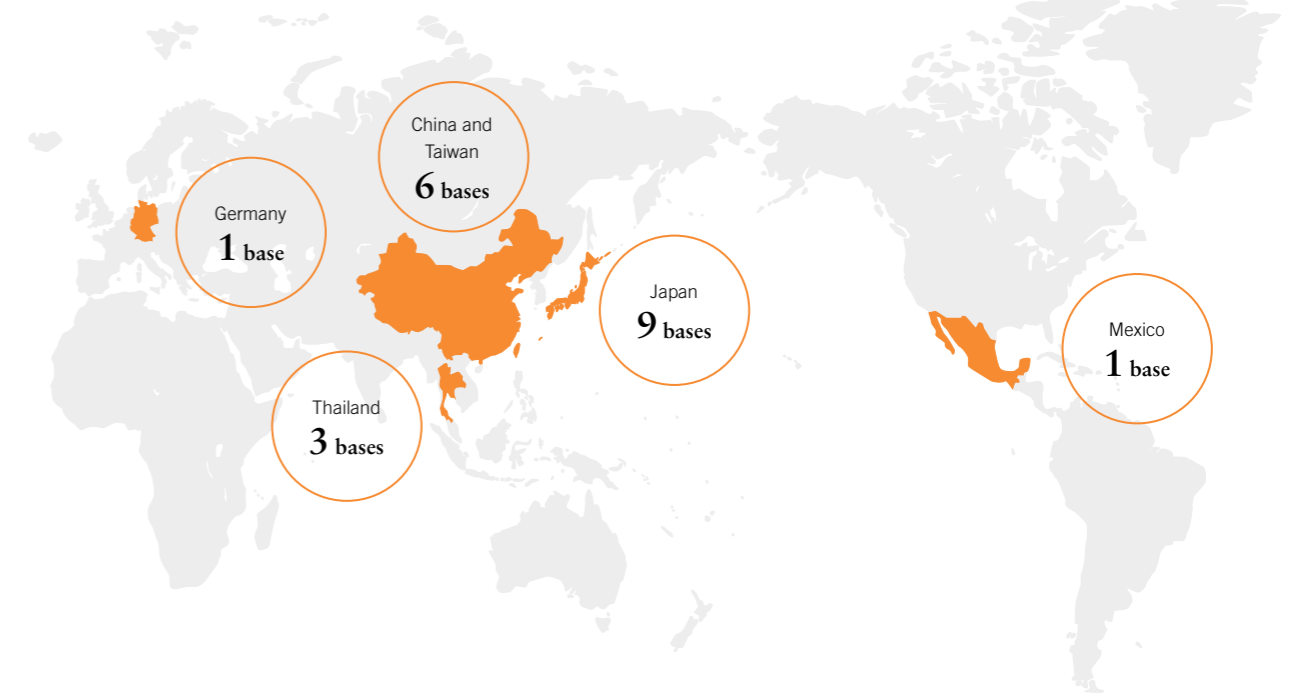
Medium- to Long-Term Initiatives

- Increase production and sales of copper alloy strips to capture the growth in demand resulting from the IoT and the introduction of electric cars and smart cars
- Expand the range of processing conducted at bases in China, Thailand, and Taiwan
- Optimize the electroplating production lines of bases in Japan and overseas to strengthen competitiveness
- Grow sales of products for railways and automobiles and develop new products

Progress and Measures

	Progress in Fiscal 2019	Initiatives Beginning from Fiscal 2020
Copper Rolled Products	We grew sales of high-performance copper alloy strips for automobiles and electronic components. At bases in Japan, we took measures to enhance productivity. Overseas, we proceeded with the construction of a processing base in Nantong, Jiangsu Province, China.	We will increase the number of facilities of high-performance copper alloy strips to capture growth in demand for the introduction of electric and smart cars. Further, we will start up operations of the processing base in Nantong, Jiangsu Province, China.
Electroplating	In Japan, we augmented production lines in anticipation of demand for environment-friendly cars. Further, we built our second electroplating base in Thailand.	At bases in Japan and overseas, we will optimize the deployment of electroplating production lines and increase productivity. We also aim to find opportunities in cutting-edge automotive technology and to acquire new orders.
Metal-Ceramics Substrates	We increased sales mainly of products for railways and automobiles. Also, we ramped up the production of fin-integrated substrates for automobiles as well as the production of mainstay offerings.	We will increase sales of existing products and develop new products.

Business Network (including sales offices)



DOWA METAL CO., LTD.



DOWA HIGHTECH CO., LTD.



DOWA POWER DEVICE CO., LTD.

TOPIC Expanding the Copper Rolled Products Tin-Plating Business in China

Having established Dowa Metaltech (Nantong) Co., Ltd., in Nantong, Jiangsu Province, China, Dowa Metaltech is expanding its copper rolled products tin-plating business in the country.

Since 2002, Dowa Metaltech has conducted operations at the Export Processing Zone in Songjiang District, Shanghai. In addition to demand for export products, demand is expected to grow in China's domestic market. With this in mind, Dowa Metaltech established the new company, which operates Dowa Metaltech's second base in China, in the general district of the Rudong Economic Development Zone in Nantong, Jiangsu. The new company has installed cutting slitters and China's first processing lines capable of low insertion force tin-plating. Going forward, we will capture new demand in China and expand the copper rolled products tin-plating business.



Heat Treatment Business

DOWA THERMOTECH CO., LTD.

Business Strategies

- ▶ Increase earnings further by taking advantage of the strengths of the current business model
- ▶ Pursue initiatives in new business domains

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

Message from the President



TSUJI Ryuji

President and Representative Director

Mainly focused on automotive components, Dowa Thermotech Co., Ltd., conducts contracted heat treatment processing—which increases the durability of metal components—and manufactures, sales, and maintains heat treatment processing facilities. In addition, we are developing businesses in Southeast Asia, India, and other countries and regions where automotive production is growing.

We enjoy the advantage of offering both intangible and tangible benefits in the form of contracted heat treatment processing competence and the heat treatment processing facilities that we build. By making maximum use of this advantage in the global market, we will increase earnings even further. Also, we will develop businesses in new fields in anticipation of changes in the automotive industry.

Business Conditions in Fiscal 2019

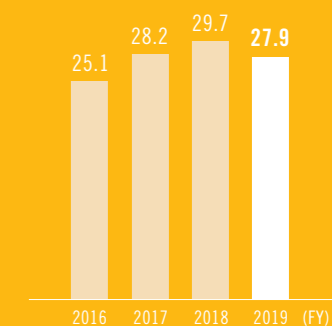
As a result of lower automotive unit production worldwide, demand for automotive products slumped. Furthermore, clients postponed overseas production and procurement localization.

Due to the reduction in global automotive unit production, in fiscal 2019, ended March 31, 2020, the heat treatment processing business conducted less contracted heat treatment processing at bases in Japan and overseas. Also, an increase in facilities resulted in higher depreciation. As for the industrial furnaces business, orders for new facilities softened, while orders for facility maintenance declined.

Results

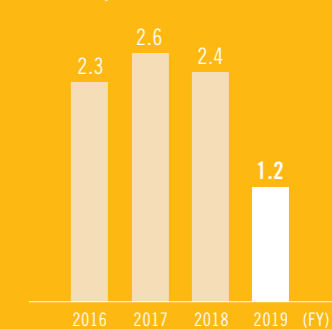
Net Sales

(Billions of yen)



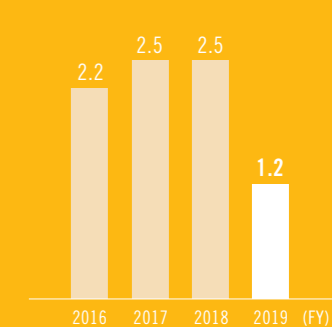
Operating Income

(Billions of yen)



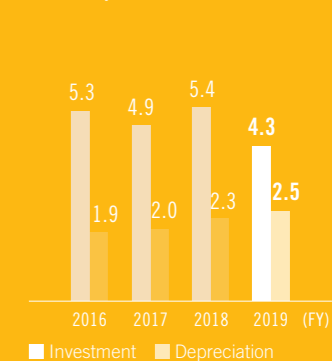
Ordinary Income

(Billions of yen)



Investment / Depreciation

(Billions of yen)



Medium- to Long-Term Initiatives for Corporate Value Enhancement

Business Conditions (Opportunities and Risks)

- Projected increase in worldwide automotive unit production over the medium to long term
- Demand for higher-quality heat treatment processing due to the increasing penetration of electric cars from 2025 onward
- Rebuilding of production capabilities in Japan and overseas by automotive and automotive component manufacturers



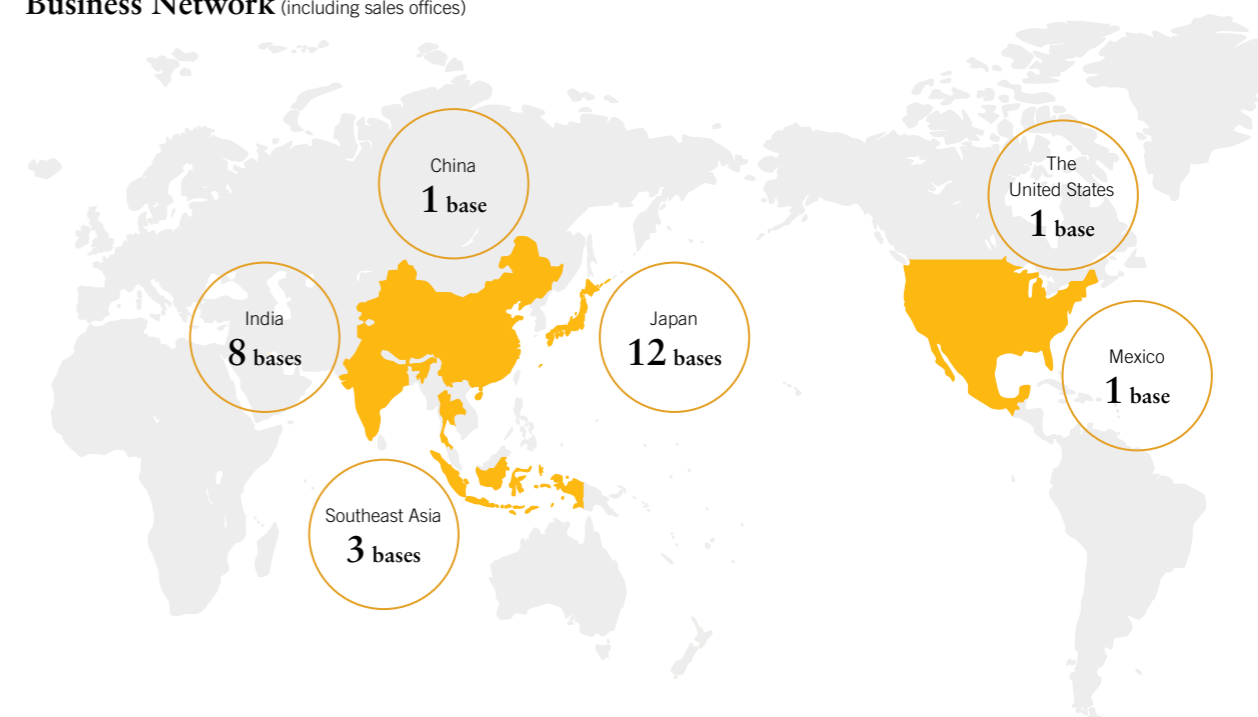
Medium- to Long-Term Initiatives

- Increase the capacity of heat treatment processing facilities at bases in Japan and overseas to reflect higher automotive demand
- Introduce automation and energy saving to heat treatment processing bases in Japan
- Strengthen the network for industrial furnace manufacturing among bases in Japan, India, and China
- Develop heat and surface treatment processing facilities for new applications

Progress and Measures

	Progress in Fiscal 2019	Initiatives Beginning from Fiscal 2020
Heat Treatment Processing	In India, we started up operations at two new heat treatment processing bases. Further, bases in China and the United States augmented their facilities to capture demand for the localization of automotive component procurement.	Bases in China and the United States will cater to demand for the localization of automotive component procurement. In addition, we will introduce automation and energy saving to heat treatment processing bases in Japan.
Industrial Furnaces	In response to the decline in automotive unit production worldwide, we focused efforts on acquiring new orders and reducing costs. Also, we launched cell-type vacuum carburizing furnaces, which are suitable for small-lot manufacturing.	We will increase our lineup of products for automotive component manufacturers. Also, we will grow sales of cell-type vacuum carburizing furnaces.

Business Network (including sales offices)



DOWA THERMOENGINEERING CO., LTD., Hamamatsu-kita Plant



PT. DOWA THERMOTECH INDONESIA



HIGHTEMP FURNACES LTD.

TOPIC Catering to Localization Demand Overseas

In overseas demand destinations where automotive component manufacturers are ramping up production, Dowa Thermotech is bolstering its heat treatment processing facilities. With a view to winning new orders as clients implement plans to step up production, we began adding to the capacity of heat treatment processing facilities in China from 2018 and in the United States from 2019.

However, given that worldwide automotive demand is likely to stagnate in 2020 and onward due to the COVID-19 pandemic, we are revising investment plans that were premised on growing demand.

Dowa Thermotech will continue expanding businesses in regions where the automotive industry is expected to grow.



Corporate Mission

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

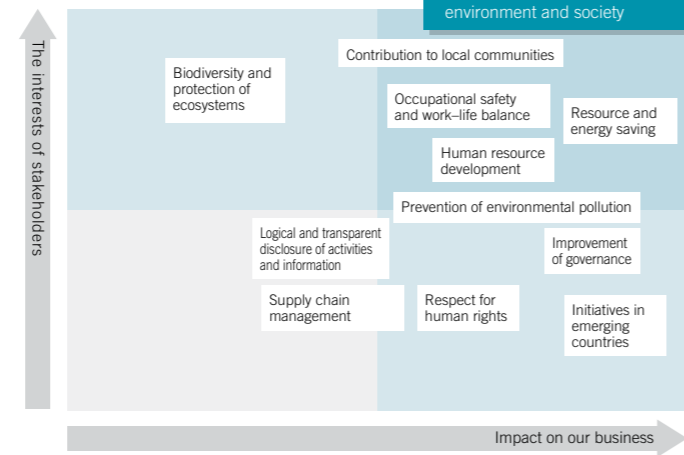
In accordance with the above Corporate Mission, we will meet the expectations of our customers, shareholders, investors, business partners, local community members, employees, and other stakeholders without fail. At the same time, will address social issues through our business activities.

Materiality and Medium-Term CSR Goals

Having identified its materiality in fiscal 2010, the DOWA Group formulated its CSR (corporate social responsibility) Policy in the following fiscal year. In fiscal 2014, we set medium-term CSR goals. Aiming to realize these goals, we annually establish a CSR action plan and targets, which we pursue on a Groupwide basis.

In light of the needs of stakeholders as well as changes in society and the business environment, we will revise our materiality while incorporating it into medium-term business plans.

Materiality Matrix



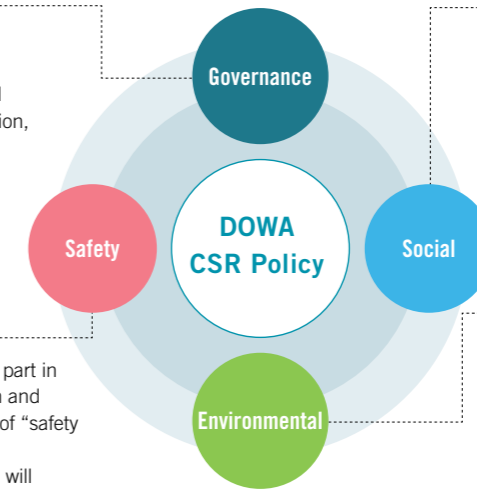
CSR Policy

Governance

- 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.

Safety

- 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.



Social

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

Environmental

- 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 executives to employees, we will be unified in working on environmental conservation activities.
- We will promote business activities that consider biodiversity.

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



Founder
FUJITA Denzaburo

DOWA's founder, FUJITA Denzaburo, rose to a position of wealth and prominence during his lifetime, the majority of which coincided with the Meiji era. As well as being involved in the mining industry, he created businesses in a broad range of industries, including construction, railways, spinning, power generation and supply, and newspapers. Reflecting his aspirations for Japan, he also provided generous donations for the establishment of schools and other initiatives.

Many of the initiatives that FUJITA

undertook, such as railway and reclamation businesses, were unlikely to produce profits by themselves. Rather than seeking near-term profits or focusing only on his own interests, however, he advanced these businesses with a view to the public interest and Japan's future. It may have been largely due to the teachings of his mother—who had a strong belief in philanthropy and loving one's fellow man—that Fujita did not devote himself solely to the acquisition of wealth and sought to grow Japan as a nation and help those in need.

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 in the form of electric utilities, waterworks, schools, housing, hospitals, theaters, and sports facilities. This social capital was made available not only to those directly or indirectly involved with the mine but also to residents of local communities. A testament to our founder's philosophy is the fact that he built Akita Prefecture's foremost general hospital at a time when



The Kosaka Mine Hospital, which was open to the general public

establishing a hospital specializing in medical examinations and treatment for diseases caused by mining work would have been less costly.

The improvement of working and living conditions was also a rational measure that enabled the maximization of results by allowing mine workers to concentrate on work, increase their skills through education and training, and recharge their batteries on days off. It is said that the basis for this measure was a "one mine, one family" philosophy, whereby everyone who worked at a mine was treated like family. Such a philosophy runs completely counter to an approach of cutting expenditures on unprofitable items with the aim of reaching the highest possible levels of profit. Thus, company management that emphasizes coexistence with workers and the residents of local communities and

which is based on long-term viewpoints is the very starting point of the DOWA Group.

Meiji-era mines caused smoke and mining pollution in various parts of Japan. Since then, DOWA has pioneered measures for tackling such issues by conducting research on and planting trees with resistance to smoke pollution and by enhancing and increasing the use of detoxification apparatus. As a result of tree planting projects that began around 1910 and continue to this day, we have restored the verdant abundance of forests affected by smoke pollution. Through these projects, we have steadily earned the trust of those residing in local communities.

With the dramatic appreciation of the yen that resulted from the Plaza Accord, many mines closed in Japan, including the Kosaka mine, which halted operations in 1990. Consequently, Kosaka Smelting & Refining Co., Ltd., shifted to the use of imported ores as raw materials for



Kosaka Smelting & Refining after its conversion to recycling and smelting operations

smelting. In 2008, the company switched over to smelting mainly recycling raw materials. Subsequently, we established a recycling and smelting complex with differentiated capabilities by adding the Environmental Management & Recycling Business to our existing Nonferrous Metals Business. As part of these efforts, we established facilities for recovering metals and steam from automobile shredder dust and constructed landfill sites for the final disposal of waste. The aforementioned transitions have only required short lead times thanks to the understanding of local communities and the strong relationships of trust we have built up with them.

People, goods, money, and information have long been recognized as essential for corporate activities. In recent years, however, in addition to these four types of capital, consideration for society and nature has been advocated as critical in advancing sustainability-focused management.

Since our foundation, from generation to generation, we have passed down the philosophy that economic activities can only proceed smoothly once they have developed favorable relationships with society and nature. This philosophy is nothing less than the base of our value creation.

Unfortunately, the hospital and most of the other facilities that the Company built when developing the town of Kosaka during the Meiji era have gone. However, the theater, established as a leisure facility, is still in use and is one of the oldest theaters in Japan. Further, we continue to play a part in the promotion of the Kosaka area. For example, an acacia festival, whose logo incorporates the flowers of the acacia trees that we planted, is held annually, and what is more, acacia honey has become a specialty of the town.

The Six Types of Capital We Have Long Valued



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

At the DOWA Group, in the four priority areas of governance, safety, the environment, and society with regard to our CSR Policy, we have set “Vision for 2020” as our medium-term Goal. To achieve this vision, we have selected certain issues as targets for priority measures. We have also developed a year-long activity plan with set initiatives and goals and promote this plan through an accumulation of actions, evaluations, and reviews.

“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 concerns by simultaneously minimizing management risks and improving corporate value.



Area	CSR Policy	Medium-Term Goal “Vision for 2020”	Priority Measure	Indicator	FY2020 Goal	Activity Plan for FY2019		
						Initiative	Goal	FY2019 Results
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. 	Promoting 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	Establish a nominating committee	Establish such a committee	Committee fully established
		By each employee carrying out appropriate activities based on the DOWA Group’s Values and Code of Conduct, promoting 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%	Conduct compliance training for those posted overseas	Conduct group training regarding compliance for managers at overseas locations	Delivered explanation during meeting of managers at overseas locations on how to use internal control handbook and the importance of compliance in their respective regions and countries of operation (eight countries, 17 participants)
		Promoting 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	Create an education tool through collaboration with other companies	One incidence	Two incidences
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 the 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 Severity rate	0.7 or less 0.01 or less	Implement safety audits and safety and health examinations from an objective viewpoint	Frequency rate of 1.5 or less Severity rates of 0.02 or less	1.12 0.01
			Strengthen safety education at subsidiaries outside Japan	No. of times education is implemented No. of persons educated	20 times in total 200 people in total	Strengthen maintenance education	Cut in half the incidence of accidents at the time of repairs	-14.3%
Environmental	<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	Strengthen the collection of materials for recycling outside Japan	Increase the rate of collection 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
		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 Strengthen energy-saving initiatives	Amount of CO ₂ emissions per unit	Compared with FY1990, 15% reduction	Promote use of energy-saving equipment and energy conversion	Reduce total greenhouse gas emissions by 1% compared with previous fiscal year	-4.2%
		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 * Environmental accidents: In cases where there is impact outside of the Company and it is reported to the relevant agency	No. of environmental accident occurrences	Zero incidences	Raise the level through seminar courses and mutual inspections of environmental management systems	8 regions	5 regions
		Promote biodiversity conservation activities in collaboration with upstream and downstream partners of the supply chain	Understand the biodiversity risk of suppliers Confirm consideration for the biodiversity situation at mines	Survey rate for suppliers and mines	100%	Confirm the biodiversity consideration status of mine-related suppliers	Ensure over 80% on a transaction amount basis	14.7%
Social	<ul style="list-style-type: none"> We will aim to create a workplace where diversity and the human rights of employees are respected, and 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 styles, and the Company and teams support each other	Promote diversity	Employment rate of people with disabilities*	2.3%	Increase the rate of employment of the physically challenged	2.3%	1.98% (as of March, 2020) Note: Target reached as of June 2020
				Attendance rate for seminars on promoting the success of women	100%	Interview each office about their workplace conditions	Draft measures in order to create workplaces where it is easy to work	Held interviews with managers of locations at which female subordinates have expressed concerns over issues or other matters
						Expand global human resources and strengthen human resources and organizations at offices overseas	<ul style="list-style-type: none"> Implement a global challenge program Provide English-language training Provide management training for overseas location managers 	<ul style="list-style-type: none"> Dispatched seven young employees to five countries (U.S., Indonesia, India, Thailand, and Singapore) 16 participants 17 managers at overseas locations in eight countries
		Promote work-life balance	Rate of annual paid leave taken	70%	Instill knowledge within the Company regarding its various systems	Publicize handbooks to explain the systems	Completed distribution of handbooks explaining various Company systems	
					Encourage the use of annual paid leave	Achieve a rate of 70% for days taken, and promote measures to encourage the taking of paid leave	<ul style="list-style-type: none"> A rate of 75% for the days taken Set a Companywide target for utilization of paid leave 	
		Establish a culture that fosters fair evaluation and treatment, with employees experiencing growth, results, and satisfaction. Employees themselves create an organization where they compete with each other and support each other	Train both evaluators and those being evaluated Strengthen in-house human resource education Support career development done on the initiative of the employee	Employee degree of satisfaction - Individual business planning system - Education programs	90%	Conduct surveys about the degree of penetration and understanding of the personnel system	A response rate of 100% (targeting 1,100 people)	A response rate of 75.9%
						Carry out evaluation system education for new employees	Attendance rate of 100%	Attendance rate of 100%
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	—	Hold activities related to education for children	4 times	8 times		
				Hold activities related to regional revitalization	4 times	6 times		

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



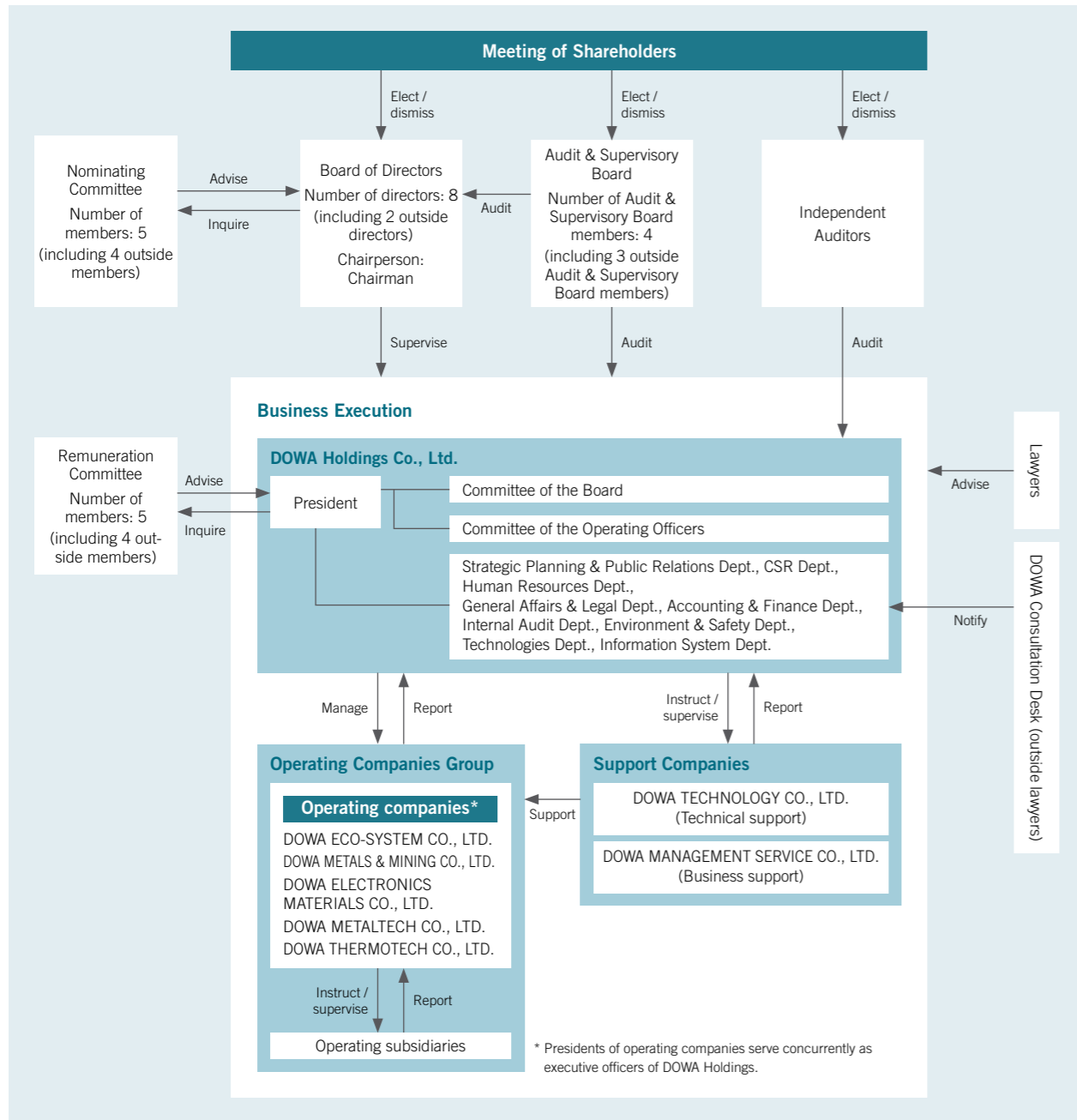
Governance

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

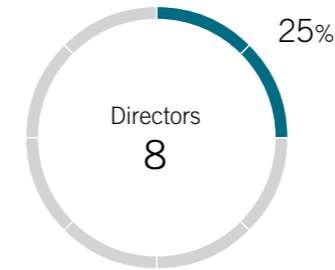
The DOWA Group Corporate Governance Structure

Audit System Company with Audit & Supervisory Board
 Term of Office (according to the Articles of Incorporation): 1 year
 Chairperson of the Board of Directors: Chairman

(As of June 25, 2020)

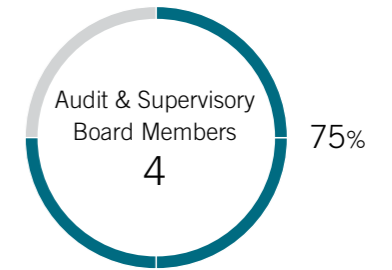


Percentage of Outside Directors



■ Inside directors
 ■ Outside directors

Percentage of Outside Audit & Supervisory Board Members

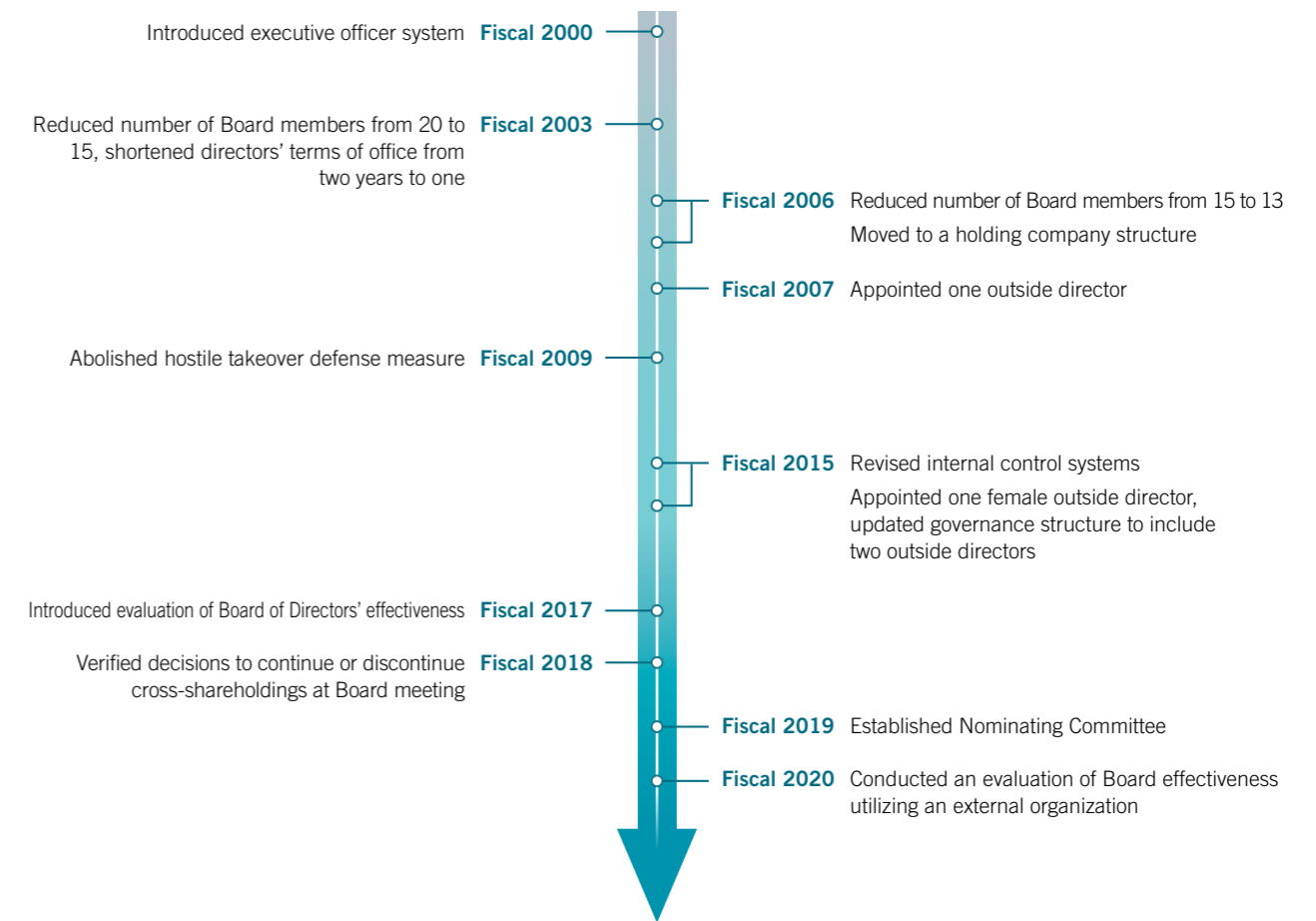


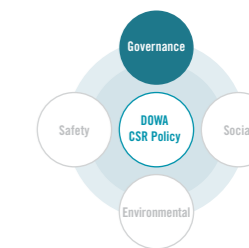
■ Inside Audit & Supervisory Board members
 ■ Outside Audit & Supervisory Board members

Advisory Committee

Name of Committee	Committee Chairperson	Composition	Role and Duties
Remuneration Committee	Outside director	2 outside directors 2 outside experts 1 other	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	2 outside directors 2 outside experts 1 other	Provide objective assessments and advice to the Board of Directors regarding the important matter of appointing and dismissing management personnel

Efforts to Enhance Corporate Governance





Governance

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 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 split our core business 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 business 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, 2020, there were eight directors (including two outside directors). The Board of Directors’ meeting is held once every month, in principle. There are also seven

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, 2020)

Organization form	Company with Audit & Supervisory Board
Number of directors	8 (Number of the Company’s Articles of Incorporation: 13)
Number of outside directors on the Board of Directors	2 (both 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 eight directors (seven men and one woman), including two outside directors, and its meetings are also attended by four Audit & Supervisory Board members, three of whom are outside Audit & Supervisory Board member. In fiscal 2019, the Board of Directors met 15 times, and the attendance rate of outside directors was 96%.

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 2020, 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 2020 based on said organization’s report on the aggregated results. What follows is a summary of these results.

Overall evaluation

- The Board of Directors as a whole is functioning effectively and appropriately, both in terms of the frequency of meetings and number of members, with the opinions of outside officers properly reflected in decision-making and judgments.

Issues

- Some opinions called for continued efforts to increase investigations into Companywide risk evaluation methods and to improve analysis and review of measures implemented for the current medium-term business plan, issues that were highlighted in the previous fiscal year’s evaluation.
- Opinions were also expressed stating a greater need for information sharing via dialogues with shareholders.

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

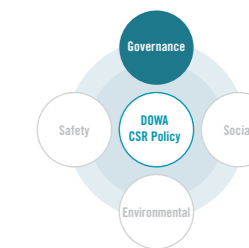
The Audit & Supervisory Board comprises four members, also regarded as corporate auditors, one of whom has accounting and financial knowledge from working in the banking industry. In accordance with the audit policies and audit plans for the term stipulated by the Audit & Supervisory Board, members attend 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 auditors and report audit findings.

There were 16 meetings of the Audit & Supervisory Board in fiscal 2019. 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	16	16
KOBAYASHI Hidefumi	16	16
TAKEDA Jin	16	16
EGAWA Shigeru*2	11	10

*1 Mr. YUKITAKE retired from his position following the 117th General Meeting of Shareholders held on June 24, 2020.
*2 Mr. EGAWA was appointed to his position following the 116th General Meeting of Shareholders held on June 25, 2019.



Governance

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 each operating company.

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.

<p>Committee of the Operating Officers (Chairperson: President and Representative Director)</p>	<ul style="list-style-type: none"> The committee is composed of directors, executive officers, and members of the boards of directors of each operating company. It meets once a month in principle. Each operating company reports on the status of business activities, including the disclosure of monthly financial information, as a means to furnish quick responses to changes in the business environment. Matters of high importance are overseen by the executive officer in charge and reported to the Committee of the Board and the Board of Directors.
<p>Committee of the Board (Chairperson: President and Representative Director)</p>	<ul style="list-style-type: none"> The committee comprises directors and executive officers. Meetings are held as needed. Meetings are held to discuss and approve matters of the highest importance related to medium- to long-term business strategy. Matters that require discussion and deliberation by the Board of Directors are submitted thereto after being discussed by the Committee of the Board.

Remuneration for Directors and Auditors

The remuneration system for directors comprises basic remuneration and performance-based remuneration. Remuneration amounts for all directors and Audit & Supervisory Board members are determined by resolution of the General Meeting of Shareholders. Basic remuneration for directors shall be based on the director's position and results, while performance-based remuneration shall be paid reflecting individual performance in conformity with the "standard performance-based remuneration," which is determined in accordance with net income attributable to owners of the parent and dividends distributed to shareholders. Since outside directors perform supervisory roles from an independent and objective standpoint, they are not subject to a remuneration system based on individual performance.

Remuneration of each Audit & Supervisory Board member is limited to basic remuneration, as their duties are independent of business execution, and is determined by deliberation among the Audit & Supervisory Board members within the limits approved by the General Meeting of Shareholders. Net income attributable to owners of the parent and dividends distributed to shareholders have been

highlighted as performance criteria as a means to link Company profits with remuneration and thereby increase motivation to contribute to business growth. Furthermore, linking dividend payouts with remuneration will promote shared value growth with shareholders.

An upper limit for director remuneration of ¥570 million was set at the 113th Annual General Meeting of Shareholders held on June 24, 2016.

The remuneration system has been designed with input from the Remuneration Committee, based on objective factors such as the Group's consolidated performance, dividends to shareholders, and remuneration levels outside the Company.

In principle, the committee, which mainly comprises members from outside the Company, such as outside directors and outside experts, meets once a year to deliberate and provide advice regarding system objectivity, as well as the validity of remuneration levels. Decisions concerning individual director remuneration are entrusted to the representative directors who assess each director's performance and assign an appropriate remuneration amount.

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)
		Basic remuneration	Performance-based remuneration	Retirement bonuses	
Directors*1	315	239	76	—	6
Audit & Supervisory Board members*2	26	26	—	—	1
Outside directors and Outside Audit & Supervisory Board members	68	60	8	—	6

*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, we will gradually sell it, 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 2019, decisions to continue or discontinue holdings of all listed shares under possession were verified by the Board of Directors. These decisions were arrived at by weighing dividend results, transaction status, materiality, and other factors against capital costs, based on the book value at the time of acquisition and market value, respectively. As a result of this process, we sold all shares of one issuing company within the fiscal year under review.

Internal Control Systems

In accordance with the DOWA Group's 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 systems for internal control 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)

Board of Directors and Officers (As of June 25, 2020)

Directors



YAMADA Masao

Chairman and Representative Director

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)



SEKIGUCHI Akira

President and Representative Director

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)



MITSUME Yutaka

Director

Apr. 1980 Joined the Company
 Apr. 2003 Chief of Environmental Protection Laboratory, Environmental Management & Recycling Company
 Apr. 2013 President and Representative Director of Kosaka Smelting & Refining Co., Ltd., Director of Dowa Metals & Mining Co., Ltd.
 Apr. 2016 Officer, responsible for Technology, Environment, and Safety
 Apr. 2016 Director of Dowa Metals & Mining Co., Ltd., Director of Dowa Technology Co., Ltd. (current positions)
 Jun. 2016 Director (current position)
 Jun. 2016 Director of Dowa Metaltech Co., Ltd. (current position)



MATSUSHITA Katsuji

Director

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. (current position)
 Jul. 2013 Audit & Supervisory Board Member of Konoshima Chemical Co., Ltd. (current position)
 Apr. 2016 Director of Dowa Metals & Mining Co., Ltd. (current position)



KAGAYA Susumu

Director

Dec. 1985 Joined the Company
 Apr. 2003 President and Representative Director of Dowa Semiconductor Co., Ltd. (currently Dowa Semiconductor Akita Co., Ltd.)
 Oct. 2006 Director of Dowa Electronics Materials Co., Ltd.
 Oct. 2008 President and Representative Director of Dowa Semiconductor Akita Co., Ltd.
 Apr. 2013 President and Representative Director of Dowa Electronics Materials Okayama Co., Ltd.
 Apr. 2016 Officer, responsible for Business Development and Research and Development of the Company
 Apr. 2016 Director of Dowa Electronics Materials Co., Ltd., Director of Dowa Thermotech Co., Ltd. (current positions)
 Jun. 2016 Director (current position)



KAWAGUCHI Jun

Director

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)



HOSODA Eiji

Outside Director*

Dean of Faculty of Business Administration and Information Science, 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 (current position)
 Jan. 2011 Council Member of Central Environmental Council, Ministry of the Environment (current position)
 Mar. 2017 Representative Director of Japan Foundation for Advanced Auto Recycling (current position)
 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)



KOIZUMI Yoshiko

Outside Director*

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 (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)

* Independent Officer

Audit & Supervisory Board Members



KOBAYASHI Hidefumi

Outside Corporate Auditor (Full-Time)*

Apr. 1981 Joined the Industrial Bank of Japan, Limited (currently Mizuho Bank, Ltd.)
 Apr. 2010 Executive Officer of Mizuho Corporate Bank, Ltd. (currently Mizuho Bank, Ltd.)
 Apr. 2012 Managing Officer of Mizuho Securities Co., Ltd.
 Apr. 2013 Managing Officer of Mizuho Financial Group, Inc., Managing Officer of Mizuho Securities Co., Ltd.
 Apr. 2014 Managing Officer of Mizuho Financial Group, Inc., Managing Director and Managing Officer of Mizuho Securities Co., Ltd.
 Jun. 2017 Audit & Supervisory Board Member (current position)



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)



TAKEDA Jin

Outside Corporate Auditor (Part-Time)*

Attorney
 Partner 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 (current position)
 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)



EGAWA Shigeru

Outside Corporate Auditor (Part-Time)*

Audit & Supervisory Board member of Fujita Kanko Inc.
 Apr. 1981 Joined Fujita Kanko Inc.
 Apr. 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 Fairtron Corporation
 Mar. 2019 Audit & Supervisory Board Member of Fujita Kanko Inc. (current position)
 Jun. 2019 Audit & Supervisory Board Member (current position)

* Independent Officer

Officers



TOBITA Minoru

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



SUYAMA Toshiaki

Officer (Part-Time)
 President and Representative Director, DOWA Metals & Mining Co., Ltd.



SUZUKI Koji

Officer (Part-Time)
 President and Representative Director, DOWA Electronics Materials Co., Ltd.



SUGAWARA Akira

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



TSUJI Ryuji

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



YAMADA Kiyoshi

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



WAKABAYASHI Eiichi

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

Messages from Outside Directors



HOSODA Eiji
Outside Director
Dean of Faculty of Business Administration and Information Science, Chubu University

Q. At meetings of the Board of Directors, in what ways do you draw on your career and experience to date?

As both an economist and an environmental economist, I primarily offer guidance on macroeconomic matters and the relationship between the environment and the economy. Further, I always keep in mind the importance of experiencing situations on the ground in the economy's venous industries, and at meetings of the Board of Directors I endeavor to make use of discoveries and insight garnered from such on-site visits. As I participate in government-related committees, at Board meetings I also provide interpretations of policies and future trends in government, without infringing upon the obligation to maintain confidentiality.

Q. What is your evaluation of the Company's measures to strengthen corporate governance?

With respect to corporate governance, the incorporation of properly established procedures is essential. At home and abroad, companies are expected to follow proper procedures that are viewed as standard. In this regard, DOWA's steadfast adherence to proper corporate governance procedures is commendable. However, I feel that there is a slight overemphasis on procedural management, which may render deliberation on the content of corporate governance a little sparse. While discussions about procedures are important, going forward I believe that more time needs to be set aside for deliberations on what the content of corporate governance should be and how to breathe life into it.

Q. How do you find the atmosphere at meetings of the Board of Directors?

Due to the COVID-19 pandemic, the Company employs web conferencing in convening Board meetings. Nonetheless, this does not hamper discussions, and such meetings have the same uninhibited atmosphere as their face-to-face counterparts. Further, as I am presently also engaged at a university, attending web conferences is a convenience for which I am very grateful.

At Board meetings, President and Representative Director SEKIGUCHI Akira replies to questions in an extremely clear and readily understandable manner. Moreover, his style of leadership inspires confidence and engenders lasting trust. As we navigate the ongoing COVID-19 crisis, his ability to remain composed and objective and to take sound, timely measures merits praise as it is helping create a sense of stability throughout the Company.

Q. With a view to realizing sustained growth, what management issues should the Company examine?

First of all, the Company must accurately identify society's needs. Since the COVID-19 crisis began, people's lifestyles have changed dramatically, and changes in social needs are beginning to emerge. According to a survey conducted by Japan's Cabinet Office, people began placing greater emphasis on spiritual enrichment from around 1977, and currently more than 60% of people favor spiritual over materialistic enrichment. Such changes are sure to greatly affect lifestyles and approaches to manufacturing. Moreover, a prolonged COVID-19 pandemic is likely to accelerate these changes.

Thus, accurately understanding the aforementioned trends and envisioning the future economy is critical. Next, the Company must examine and analyze its ideal role and corporate format in this envisioned future and take action as appropriate. Needless to say, constant scrutiny of corporate activities is called for to ensure that they accord with private and public interests.



KOIZUMI Yoshiko
Outside Director
Attorney
Partner of City-Yuwa Partners

Q. At meetings of the Board of Directors, in what ways do you draw on your career and experience to date?

For many years, I have been engaged, in terms of corporate law, in a range of matters arising from international trade with companies in developed and emerging economies. I will continue utilizing this experience to present the business management options of the Board when it is involved in considerations of or withdrawal from overseas development or M&As, labor issues, intellectual property competition, lawsuits, and arbitral proceedings.

I also monitor the important management issue of compliance based on the experience I have as a corporate lawyer in providing counsel on corruption incidents in Japan and overseas.

Q. How do you find the atmosphere at meetings of the Board of Directors?

One merit of DOWA's Board of Directors is that its meetings have an open atmosphere conducive to having frank discussions. The Company's presentations of monthly business results and explanations of concerns in this regard are extremely easy to follow. In addition, when a question arises, as well as the president of the relevant operating company replying, the chairman and representative director as well as the president and representative director provide supplementary explanations. This approach gives one an understanding of the Company's overall management policies. On the other hand, I would be grateful if a little more time was allowed for Board meetings, and I would like to hear opinions from representatives of operating companies other than those directly affected by agenda items.

As for business activities, the management team and employees are implementing measures with a steady earnestness. Although the Company's businesses are susceptible to global economic trends—particularly developments in the relationship between the United States and China and trends in the automotive industry—the Company deserves credit for establishing a business portfolio that has had a positive, stabilizing effect on business activities. In this regard, the start-up of operations at the Los Gatos Mine is especially satisfying to me as I saw the site before construction began.

Q. What are your opinions regarding the introduction of web conferencing for Board meetings during the COVID-19 crisis?

DOWA was using web conferencing on a trial basis prior to the COVID-19 crisis. Around the summer of 2019, I began participating in these web conferences, which left me impressed by how proactive the system managers were about the initiative. This enthusiasm stemmed from the fact that web conferencing was being tackled as a Companywide task in response to President and Representative Director SEKIGUCHI Akira's firm resolve to enable participation in meetings by all employees wherever they were at any given time. When telecommuting became more important with the spread of COVID-19, DOWA already had a Companywide web conferencing system in place and was able to make a smooth transition to telecommuting. Such preparedness has helped employees and associates stay healthy. This highly commendable achievement is attributable to President and Representative Director SEKIGUCHI Akira's strong leadership.

Q. With a view to realizing sustained growth, what management issues should the Company examine?

Given that calls for digital transformation have been mounting in society at large during the current pandemic, the Company must embark upon full-fledged efforts to realize digital transformation and utilize AI in its business fields. Further, while contributing to the alternative energy field, the Company should identify business fields where it can help in the transitional period when fossil fuels are still needed and nuclear power is not completely eliminated.



Governance

Participation in International Organizations and an International Consortium

In March 2009, the DOWA Group endorsed and signed the UN Global Compact (UNGC), a series of voluntary principles for corporate action proposed by the United Nations. 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. In fiscal 2019, we participated in the Supply Chain Subcommittee of the GCNJ, and while cooperating with various participatory companies we are working to promote its activities.

The 10 Principles of the UN Global Compact

Human rights	<ol style="list-style-type: none"> 1 Businesses should support and respect the protection of internationally proclaimed human rights. 2 Make sure that they are not complicit in human rights abuses.
Labor	<ol style="list-style-type: none"> 3 Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining; 4 the elimination of all forms of forced and compulsory labor; 5 the effective abolition of child labor; and 6 the elimination of discrimination in respect of employment and occupation.
Environment	<ol style="list-style-type: none"> 7 Businesses should support a precautionary approach to environmental challenges; 8 undertake initiatives to promote greater environmental responsibility; and 9 encourage the development and diffusion of environmentally friendly technologies.
Anti-corruption	<ol style="list-style-type: none"> 10 Businesses should work against corruption in all its forms, including extortion and bribery.

Global Compact Network Japan
<https://www.ungcjin.org/index.html>

Initiatives for Human Rights and Anti-Harassment

In November 2020, we revised and publicized the DOWA Group's Values and Code of Conduct. In regard to human rights, we value "respect diversity and individuals" and the Code of Conduct clearly states our intent to "respect the rights of all people" and "avoid discrimination on any grounds, such as race, age, gender, gender identity, sexual orientation, physical characteristics, disability, ethnicity, nationality, birthplace, religion, political affiliation, group activity, marital status, pregnancy, and family situation," and our resolution to "never engage in any unlawful or unreasonable act, such as forced labor including child

labor, inhumane treatment, and harassment." We have also provided translations of the DOWA Group's Values and Code of Conduct in English, Chinese, and Thai to be applied to overseas locations as part of our efforts to spread the ideas contained within to the entire Group. In addition, 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.

Anti-Corruption

The DOWA Group's Values and Code of Conduct state 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." They also state our intention to "block all relations with antisocial forces." To address the matter of antisocial forces, we have established a system in which related departments cooperate with each other, centering on the General Affairs & Legal Department that is in charge of

handling matters related to antisocial forces, and stipulate that there will be an organization-wide response in 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 the related laws and regulations through employee training and the distribution of manuals, we conduct internal audits to monitor compliance.

DOWA Group's Values and Code of Conduct
https://www.dowa.co.jp/en/about_dowa/philosophy.html

Internal Reporting System

The DOWA Consultation Desk has been active since April 2005. This desk allows for direct and anonymous consultation with two external lawyers (one male and one female) with the goal 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 those reporting against disadvantageous treatment are both guaranteed, and the availability of the consultation desk is known through the Company intranet, posters, and Group reports. Moreover, in order to build stronger partnerships with suppliers and cooperating companies, the DOWA Consultation Desk is also available for use by employees of suppliers and partner companies.

When consultations are made or opinions are received,

an external lawyer, or the secretariat working under the supervision of the general manager of the General Affairs & Legal Department of the Company, will confirm and conduct an investigation of the contents and facts of the inquiry and take corrective action if necessary, while maintaining confidentiality of the reporting party. In fiscal 2019, there were 12 consultations made, and all investigations into these consultations were completed as necessary.



Business Continuity Plan (BCP) Initiatives

In addition to those for large-scale earthquakes, we have formulated business continuity plans (BCPs) for each region and office for natural disasters such as typhoons and floods caused by torrential rains, which have been increasing in recent years, and pandemics including new strains of influenza. We are working to avoid risks arising from such events in order to continue business activities in times of emergency.

BCP for the Procurement Department

During normal business conditions and otherwise, DOWA's

Procurement Department works to secure a stable supply of materials essential to the DOWA Group. For materials of particular importance, we evaluate the procurement risk for each material based on its supply and demand forecast across the entire supply chain, while securing alternative suppliers according to the degree of risk. Our risk assessment methods and countermeasures have worked effectively, even during the first half of 2020, when COVID-19 caused a rapid increase in risks related to the procurement of materials, which enabled us to support ongoing procurement activities.

TOPIC Enhancing Internal Controls at Overseas Locations

Over 30 DOWA Group companies currently conduct business overseas, and enhancing the internal controls at each location is an important management issue. Therefore, in fiscal 2019 we introduced a system through which the management information of each major overseas location, recorded using each location's respective accounting standards, language, and currency, can be viewed by the Company's Accounting & Finance Department in Japan, according to Japanese accounting standards, in Japanese, and in Japanese yen. The system can monitor local financial information converted to Japanese accounting standards without any time disparity, making it easier for Japanese managers at these locations to grasp financial information and eliminating delays in recognizing this information as it is relayed between Japan and these overseas locations. Furthermore, the Company is now able to support the accounting activities done at these overseas locations remotely from Japan, which not only strengthens internal controls but also contributes to operational efficiency. In the future, we will work to further strengthen the internal controls at our overseas locations by introducing this system on a wider scale.



Safety

Safety Management System

The DOWA Group's environmental and safety management activities are carried out in cooperation with the Environment & Safety Department of DOWA Holdings, the holding company, and safety and environment personnel appointed by each operating company that conducts environmental conservation activities. While arranging and coordinating between each of the operating companies, DOWA Holdings implements safety promotion activities for the entire Group.

Developing Policy at Business Locations and Securing the Safety of All Workers

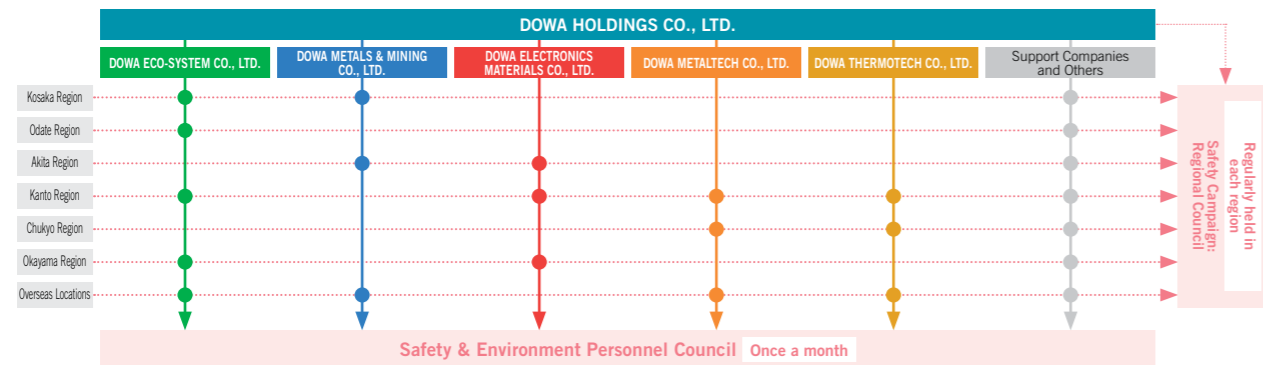
The DOWA Group Health and Safety Policy is employed as part of a series of documents including the CSR Management Plan that affects the management of occupational health and safety at each business location. The Group's safety initiatives target all workers involved in its business activities, including partner companies and contractors.

Safety & Environment Personnel Council

The Safety & Environment Personnel Council 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 or disaster, the council grasps the situation and discusses the causes and measures to deal with it. 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.

Safety Campaign: Regional Council

The Regional Council is set up as a place for communication, utilizing a system in which the members of each region share examples of activities and ideas and consult with each other. The council has managed to establish cooperative ties among different business fields based on the shared goal of realizing a safe workplace.

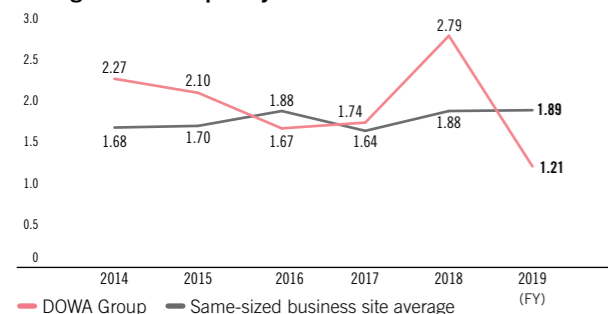


Work-Related Accidents

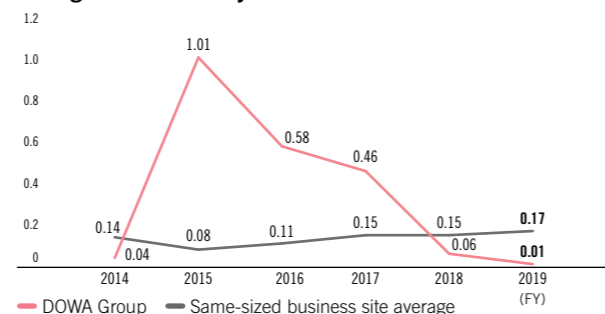
The number of work-related accidents for the DOWA Group as a whole has been on the decline over the long term. Fiscal 2019 saw improvements both in terms of the rate and severity of accidents compared with the previous fiscal year, and the rate and severity of accidents fell below the average for companies of a similar size, according to statistics put forth by the

Ministry of Health, Labour and Welfare. In fiscal 2019, we reduced the number of accidents leading to lost working days significantly by enhancing safety audits and safety education aimed at preventing the occurrence of serious accidents. These and similar activities constitute a high priority for the Group.

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 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

The Environment & Safety Department uses accident analysis to identify the type of work that is likely to lead to accidents, as well as data on age groups, business locations, and other factors to help prioritize guidance regarding accident prevention. Of the work-related accidents that occurred in

fiscal 2019, a large number involved body parts being pinched and getting caught in machinery as well as cuts and scrapes, accounting for 40% of injuries. In addition, many of those injured had little industry experience, and therefore we are focusing on training such employees.

Safety Audits

When an accident occurs, the Environment & Safety Department conducts on-site inspections and safety audits in order to prevent recurrence. Post-accident, we deepen our factor analysis based on the completed on-site inspection, provide guidance on efforts to prevent recurrence, and conduct an evaluation based on this check list. We reach consensus on themes to be addressed during the safety audit and provide support until a report showing the necessary corrections have been made is received. For companies with work locations that see a large number of accidents, we provide third-party diagnostic services and support for making improvements.

On-site inspections / safety audits	<ul style="list-style-type: none"> Fact-finding investigation and confirmation Investigation into corrective measures during accident analysis Safety audit Establishment and implementation of agreed-upon corrective steps
Guidance for companies with frequent work accidents	<ul style="list-style-type: none"> Diagnostics on health and safety via third party Recognition of deficiencies in current on-site operations Establishment of themes for improving level of health and safety Incorporation and execution of themes in annual plan

Safety Education

The DOWA Group holds seminars on the environment and safety every fiscal year in each district in Japan where it maintains business locations. In fiscal 2019, 94 employees from five districts learned about environmental and safety-related laws. To improve the level of each Group company's safety initiatives, the Group has held an annual DOWA Group Risk Assessment Award Presentation event since 2011 to share the notable efforts being made by each Group company and to build a personnel network. About 60 people from Japan and overseas

gathered at the event and actively exchanged opinions on the efforts of each Group company. In addition, we have introduced location-specific safety education in order to reduce risk.



Environment and safety seminar



Risk Assessment Award winner

TOPIC Preventing the Spread of COVID-19

In March 2020, as a response to the spread of COVID-19, the DOWA Group established a countermeasures headquarters led by the director in charge of occupational health. In addition, the Group has encouraged staggered work shifts and remote working, taking advantage of web conferencing while restricting the number of business trips made by employees.

Safety Measures and Responses to Changes in the Operating Environment

In anticipation of Japan's shrinking labor force, DOWA has taken steps to introduce a new system that promotes online meeting management and information sharing and utilization via groupware aimed at reducing work hours and improving productivity.

Amid restrictions on human movement as a result of COVID-19, we have been able to utilize this system to ensure continued communication and information sharing among employees and departments, both of which are necessary for continuing our business activities. As an example, the entire two-month training program for new employees, the components of which include the entrance ceremony, orientation, and factory tours, was conducted effectively online. We have also promoted the transition to online recruitment activities and position-based education and training, and have worked to enhance human resource recruitment and human resource development while reducing the risk of infection.

Going forward, we will continue to make every effort to prevent the spread of COVID-19 and ensure the health and safety of our employees. We will also make use of our track record in online communication and information sharing to be flexible in our response to various changes in the operating environment.



Online entrance ceremony for new employees



Environmental Initiatives

The DOWA Group recognizes the impact of 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.

Material Balance

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.

Environmental Management System

Within the DOWA Group, 47 business locations, comprising 70% of major production bases, have acquired either ISO 14001 certification or EcoAction 21 certification, having established an environmental management system. In terms of our transportation operations, we have also been certified under the Green Management Certification System for promoting environmental conservation in the trucking industry.

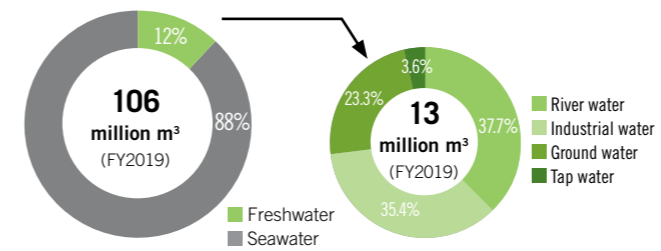
Obtained environmental management system certification

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

Water Resources

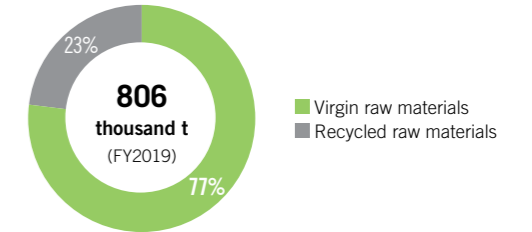
The DOWA Group mainly uses its water resources in the smelting process, which utilizes seawater. In fiscal 2019, freshwater use amounted to 13 million m³, accounting for approximately 12% of all the water resources used.

In addition, 790,000 m³ of used wastewater is recycled and reused in our own processes.



Percentage of Recycling Raw Materials

In fiscal 2019, the DOWA Group utilized 806 thousand tons of raw materials, of which approximately 23% was recycling raw materials.

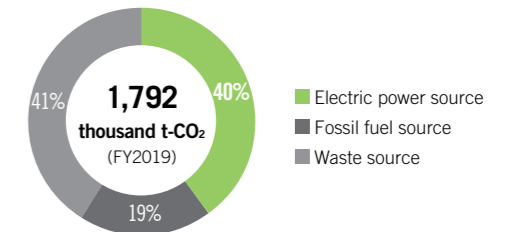
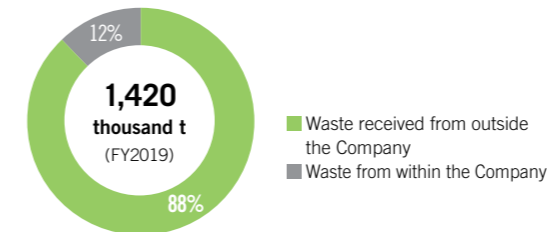


Greenhouse Gases

In fiscal 2019, the greenhouse gas emissions generated by the DOWA Group as a whole totaled approximately 1,792 tons of CO₂, with 40% coming from electricity, 19% from fossil fuel, and 41% from waste received. The CO₂ emissions derived from waste received include emissions from the treatment of waste received by the waste treatment business from outside the Company.

Waste Received

In fiscal 2019, the amount of waste treated by the waste treatment business amounted to 1,420 thousand tons, with 88% of this amount received from outside the Company and 12% received from within the Company.



Input

Total energy input	18.2 PJ	Versus previous FY -3%
Fossil fuel consumption	121,000 kL	
Purchased electric power	1,351 GWh	
Thermal power generation	4.6 GWh	
Hydroelectric power generation	38.7 GWh	
Solar power generation	335 MWh	
Purchased steam flow	388 GJ	

Water resources	106 million m³	Versus previous FY -8.2%
Seawater	93 million m ³	
Besides seawater	13 million m ³	

Raw material use	1,058 thousand tons	Versus previous FY -3%
Raw materials	806 thousand tons	
Auxiliary materials	161 thousand tons	
Heat treatment of items received	89 thousand tons	
Packaging materials	1.7 thousand tons	

Amount of waste received	1,556 thousand tons	Versus previous FY +2%
Waste	1,420 thousand tons	
Statutory recycled items received	96 thousand tons	
Contaminated soil	40 thousand tons	
Fluorocarbon throughput	552 thousand tons	

DOWA Group business activities

Manufacturing businesses

- Nonferrous Metals Business
- Electronic Materials Business
- Metal Processing Business
- Heat Treatment Business

Environmental Management & Recycling Business

- Research & development
- Raw material procurement
- Logistics

Within business areas

Waste heat power generation **79 GWh** (Versus previous FY +1%)

Waste heat utilization **427 TJ** (Versus previous FY +3%)

Output

Total greenhouse gas emissions	1,792 thousand tons	(CO ₂ equivalent)	Versus previous FY -4.2%
Electric power source	715 thousand tons	(CO ₂ equivalent)	
Fossil fuel source	342 thousand tons	(CO ₂ equivalent)	
Waste source	735 thousand tons	(CO ₂ equivalent)	
Amount of electric energy sold	0.8 GWh		Versus previous FY +52%
Product quantity	945 thousand tons		Versus previous FY -4%

Chemical substance emissions	1,773 tons	Versus previous FY -24%
Drainage water discharge	117 million m ³	Versus previous FY -10%
Amount of waste	367 thousand tons	Versus previous FY -5%
Recycled amount	634 thousand tons	Versus previous FY +4%
Thermal recycling	352 thousand tons	
Material recycling	282 thousand tons	

In-house treatment and recycling

Use and disposal

End users

Manufacturing and sales

Clients



Environmental Initiatives

Climate Change

We believe climate change has the potential to affect profits and costs. Therefore, promoting efforts to reduce CO₂ emissions is an extremely important issue for the Company.

Climate change risks for the Company

Risk	Impact
Transition risks	
Policy	<ul style="list-style-type: none"> Carbon prices Review of carbon tax exemption measures Mandatory information disclosure <ul style="list-style-type: none"> Costs in response to regulations Declining asset value
Economic	<ul style="list-style-type: none"> Energy prices Transition to renewable energy <ul style="list-style-type: none"> Energy procurement costs Procurement costs for raw materials (including logistics)
Social	<ul style="list-style-type: none"> Shifts in customer behavior Investor evaluation <ul style="list-style-type: none"> Transition to low-carbon products and services Need to adjust medium- to long-term strategy, targets, and response to TCFD recommendations and Science Based Targets initiatives
Technological	<ul style="list-style-type: none"> Energy conservation and renewable energy Change in customer trends <ul style="list-style-type: none"> Need to review existing products and services Need to engage in capital investment and investment in alternative technologies
Physical risks	
Long-term / chronic	<ul style="list-style-type: none"> Rising temperatures Rising sea levels <ul style="list-style-type: none"> Deterioration in working environment Expenses related to facility and equipment upgrades
Immediate / short-term	<ul style="list-style-type: none"> Typhoons, localized downpours <ul style="list-style-type: none"> Danger to employee safety Disruption to supply chain Increased insurance premiums

We believe that by addressing the risks and simultaneously providing products and services that utilize lower-carbon amounts, we will be able to create new business opportunities.

Product in the Field of Renewable Energy: Silver Powders for Solar Panels

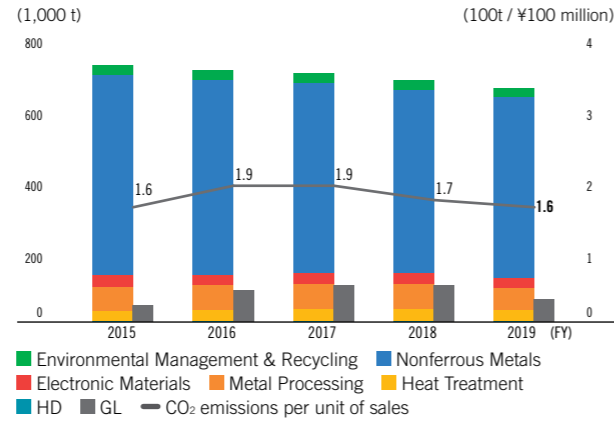
Dowa Hightech Co., Ltd., is one of the world's largest manufacturers of Silver powder used in the electrodes for solar panels. Silver powder is considered an important raw material for solar panels and is a major factor in heightening performance. Therefore, by approaching domestic manufacturers and ensuring a stable supply of silver powder that best meets their needs, we are making a major contribution toward improving the functionality of these solar panels.



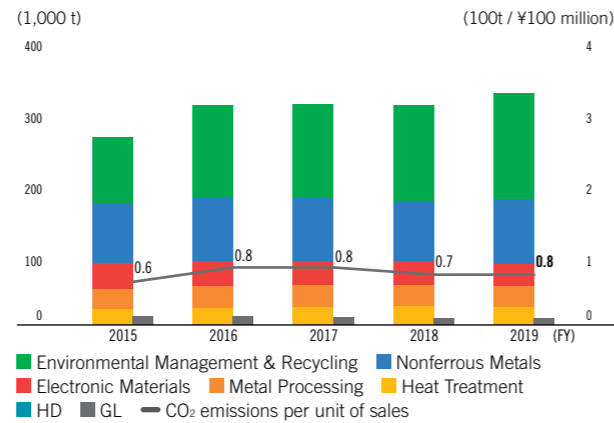
Trend in CO₂ Emissions

Greenhouse gas emissions for the entire DOWA Group in fiscal 2019 decreased by slightly above 4% compared with the previous fiscal year.

Electric power source



Fossil fuel source



Renewable Energy Initiatives

Kosaka Smelting & Refining Co., Ltd., in Akita Prefecture, started operation of its second domestic hydroelectric plant in 1897, and currently owns six such plants. In fiscal 2019, these power plants generated 38.7 GWh of electricity. In addition, we have introduced solar power generation systems, generating a total of 335 MWh of solar power in fiscal 2019.



Energy Use

Changes in the amount of CO₂ emissions produced by the DOWA Group are heavily impacted by emissions from incinerating waste received from outside the Company, which is difficult to control in terms of the amount and type of waste received. Therefore, we are working to combat global warming by promoting thermal recycling that uses the heat and steam produced through incineration to generate power. In fiscal 2019, 79 GWh of power was generated using heat from incineration, almost the same level as in the previous fiscal year. In addition, the amount of such heat used for drying and other processes amounted to 427 TJ, an increase of about 3% from the previous fiscal year.

International Cooperation to Prevent Global Warming

Refrigeration and air-conditioning equipment distributed in Southeast Asian countries often utilize fluorocarbons with a high global warming coefficient. In 2014, DOWA Group

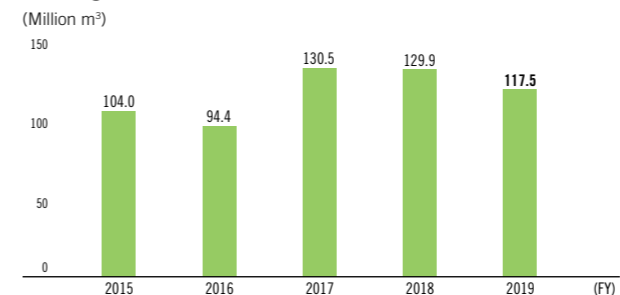
company Eastern Seaboard Environmental Complex Co., Ltd. (Thailand), cooperated with the Ministry of the Environment for conducting its feasibility study for a large-scale Joint Crediting Mechanism (JCM) project development titled "Strategic Promotion of Recovery and Destruction of Fluorocarbons." During this project, tests on fluorocarbon recovery and dismantling of equipment containing fluorocarbons were conducted, serving as a step toward appropriate on-location fluorocarbon recovery.

With the support of Japan's Ministry of the Environment, we are also promoting fluorocarbon destruction treatment utilizing the incineration and thermal recovery equipment of Group company Bangpoo Environmental Complex Ltd. (BPEC), also based in Thailand. These efforts are in line with the Thai government's intention to tackle global warming. In December 2019, BPEC signed an agreement with the Industrial Estate Authority of Thailand to promote a demonstration project for fluorocarbon destruction.

Drainage Water

In fiscal 2019, total drainage water was 117 million m³, a decrease of approximately 10% from the previous fiscal year, due to a decrease in rainfall and suspension of facilities that utilize water.

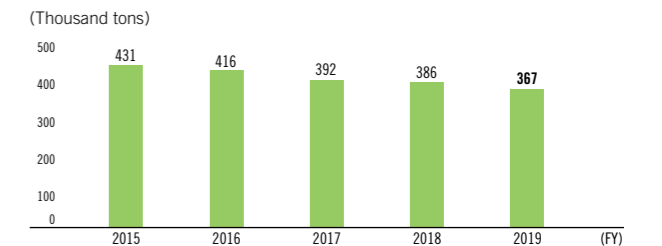
Drainage Water



Waste

In fiscal 2019, 367 thousand tons of waste was generated (347.6 thousand tons domestically and 19.3 thousand tons overseas), a decrease of about 5% compared with the previous fiscal year. Of this amount, 13.6 thousand tons of waste generated was hazardous waste (specially controlled industrial waste).

Waste



TOPIC Signing Disaster-Related Waste Treatment Agreements with Local Governments

In recent years, large amounts of disaster-related waste have been produced due to an increasing number of large-scale typhoons and earthquakes in Japan. Disaster-related waste requires prompt treatment for hygienic reasons, but since large amounts of waste are generated in short periods of time, treatment time can be long, exceeding the processing capabilities of local governments. To prepare for such occasions, we have entered into disaster-related waste treatment agreements with local governments with jurisdiction over major waste treatment bases, while also establishing a system through which we can cooperate in the prompt disposal of disaster-related waste.



Environmental Initiatives



Resource-Recycling Initiatives

The DOWA Group is working to make effective use of limited resources by incorporating waste produced by its own manufacturing processes, waste derived from the manufacturing processes of other companies, and waste generated by society.

The amount of materials recycled in fiscal 2019 was 634 thousand tons, an increase of about 4% from the previous fiscal year. Of this amount, material recycling accounted for 282 thousand tons and thermal recycling totaled 352 thousand tons.

A Multifaceted Approach toward a Recycling-Oriented Society

Ore, a natural resource, is finite, and metal recycling is an important solution for the realization of a sustainable

society. However, recycling also brings with it technological, economic, and social issues that need to be addressed, including the development of efficient metal recovery technology and technology for safely processing harmful and non-useful substances generated in the recycling process, the creation of an efficient collection system for recycling raw materials, and the addressing of costs incurred by processing a wide variety of raw materials.

The DOWA Group is developing a broad range of recycling businesses in Japan and overseas. However, in addition to recycling, we are looking at effectively using resources from a variety of angles, and we are working toward this goal by utilizing our waste treatment facilities, research institutes, and Transportation Department.

Examples of the approach of the DOWA Group

Improvement of collection technology

- Recovery of more than 20 types of metals
- Addressing of small quantities of many varieties of recycled materials
- Improvement of metal recovery efficiency at overseas mines
- Highly efficient recovery of trace elements

Securing of rare metals

- Recovery of platinum from spent catalysts
- Cobalt and nickel recovery from lithium-ion batteries
- Recovery of gallium-indium from processed scrap

Overseas expansion

- Precious metal recycling and home appliance recycling in China
- Precious metal recycling in Singapore

International resource recycling

- Recycling at DOWA's overseas bases
- Appropriate recycling at DOWA bases in Japan when it proves difficult to recover resources overseas.

Reduction of the environmental burden from mining

- Mine development with consideration to the natural environment
- Consideration for biodiversity in mineral exploration and mining

Promotion of diverse means of recycling

- Home appliance recycling
- Automobile recycling
- Precious metal recycling
- Recycling of small household appliances
- Recycling of waste edible oil

Securing of a stable supply of recycled materials

- Collection of spent catalysts through American and European bases

Controlling of risks to the environment

- Proper disposal of heavy metals, CFC, etc., contained in recycled materials
- Reduction of waste by promoting resource recycling

Promotion of responsible mineral procurement

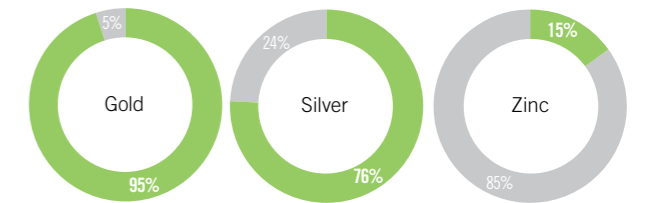
- Acquisition of certification for conflict mineral-free smelter
- Raw material management based on the DOWA Group's conflict mineral management policy



Providing Sustainable Metal Recycling

We recover approximately 20 kinds of metals by leveraging the function of our unique combined smelting and recycling complex. We also refine metals from recycled materials in an effort to provide the sustainable metal resources needed by society. The percentage of the metals primarily produced by the Company derived from recycling in fiscal 2019 is shown on the right.

Percentage of Metals produced by the Company derived from recycling



■ Raw materials derived from recycling ■ Concentrates
 Note: Kosaka Smelting & Refining Co., Ltd., provides value in the form of recycled gold and silver, whereas Akita Zinc Co., Ltd., provides value in the form of recycled zinc.

For the purposes of these graphs, raw materials derived from recycling are defined as metals derived from electronic circuit boards recovered from used products, scrap, and other by-products produced via processes at factories for electronic parts or other secondary raw materials realized from smelting inside or outside the Group.

Conservation of Biodiversity

Based on the basic policy on biodiversity, the DOWA Group is working to minimize the impact that its business activities have on biodiversity, and we are promoting the conservation of biodiversity through social action programs.

Basic policy on biodiversity
<http://www.dowa-csr.jp/en/csr/biodiversity.html>

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.

Conserving Biodiversity during Procurement

While, excluding water, we do not use biological resources for our main raw materials, we use paper at all of our business sites. For this reason, we use paper that is a mixture of old paper and forest-certified wood pulp for copy paper and pamphlets, while making every effort to use sustainable biological resources. When taking bids for centralized purchasing, we confirm that suppliers carry out responsible paper procurement based on our CSR Procurement Policy.

Safety Management for Suspended or Closed Mines and Tailing Dams

Managing Water Resources

At suspended or closed mines, mine water, including acidic water or water containing heavy metals, may flow out of the pithead. In addition, at tailing dams leachate (wastewater) containing harmful heavy metals is discharged due to rainwater or groundwater, and 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 more than 20 suspended or closed mines and over 30 tailing dams that we currently operate, and by doing so, we are working to maintain healthy water circulation and an environment conducive to sustainable water use.

Maintaining Stability at Suspended or Closed Mines and Tailing Dams

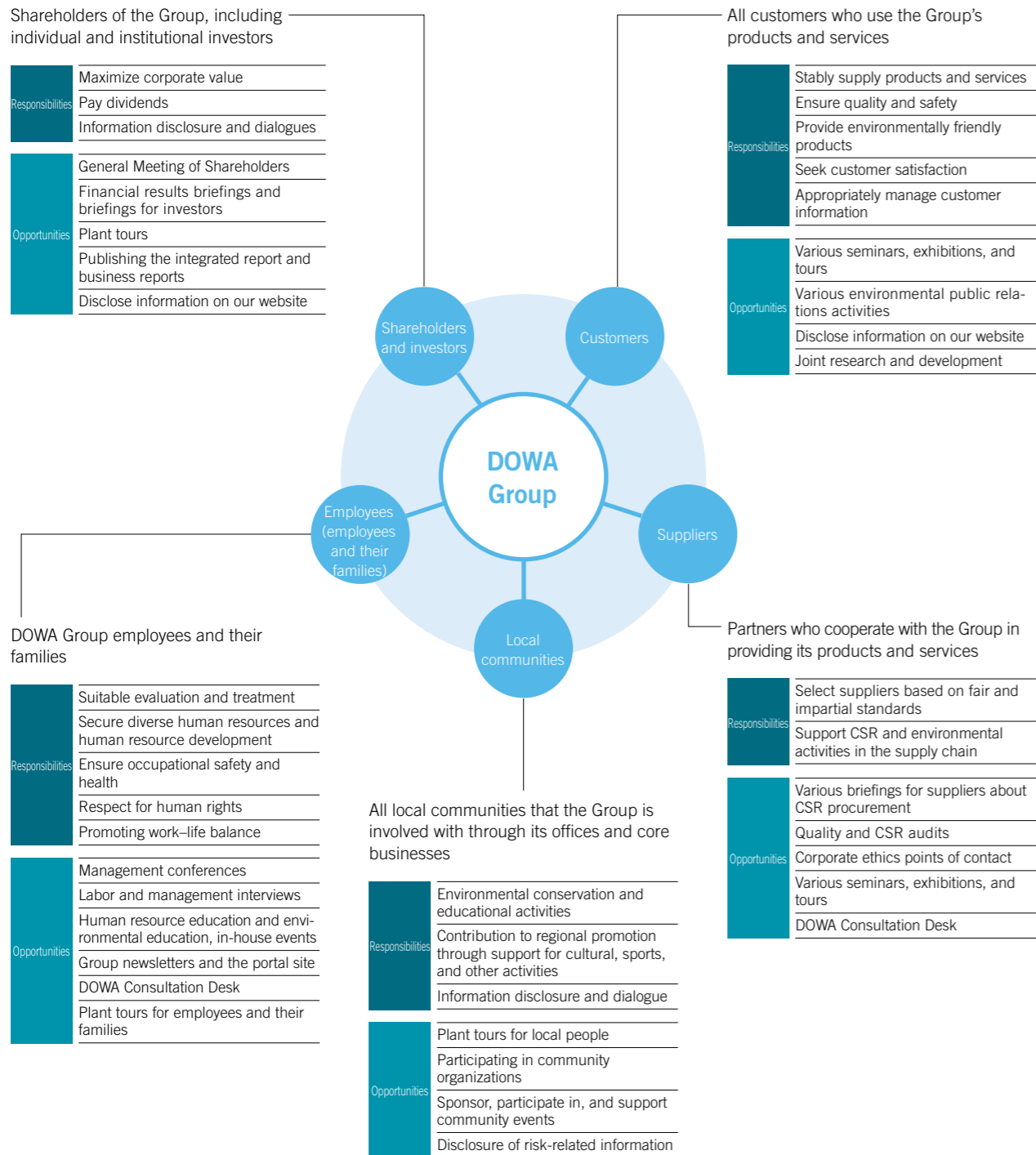
Mine wastewater treatment plants and tailing dam facilities are inspected on an irregular basis by public safety and inspection departments in each region. Most of the suspended or closed mines and tailing dams that we manage are facilities that ceased operations by 1980. These mines and dams are in 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 maintain stable conditions.



Social Initiatives

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

Name of certification	Number of certified locations
ISO 9001	22 locations (domestic) 11 locations (overseas)

In addition, as an initiative to strengthen quality control, we put effort into confirming the quality of procured items. In cooperation with suppliers, we aim to ensure the quality of procured items from quality and technological standpoints by implementing supplier surveys and inspections at appropriate intervals.

Suppliers

CSR Procurement

We promote CSR throughout the whole supply chain by distributing to business partners and suppliers the DOWA Group CSR Procurement Guidelines, which combine elements of our CSR Procurement Policy and Code of Conduct, and by confirming understanding about our 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 CSR Department and the Procurement Department collaborate to implement internal explanation and follow-up. As well as an annual self-check questionnaire, important suppliers receive in-person visits whereby we convey our philosophy on CSR procurement and confirm suppliers' level of conformity with the Group's CSR Procurement Guidelines.

Supply chain management for fiscal 2019

Self-check questionnaires	Number of recipients	85 companies
	Recovery rate	92%
CSR procurement audits	Number of companies visited	2 companies

CSR Procurement
http://www.dowa-csr.jp/en/csr/csr_procurement.html

Local Communities

Social Contribution Activities

Helping develop the next generation by supporting professional sports

The DOWA Group is the main partner of DREAM SCHOOL, a project based on school visits conducted by the professional basketball team Akita Northern Happinets. Under this project, aimed at contributing to the local community, the Akita Northern Happinets staff and athletes visit schools in all 25 municipalities of Akita Prefecture that put in a request to bring happiness and excitement to the local children and convey the importance of sports, especially as a means to have fun and participate and compete in a physical activity. In fiscal 2019, 23 elementary schools received visits under the project, and attendees interacted with presenters through basketball lessons and an introduction to the German Wheel (a competitive gymnastic event utilizing two large iron wheels connected in parallel) aimed at students, cheerleading dance classes, and speeches.

Awards from Akita Prefecture and Kosaka Town for long-standing contributions to sports

DOWA has been recognized for its contributions toward popularizing competitive sports and for holding the DOWA Cup Junior Cross-Country Ski Tournament at Lake Towada over the course of many years. In March 2020, DOWA received the Kosaka Town Sports Award for Distinguished Service from Akita Prefecture and Kosaka Town Athletic Association and Board of Education. In November of the same year, DOWA received an award from Akita Prefecture as a company that has made contributions to the promotion of sports.

The DOWA Cup was launched in 1991 with the goal of cultivating the youth of Japan and invigorating the region. With the cooperation of the local community, the event has since blossomed into a tradition spanning 30 years, producing Olympic-caliber athletes and others active in top-level competitions in Japan and overseas. Unfortunately, however, February 2019 was the last time the event would take place, as the DOWA Cup seems to have fulfilled its role. One of our CSR policies is to work in unison with local communities to promote social contributions that reflect the unique characteristics of those communities. Therefore, we will continue to promote new social contribution activities rooted in the local community so that we can move forward together.



Social Initiatives Employees

The DOWA Group has positioned “respect diversity and individuals” as one of its important Values and resolves to evaluate employees based on their ability to perform their duties, regardless of educational background, seniority, gender, or any other discriminating factor. To ensure that we can create value, we believe it is important to actively incorporate and utilize a diverse set of human resources and their variety of viewpoints, irrespective of nationality or age. Therefore, we employ an array of programs in order to promote diversity and build an organization that accepts and utilizes people and makes use of their differences.

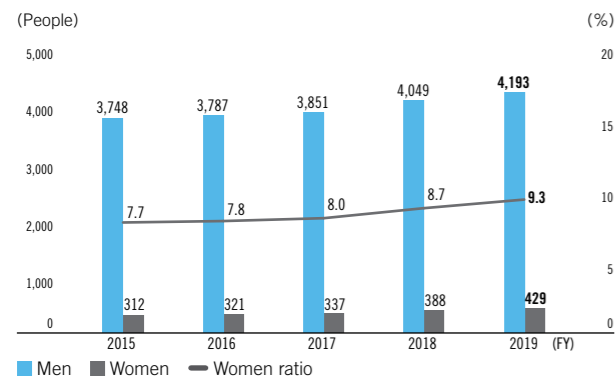
Employment

At the end of fiscal 2019, the number of employees in Japan was 6,491, an increase of 142 from the previous fiscal year. Of the full-time employees in Japan, 4,193 (90.7%) were men and 429 (9.3%) were women. Of the DOWA Group's total number of employees, 34% are based overseas, the same percentage as in the previous fiscal year.

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

Region	FY2015	FY2016	FY2017	FY2018	FY2019
Japan (people)	5,878	6,072	6,094	6,359	6,491
Overseas (besides Japan)	2,897	2,899	3,092	3,148	3,217
Europe	22	23	14	14	12
North America	96	96	131	166	128
Latin America	1	1	4	4	52
Overseas total	3,016	3,019	3,241	3,332	3,409
Total	8,894	9,091	9,335	9,691	9,900

Employment Situation in Japan (Full-time Employees)



Employment Status

	FY2019	Men	Women
Average age (years old)		40	39
Average length of employment (years)		14	12
Number of employees hired		303	95
Number of employees who left Company at own request		83	13
Number of employees who left Company due to retirement		3	1
Number of employees re-hired after retirement		55	2
Employee retention rate: employees employed for 10 years or longer (among employees hired as new graduates for the holding company)		78%	71%

Work-Life Balance

With the aim of harmonizing work and life, we are enhancing the system to support 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 Various Workstyles

In fiscal 2019, 22 employees took childcare leave, while 64 male and 24 female employees took time off work to care for their sick children.

In addition, 11 employees returned from childcare leave after taking leave during fiscal 2019, and 31 employees who took childcare leave in fiscal 2018 remained with the Company 12 months after taking childcare leave.

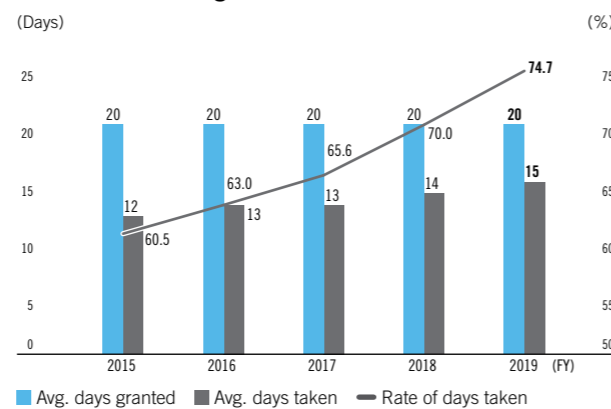
Those taking child-care leave and leave for nursing sick children

Type of leave taken (people)	FY2017		FY2018		FY2019	
	Men	Women	Men	Women	Men	Women
Child-care leave	2	32	2	31	0	22
Leave for nursing sick children	27	26	35	28	64	24

Optimizing Working Hours

We are 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 2019 was 19 hours per month, approximately the same as in the previous fiscal year. With regard to annual paid leave in fiscal 2019, with 20 days on average granted, employees took about 15 days, or 74.7%, of their vacation days, an increase of 5% from the previous fiscal year.

Status of the Taking of Annual Paid Leave



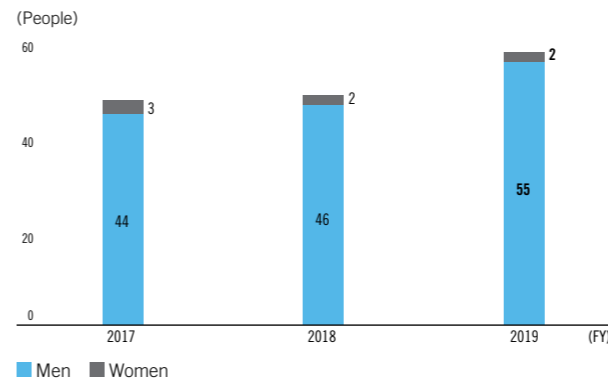
Promoting Diversity

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.

Re-Employment of Retired Workers

In fiscal 2019, a total of 57 retired workers were re-hired. Also in fiscal 2019, the Company revised the ways in which it treats employees and made internal developments specifically targeting employees who wish to return to work post-retirement, so as to not only ensure they can work with greater motivation but also enable the Company to utilize their knowledge and technical ability. In anticipation of the decline in the working population, we are planning to extend the age of retirement in the future.

No. of Re-Employed



Promoting Women's Participation and Advancement

At DOWA, there is no gender distinction in terms of workstyle, with male and female employees playing the same active on-site roles, both in Japan and overseas. In matters of promotion and advancement, assessments are made according to ability, irrespective of gender.

On the other hand, one problem facing the Company is that the proportion of female employees in long-term employment is lower than that of male employees. To address this issue, we are making efforts to raise the percentage of women who remain employed with the Company for over 10 years to 80%, the same as that for men.

As for specific measures, from fiscal 2019 we have been developing a system that will support women in both their child-rearing and work duties by expanding the scope of employees who can work shortened hours for child-rearing

purposes. This system supplements existing measures that include a flextime system and assistance for child-rearing costs. In addition, we have conducted diversity and career training and diversity and management training since fiscal 2017 to support the advancement of women, and are working on reforms to expand such education and awareness.

Going forward, we will continue to leverage these measures 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.

Percentage of Female Workers by Position

Position	FY2015	FY2016	FY2017	FY2018	FY2019
Executive officers	0.8%	0.8%	0.8%	0.8%	0.9%
Management employees	1.1%	1.2%	1.3%	1.7%	1.4%
General employees	9.6%	9.7%	10.0%	10.5%	11.2%

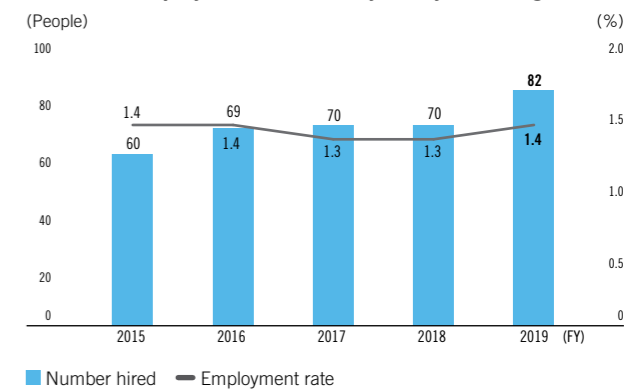
Implementation Status of Diversity Training

Training	Attendance rate up to FY2019 (total)
Diversity career training (for female employees)	72%
Diversity management training (for management employees)	64%

Employment Rate for the Physically Challenged

In fiscal 2019, the Groupwide employment rate for the physically challenged was 1.4%, below the statutory employment rate. However, the number of physically challenged employees is on an upward trend, and 17 such employees were hired by DOWA Holdings in fiscal 2019, equating to an employment rate of 2.0%.

Status of Employment for the Physically Challenged





Social Initiatives

Human Resource Development and Evaluation

As a vision for human resources and our 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.

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 on understanding of the abilities and behaviors required of employees’ job grades, try to improve their work performance

Education and Training System

From new employees to managers, we have established stratified education according to job classification, and have set up an education system of selective education in order to nurture the next generation of leaders at each level. We also conduct training and meetings to implement shared awareness and edification.

Status of training system (fiscal 2019)

Content	Target employees	FY2019	
		No. of participants	Total time
Business leader training	Development of the next management team	16	1,488
Training to strengthen middle management	Managers	57	2,052
Management training, training to strengthen skills for leading subordinates	Managers	71	2,808
Leadership training	Mid-level employees	42	1,512
New employee training	New employees	53	13,568
Follow-up training for new and young people	1st–3rd year employees	100	1,600
Global challenge program	Mid-level employees	7	4,424
Training program for problem solving and logical thinking	Mid-level employees	18	432
Frontline supervisor training	Site managers	50	4,400
Office worker training	Office workers	22	528
Training for on-the-job-training instructors	On-the-job-training instructors	47	376
New recruiter training	New recruiters	37	296
Training for practical English skills	Mid-level employees	16	640

Education

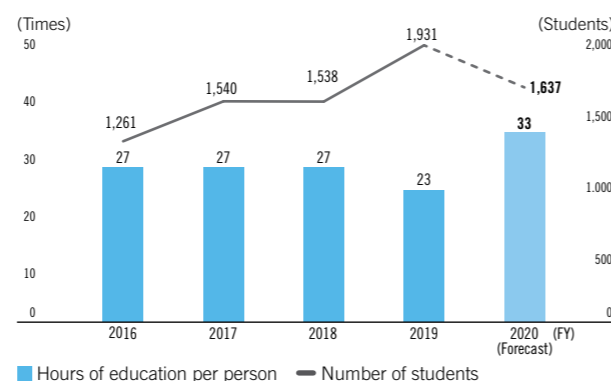
Our selective education provides opportunities for self-development unbound by time and location, offered in forms that include easy-to-use correspondence education, e-learning, as well as external interactive programs.

In fiscal 2019, we invested a total of ¥114,576 thousand, an approximately 23% increase from the previous fiscal year.

Status of education implementation and plan for fiscal 2020

Item	FY2016	FY2017	FY2018	FY2019	FY2020 (Forecast)
Number of participants (students)	1,261	1,540	1,538	1,931	1,637
Total education time (hours)	33,648	42,055	42,092	44,724	53,287
Education investment amount (millions of yen)	94	90	93	115	140

Changes in number of hours of education per person and number of students



TOPIC Continued Development of Activities to Enhance On-Site Capabilities

The DOWA Group has built a unique recycling-oriented business model around five core businesses that are linked by their connection to metals. The products and services of each of these businesses are at the top of their respective fields due to their unique manufacturing processes and the expertise of their employees honed over the course of many years.

However, for DOWA to continue its growth and ensure its survival, the Company must further strengthen its employee development and organizational capabilities so that it can carry its technology and knowledge into the future. For this reason, in 2011 we introduced cross-sectional Group activities to enhance on-site capabilities, aimed at boosting the capabilities of operators responsible for on-site manufacturing.

Building a System to Firmly Establish Initiatives

To ingrain the habit of continuing activities to enhance capabilities, we have established a system whereby each location will initially move forward with initiatives according to the Company’s plan, after which companies selected in regional qualifiers held in Akita, Kanto, Chubu, Okayama, and Kyushu move on to present the results of their respective initiatives in a Groupwide competition. The continued use of this system over the course of five years has facilitated execution of these plans over time, firmly establishing initiatives to enhance on-site capabilities at each Group company.



Building a Network to Improve Organizational Strength

In 2016, we introduced meetings for human resource development managers. These meetings provide managers in charge of formulating personnel strategies the opportunity to gather and learn about each Group company’s corporate culture and the differences in viewpoints at each location, as well as the opportunity to understand the role of their respective companies in the recycling-oriented business model and their position in the DOWA Group. These meetings, which bring together members of over 60 companies, are beneficial not only in terms of facilitating mutual study but also for helping build relationships and networks across factory locations and allowing participants to understand the importance of their work through dialogue, which has the added effect of improving motivation. For results presentations, we gather members from locations of a similar scale and labor composition. The groupings have led to greater interest in other Group companies and more active, self-directed exchanges.



On-Site Capabilities—the Foundation of Manufacturing

We have locations across Japan, all of which vary by operation, scale, and labor composition. As a result, it is difficult to find a single effective method. On the other hand, we can take advantage of the diverse nature of our businesses and broaden our ways of thinking by having our businesses learn from one another regardless of differing industries of scale. Doing so can lead to synergistic benefits from incorporating the activities of other companies, such as reducing losses in production by employing another company’s strategies. On-site capabilities are the foundation of manufacturing and require the support of each and every employee. We will improve DOWA’s corporate value by enhancing our on-site capabilities and creating an autonomous organization.

Message from a Senior Manager

I hope to continue the activities being carried out by DOWA for another 10 years. Furthermore, I would like employees of each Group company to be proud of the role their company plays in the Group and also for these companies to flourish and grow autonomously. To achieve this goal, we will use dialogue to connect the wisdom and ingenuity of each employee so that they and their families have pride in the companies they work for.



HATAKEYAMA Kouichi
DOWA Holdings
Senior Manager of
Human Resources Dept.

Financial Review

Financial Performance

The business environment in which the DOWA Group operated in fiscal 2019, the fiscal year ended March 31, 2020, continued to be unstable as a result of U.S.–China trade friction and the impact of COVID-19. Demand for automotive-related products hit a slump due to fewer automobiles being produced worldwide. In information and communication-related products, demand for smart-phones saw some recovery, while new energy-related products continued to experience returning demand in the Chinese market. As for the commodities markets, exchange rates made a slight turn in favor of the yen at the end of the fiscal year under review. Amid an uncertain political backdrop internationally, metal prices for gold and platinum group metals (PGMs) rose, while prices for base metals such as zinc and copper continued to fall.

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 “to expand businesses in growth markets” and “increase competitiveness of existing businesses.”

As a result, consolidated net sales increased 7.1%, to ¥485,130 million, while consolidated operating income increased 39.0%, to ¥25,955 million. Consolidated ordinary income increased 19.3%, to ¥28,996 million, and net income attributable to owners of the parent increased 16.1%, to ¥17,395 million.

COVID-19 had a minor impact on business performance and financial position in the consolidated fiscal year under review. As for the impact on business activities, operations of consolidated subsidiary Hightemp Furnaces Ltd., part of the Heat Treatment Business, were suspended from the end of March due to the lockdown in India, but initiated a staged return to operations in mid-May.

However, the halt of economic activity in Japan and other countries, particularly suspended operations and reduced production among automobile manufacturers, is expected to impact demand in the Heat Treatment Business and the Metal Processing Business in the following consolidated fiscal year, as automotive-related products constitute a large portion of sales for both businesses. Metal prices have also been sluggish during this time.

In China, consolidated subsidiaries Dowa Environmental Management Co., Ltd. (Environmental Management & Recycling Business), Dowa Advanced Materials (Shanghai) Co., Ltd. (Metal Processing business), Dowa New Materials (Shanghai) Co., Ltd. (Metal Processing Business), and Kunshan Dowa Thermo Furnace Co., Ltd. (Heat Treatment Business) conducted a staged suspension of operations from the end of January, affecting business activities, but have since resumed their respective operations.

In Mexico, equity-method affiliates Minera Tizapa, S.A. DE C.V. (Nonferrous metals Business) and Minera Plata Real, S. DE R.L. DE C.V. (Nonferrous metals Business) operate the Tizapa Mine and Los Gatos Mine, respectively. Operations of the Los Gatos Mine were suspended from mid-April to the end of May by government order, but have since resumed operations.

In addition, equity-method affiliate Fujita Kanko Inc. (Other business) was affected by the decrease in the number of domestic and overseas tourists. While the above events will affect the business performance and financial condition in the next consolidated fiscal year, it is difficult to reasonably formulate an outlook at this time.

The above-mentioned consolidated subsidiaries and equity-method affiliates end their fiscal year on December 31.

Analysis of Financial Position

Assets

Total assets at the end of the fiscal year under review stood at ¥512,495 million, up ¥17,812 million compared with the end of the previous fiscal year.

Current assets were up ¥4,135 million, while fixed assets increased ¥13,676 million. Despite decreases in notes and accounts receivable of ¥9,268 million and in raw materials and supplies of ¥4,489 million, current assets rose mainly due to increases of ¥11,612 million in cash and time deposits and ¥6,621 million in other current assets.

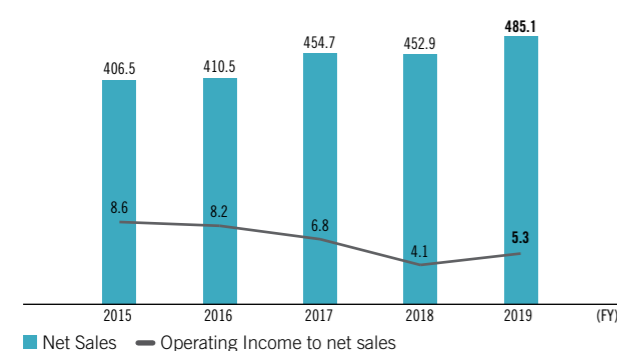
Fixed assets increased mainly due to an ¥18,970 million rise in property, plant and equipment, despite a decrease in investment securities of ¥3,126 million and in other assets listed under investments and other assets of ¥1,671 million.

Liabilities

Total liabilities grew ¥5,729 million compared with the previous fiscal year-end. This increase was largely due to increases in other current liabilities of ¥7,783 million, accrued income taxes of ¥4,088 million, and short-term borrowings of ¥3,219 million, despite a decrease in notes and accounts payable of ¥8,969 million.

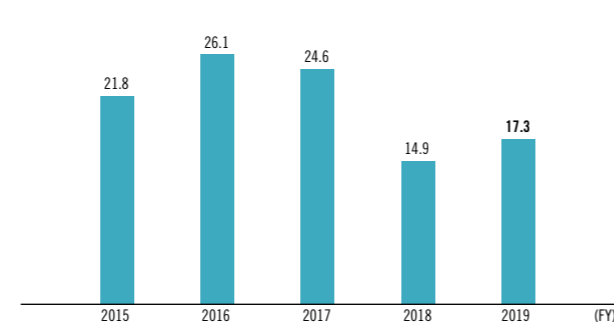
Net Sales / Operating Income to Net Sales

(Billions of yen / %)



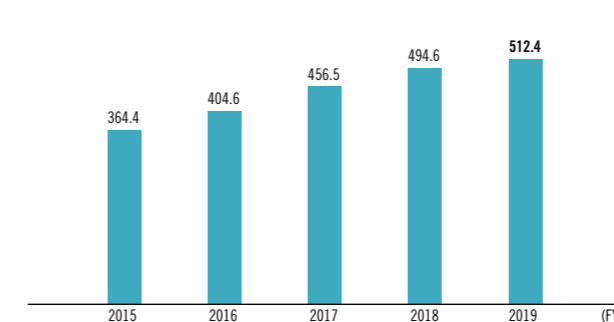
Net Income Attributable to Owners of the Parent

(Billions of yen)



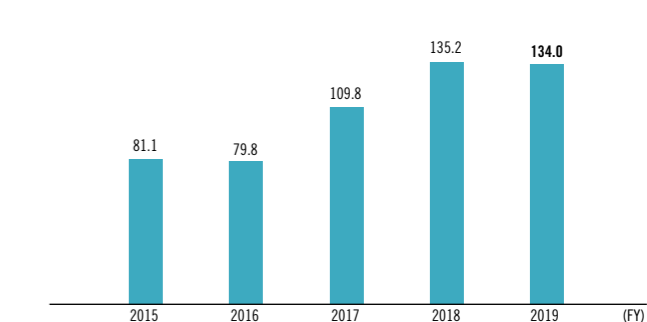
Total Assets

(Billions of yen)



Interest-Bearing Debt

(Billions of yen)



Equity

Looking at total equity, net income attributable to owners of the parent amounted to ¥17,395 million, but payment of cash dividends resulted in an increase in shareholders' equity of ¥11,186 million. In addition, total accumulated other comprehensive income dropped ¥353 million due to unrealized loss on available-for-sale securities, and total equity was ¥12,082 million higher than the balance as of the end of the previous fiscal year, with the equity ratio at 48.4%.

Analysis of Cash Flows

Consolidated cash and cash equivalents (hereinafter, "net cash") at the end of the consolidated fiscal year under review increased ¥11,229 million compared with the previous fiscal year-end, to ¥30,232 million.

Net cash provided by operating activities came to ¥55,113 million, up ¥17,558 million year on year. Principal cash inflows included income before income taxes of ¥28,762 million, non-financial expenses of depreciation and amortization of ¥19,288 million, and a decrease in notes and accounts receivable of ¥8,553 million. Outflows included a decrease in notes and accounts payable of ¥8,383 million.

Net cash used in investing activities was ¥37,812 million, down ¥13,213 million compared with the previous fiscal year. This was primarily due to capital expenditures of ¥36,126 million, primarily in the Environmental Management & Recycling Business, and payments for loans amounting to ¥8,120 million.

Net cash used in financing activities was ¥6,569 million, compared with net cash provided by financing activities of ¥15,944 million in the previous fiscal year, a difference of ¥22,514 million (rounded). This reflected cash dividends paid of ¥5,577 million and a decrease in interest-bearing debt of ¥807 million.

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

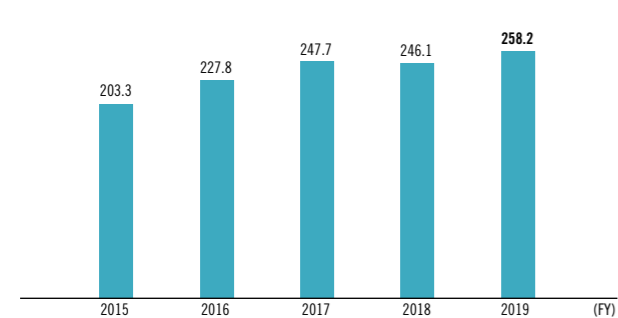
DOWA views the payment of dividends to shareholders as one of its most important management issues. The Company's fundamental policy is to maintain the stable payment of dividends and, in that light, it pays a dividend commensurate with performance, having appropriated a sufficient amount of retained earnings to bolster the Group's business position and support future business

development. 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, the annual dividend paid for the fiscal year under review was ¥90 per share, the same amount as in the previous fiscal year.

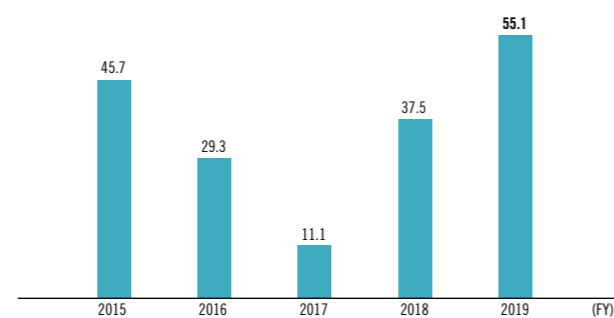
Equity

(Billions of yen)



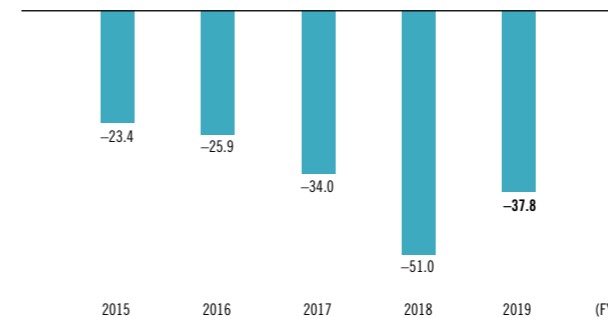
Cash Flows from Operating Activities

(Billions of yen)



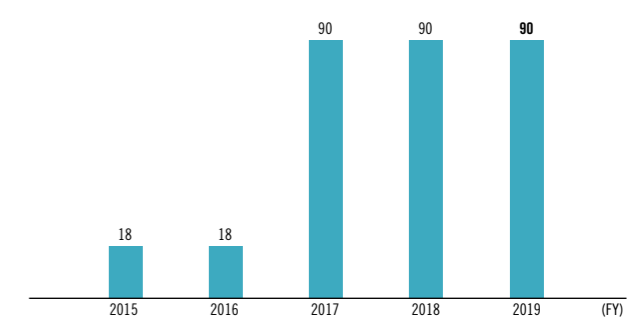
Cash Flows from Investing Activities

(Billions of yen)



Cash Dividends

(Yen)



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

Consolidated Performance Trends

(Millions of yen)

Midterm Plan 2020

For the years ended March 31	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019(FY)*1
Financial Performance											
Net Sales	¥307,462	¥379,816	¥392,468	¥419,390	¥443,985	¥464,219	¥406,598	¥410,503	¥ 454,754	¥ 452,928	¥ 485,130
Cost of Sales	268,738	330,380	343,015	365,963	382,079	391,509	337,314	341,177	387,831	396,495	421,630
Selling, General and Administrative Expenses	25,022	26,511	27,443	28,863	30,111	33,616	34,216	35,335	35,975	37,761	37,544
Operating Income	13,701	22,924	22,009	24,564	31,794	39,094	35,067	33,990	30,948	18,671	25,955
Operating Income by Segment											
Environmental Management & Recycling (%)	15.35	12.22	20.34	26.37	29.86	18.80	18.01	19.50	16.06	30.46	27.76
Nonferrous Metals (%)	21.95	22.56	19.25	19.09	22.20	34.69	38.00	29.58	29.74	3.17	38.54
Electronic Materials (%)	35.12	31.16	24.95	23.58	21.12	22.55	22.89	19.36	18.17	11.66	4.09
Metal Processing (%)	24.00	23.66	20.59	19.89	16.96	14.85	14.01	20.49	23.54	33.74	19.71
Heat Treatment (%)	1.07	6.18	8.95	6.33	7.12	6.02	3.86	7.00	8.47	13.05	4.63
Others and Elimination (%)	2.51	4.21	5.92	4.74	2.74	3.09	3.24	4.06	4.01	7.92	5.27
Ordinary Income (Loss)	¥ 13,809	¥ 23,371	¥ 20,918	¥ 27,277	¥ 35,055	¥ 42,037	¥ 35,056	¥ 36,504	¥ 36,355	¥ 24,309	¥ 28,996
EBITDA*2	32,978	41,410	40,354	41,551	48,000	54,667	50,212	49,786	48,160	37,300	45,244
Net Income (Loss) Attributable to Owners of the Parent	4,359	8,521	10,610	15,213	23,310	26,543	21,826	26,169	24,693	14,986	17,395
Capital Expenditures	10,763	17,820	15,910	18,422	16,549	17,247	22,936	26,526	24,608	24,087	37,723
Depreciation	19,276	18,486	18,344	16,987	16,205	15,572	15,145	15,796	17,212	18,628	19,288
R&D Expenses	4,099	4,266	4,623	4,604	4,651	5,320	5,594	5,670	5,380	5,888	6,076
Exchange Rate and Metal Prices											
Copper (Price Quoted, Average)	¥609,483	¥738,200	¥717,817	¥696,375	¥757,633	¥765,775	¥675,483	¥603,917	¥ 756,683	¥ 746,608	¥ 681,592
Zinc (Price Quoted, Average)	222,575	231,858	211,683	208,675	240,325	285,983	269,383	305,633	386,733	353,725	313,308
U.S. Dollar (Average)	92.85	85.72	79.08	83.10	100.24	109.93	120.14	108.38	110.85	110.91	108.74
Financial Position											
Equity	¥111,667	¥113,785	¥121,807	¥142,400	¥166,987	¥195,649	¥203,370	¥227,821	¥ 247,762	¥ 246,158	¥ 258,241
Non-Controlling Interests	5,663	6,942	7,999	8,807	8,733	8,528	8,449	8,518	8,946	8,944	10,194
Total Assets*3	330,720	340,161	319,665	349,787	358,717	379,193	364,420	404,604	456,530	494,683	512,495
Interest-Bearing Debt	149,371	138,119	117,670	107,138	99,663	86,668	81,135	79,883	109,827	135,241	134,086
Per Share*4 (Yen)											
Basic Net Income (Loss)	¥ 14.96	¥ 28.80	¥ 35.86	¥ 51.41	¥ 78.77	¥ 89.69	¥ 73.75	¥ 88.43	¥ 417.21	¥ 253.22	¥ 293.92
Fully Diluted Equity	358.33	361.18	384.55	451.41	534.75	632.30	658.66	741.06	4,035.06	4,008.03	4,191.09
Cash Dividends	10.00	10.00	10.00	12.00	15.00	18.00	18.00	18.00	90.00	90.00	90.00
Cash Flows											
Cash Flows from Operating Activities	¥ 25,011	¥ 23,955	¥ 31,499	¥ 34,970	¥ 30,189	¥ 38,345	¥ 45,751	¥ 29,389	¥ 11,125	¥ 37,555	¥ 55,113
Cash Flows from Investing Activities	(14,602)	(19,257)	(19,491)	(19,354)	(18,689)	(20,321)	(23,486)	(25,954)	(34,010)	(51,025)	(37,812)
Cash Flows from Financing Activities	(33,888)	(15,070)	(24,134)	(14,982)	(12,341)	(16,905)	(11,159)	(7,155)	24,087	15,944	(6,569)
Free Cash Flow	10,408	4,698	12,007	15,615	11,499	18,024	22,265	3,434	(22,884)	(13,470)	17,301
Cash and Cash Equivalents at End of Year	27,115	16,741	4,788	6,129	5,823	8,044	18,902	15,126	16,472	19,002	30,232
Ratios											
Return on Assets*5 (%)	4.10	6.97	6.34	8.15	9.90	11.39	9.43	9.49	8.44	5.11	5.76
Return on Equity*6 (%)	4.26	8.01	9.62	12.30	15.97	15.37	11.43	12.64	10.78	6.30	7.17
Operating Income (Loss) to Net Sales (%)	4.46	6.04	5.61	5.86	7.16	8.42	8.62	8.28	6.81	4.12	5.35
Equity Ratio*7 (%)	32.05	31.41	35.60	38.19	44.12	49.35	53.49	54.20	52.31	47.95	48.40
Operating Income Growth (%)	—	67.31	(3.99)	11.60	29.43	22.96	(10.30)	(3.07)	(8.95)	(39.67)	39.01
Interest Coverage (Times)	5.12	10.55	11.52	14.82	21.41	34.23	39.04	43.12	55.47	20.71	21.69
Debt / Equity Ratio*7 (Times)	1.41	1.29	1.03	0.80	0.63	0.46	0.42	0.36	0.46	0.57	0.54
Debt / Capacity Ratio (Times)	1.91	1.90	1.83	1.37	1.28	1.06	1.00	0.83	1.05	1.29	1.26
Return on Invested Capital*7 (%)	1.71	3.48	4.58	6.32	9.04	9.70	7.91	8.75	7.08	4.02	4.55

*1 The years stated in the table are ended March 31. Thus, "2019" refers to the fiscal year that ran from April 1, 2019 through March 31, 2020.

*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 the 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).

Consolidated Balance Sheet

DOWA HOLDINGS CO., LTD. and Its Consolidated Subsidiaries
For the years ended March 31, 2020 and 2019

Assets	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Current Assets:			
Cash and time deposits (Notes 3, 6, and 14)	¥ 31,730	¥ 20,118	\$ 291,562
Notes and accounts receivable: (Note 14)			
Trade	73,544	82,330	675,773
Nonconsolidated subsidiaries and associates	2,247	2,350	20,653
Others	6,255	3,561	57,478
Subtotal	82,047	88,241	753,905
Inventories: (Note 13)			
Merchandise and finished products	29,416	29,461	270,298
Work in process	5,679	5,769	52,186
Raw materials and supplies	80,207	84,696	736,999
Subtotal	115,303	119,928	1,059,484
Other current assets	13,413	9,866	123,250
Allowance for doubtful accounts	(352)	(147)	(3,235)
Total current assets	242,143	238,007	2,224,967
Property, Plant, and Equipment (Notes 5 and 6):			
Land	27,883	24,977	256,212
Buildings and structures	132,996	126,589	1,222,059
Machinery and equipment	261,306	250,856	2,401,052
Construction in progress	21,688	8,183	199,284
Others	18,829	17,459	173,019
Subtotal	462,704	428,066	4,251,629
Accumulated depreciation	(309,368)	(293,701)	(2,842,677)
Net property, plant, and equipment	153,336	134,365	1,408,952
Investments and Other Assets:			
Investments in securities (Notes 4, 6, and 14)	19,667	27,158	180,718
Investments in and advances to nonconsolidated subsidiaries and associates (Notes 4, 6, 14 and 19)	78,992	74,098	725,835
Deferred tax assets (Note 9)	6,883	7,689	63,253
Goodwill	4,037	4,620	37,102
Other assets	7,534	8,835	69,233
Allowance for doubtful accounts	(100)	(91)	(925)
Total investments and other assets	117,016	122,310	1,075,218
Total assets	¥ 512,495	¥ 494,683	\$ 4,709,137

*1. The accompanying notes are an integral part of these consolidated financial statements.

2. ¥108.83 = U.S. \$1, the rate of exchange on March 31, 2020.

Liabilities and Equity	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Current Liabilities:			
Short-term borrowings (Notes 6 and 14).....	¥ 33,454	¥ 28,777	\$ 307,401
Commercial paper (Notes 6 and 14)	24,000	29,000	220,527
Current maturities of long-term debt (Notes 6 and 14)	6,838	18,271	62,840
Notes and accounts payable: (Note 14)			
Trade	33,697	43,445	309,631
Nonconsolidated subsidiaries and associates	783	4	7,195
Others	5,481	5,979	50,371
Subtotal	39,962	49,429	367,198
Accrued expenses	7,519	8,655	69,091
Accrued income taxes	6,224	2,135	57,195
Accrued bonuses	3,945	4,110	36,252
Accrued directors' bonuses	191	249	1,756
Other current liabilities	34,650	22,826	318,389
Total current liabilities	156,786	163,456	1,440,651
Long-term Liabilities:			
Long-term debt (Notes 6 and 14)	71,299	59,662	655,146
Liability for employees' retirement benefits (Note 12)	18,548	17,967	170,433
Retirement allowance for directors and audit & supervisory board members	730	621	6,708
Deferred tax liabilities (Note 9)	2,158	2,064	19,829
Other long-term liabilities	4,731	4,751	43,480
Total long-term liabilities	97,467	85,067	895,598
Total liabilities	254,254	248,524	2,336,250
Contingent Liabilities (Note 7)			
Equity: (Note 8)			
Common stock:			
Authorized: 200,000 thousand shares in 2020 and 2019			
Issued: 61,989 thousand shares in 2020 and 2019	36,437	36,437	334,809
Capital surplus	25,928	26,044	238,251
Retained earnings	184,927	173,624	1,699,230
Treasury stock, at cost (2,804 thousand shares in 2020 and 2,804 thousand shares in 2019) ..	(5,711)	(5,710)	(52,478)
Accumulated Other Comprehensive Income:			
Unrealized gain (loss) on available-for-sale securities (Note 4)	5,226	9,992	48,027
Deferred gain (loss) on derivatives under hedge accounting (Note 15)	2,285	(2,787)	21,003
Foreign currency translation adjustments	(875)	(27)	(8,044)
Defined retirement benefit plans (Note 12)	(172)	(360)	(1,582)
Total	248,047	237,214	2,279,217
Noncontrolling interests	10,194	8,944	93,670
Total equity	258,241	246,158	2,372,887
Total liabilities and equity	¥ 512,495	¥ 494,683	\$ 4,709,137

Consolidated Statement of Income

DOWA HOLDINGS CO., LTD. and Its Consolidated Subsidiaries
For the years ended March 31, 2020 and 2019

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Net Sales	¥ 485,130	¥452,928	\$ 4,457,689
Cost of Sales (Notes 11 and 13)	421,630	396,495	3,874,210
Gross profit (loss)	63,499	56,432	583,478
Selling, General, and Administrative Expenses (Notes 10 and 12) ...	37,544	37,761	344,984
Operating income (loss)	25,955	18,671	238,494
Other Income (Expenses):			
Interest and dividend income	2,752	2,204	25,291
Interest expense	(1,323)	(1,008)	(12,162)
Gain (loss) on sales and disposals of property, plant and equipment, net	(676)	(860)	(6,217)
Foreign exchange gain (loss)	(986)	(27)	(9,065)
Share of profit (loss) of entities accounted for using equity method	605	2,470	5,566
Commission income	838	583	7,703
Royalty income	790	1,154	7,261
Gain (loss) on sales of investments in securities, net (Note 4)	1,555	158	14,297
Environmental expenses	(535)	(522)	(4,924)
Loss on impairments (Note 5)	(1,181)	(212)	(10,853)
Loss from natural disaster	(107)	(184)	(987)
Settlement package	—	(206)	—
Reversal of foreign currency translation adjustment	—	227	—
Other, net	1,075	1,050	9,881
Subtotal	2,806	4,828	25,789
Income (loss) before income taxes	28,762	23,499	264,283
Income Taxes: (Note 9)			
Current	9,857	7,148	90,580
Deferred	223	1,240	2,057
Total income taxes	10,081	8,389	92,638
Net Income (loss)	18,680	15,110	171,645
Net Income (Loss) Attributable to Noncontrolling Interests	1,284	123	11,802
Net income (loss) attributable to owners of the parent	¥ 17,395	¥ 14,986	\$ 159,842

Per Share: (Note 17)	Yen		U.S. dollars (Note 1)
	2020	2019	2020
Basic net income	¥ 293.92	¥ 253.22	\$ 2.70
Cash dividends	90.00	90.00	0.82

*1. The accompanying notes are an integral part of these consolidated financial statements.

2. ¥108.83= U.S. \$1, the rate of exchange on March 31, 2020.

Consolidated Statement of Comprehensive Income

DOWA HOLDINGS CO., LTD. and Its Consolidated Subsidiaries
For the years ended March 31, 2020 and 2019

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Net Income (loss).....	¥ 18,680	¥ 15,110	\$ 171,645
Other comprehensive income: (Note 16)			
Unrealized gain (loss) on available-for-sale securities	(5,127)	(3,872)	(47,114)
Deferred gain (loss) on derivatives under hedge accounting	5,069	(4,016)	46,585
Foreign currency translation adjustments	(880)	(1,672)	(8,094)
Defined retirement benefit plans	169	307	1,559
Share of other comprehensive income in affiliates	396	(833)	3,639
Total other comprehensive income	(372)	(10,086)	(3,424)
Comprehensive income	¥ 18,307	¥ 5,023	\$ 168,221
Total comprehensive income attributable to:			
Owners of the parent	¥ 17,042	¥ 4,969	\$ 156,594
Noncontrolling interests	1,265	54	11,626

*1. The accompanying notes are an integral part of these consolidated financial statements.

2. ¥108.83= U.S. \$1, the rate of exchange on March 31, 2020.

Consolidated Statement of Changes in Equity

DOWA HOLDINGS CO., LTD. and Its Consolidated Subsidiaries
For the years ended March 31, 2020 and 2019

	Thousands	Millions of yen			
		Shareholders' Equity			
	Number of Shares of Common Stock Outstanding	Common Stock	Capital Surplus	Retained Earnings	Treasury Stock, at Cost
Balance, April 1, 2018	59,185	¥ 36,437	¥ 26,222	¥ 165,029	¥ (5,708)
Cash dividends paid	—	—	—	(5,409)	—
Net Income (loss) attributable to owners of the parent	—	—	—	14,986	—
Purchases of treasury stock	(0)	—	—	—	(1)
Change of scope of consolidation	—	—	—	(982)	—
Change in the parent's ownership interest due to transactions with noncontrolling interests	—	—	(178)	—	—
Net changes of items other than shareholders' equity	—	—	—	—	—
Balance, April 1, 2019	59,184	¥ 36,437	¥ 26,044	¥ 173,624	¥ (5,710)
Cash dividends paid	—	—	—	(5,409)	—
Net Income (loss) attributable to owners of the parent	—	—	—	17,395	—
Purchases of treasury stock	(0)	—	—	—	(1)
Change of scope of consolidation	—	—	—	(683)	—
Change in the parent's ownership interest due to transactions with noncontrolling interests	—	—	(115)	—	—
Net changes of items other than shareholders' equity	—	—	—	—	—
Balance, March 31, 2020	59,184	¥ 36,437	¥ 25,928	¥ 184,927	¥ (5,711)

	Thousands	Thousands of U.S. dollars (Note 1)			
		Shareholders' Equity			
	Number of Shares of Common Stock Outstanding	Common Stock	Capital Surplus	Retained Earnings	Treasury Stock, at Cost
Balance, April 1, 2019	59,184	\$ 334,809	\$ 239,312	\$ 1,595,369	\$ (52,467)
Cash dividends paid	—	—	—	(49,702)	—
Net Income (loss) attributable to owners of the parent	—	—	—	159,842	—
Purchases of treasury stock	(0)	—	—	—	(10)
Change of scope of consolidation	—	—	—	(6,279)	—
Change in the parent's ownership interest due to transactions with noncontrolling interests	—	—	(1,061)	—	—
Net changes of items other than shareholders' equity	—	—	—	—	—
Balance, March 31, 2020	59,184	\$ 334,809	\$ 238,251	\$ 1,699,230	\$ (52,478)

*1. The accompanying notes are an integral part of these consolidated financial statements.

*2. ¥108.83= U.S. \$1, the rate of exchange on March 31, 2020.

	Millions of yen						
	Accumulated Other Comprehensive Income				Total	Non-controlling Interests	Total Equity
	Unrealized Gain (Loss) on Available-for-Sale Securities	Deferred Gain (Loss) on Derivatives under Hedge Accounting	Foreign Currency Translation Adjustments	Defined Retirement Benefit Plans			
Balance, April 1, 2018	¥ 14,164	¥ 1,199	¥ 2,124	¥ (653)	¥ 238,815	¥ 8,946	¥ 247,762
Cash dividends paid	—	—	—	—	(5,409)	—	(5,409)
Net Income (loss) attributable to owners of the parent	—	—	—	—	14,986	—	14,986
Purchases of treasury stock	—	—	—	—	(1)	—	(1)
Change of scope of consolidation	—	—	—	—	(982)	—	(982)
Change in the parent's ownership interest due to transactions with noncontrolling interests	—	—	—	—	(178)	—	(178)
Net changes of items other than shareholders' equity	(4,171)	(3,986)	(2,151)	293	(10,016)	(2)	(10,019)
Balance, April 1, 2019	¥ 9,992	¥ (2,787)	¥ (27)	¥ (360)	¥ 237,214	¥ 8,944	¥ 246,158
Cash dividends paid	—	—	—	—	(5,409)	—	(5,409)
Net Income (loss) attributable to owners of the parent	—	—	—	—	17,395	—	17,395
Purchases of treasury stock	—	—	—	—	(1)	—	(1)
Change of scope of consolidation	—	—	—	—	(683)	—	(683)
Change in the parent's ownership interest due to transactions with noncontrolling interests	—	—	—	—	(115)	—	(115)
Net changes of items other than shareholders' equity	(4,766)	5,072	(848)	187	(353)	1,249	896
Balance, March 31, 2020	¥ 5,226	¥ 2,285	¥ (875)	¥ (172)	¥ 248,047	¥ 10,194	¥ 258,241

	Thousands of U.S. dollars (Note 1)						
	Accumulated Other Comprehensive Income				Total	Non-controlling Interests	Total Equity
	Unrealized Gain (Loss) on Available-for-Sale Securities	Deferred Gain (Loss) on Derivatives under Hedge Accounting	Foreign Currency Translation Adjustments	Defined Retirement Benefit Plans			
Balance, April 1, 2019	\$ 91,820	\$ (25,610)	\$ (249)	\$ (3,309)	\$ 2,179,676	\$ 82,187	\$ 2,261,864
Cash dividends paid	—	—	—	—	(49,702)	—	(49,702)
Net Income (loss) attributable to owners of the parent	—	—	—	—	159,842	—	159,842
Purchases of treasury stock	—	—	—	—	(10)	—	(10)
Change of scope of consolidation	—	—	—	—	(6,279)	—	(6,279)
Change in the parent's ownership interest due to transactions with noncontrolling interests	—	—	—	—	(1,061)	—	(1,061)
Net changes of items other than shareholders' equity	(43,793)	46,613	(7,794)	1,726	(3,247)	11,482	8,234
Balance, March 31, 2020	\$ 48,027	\$ 21,003	\$ (8,044)	\$ (1,582)	\$ 2,279,217	\$ 93,670	\$ 2,372,887

Consolidated Statement of Cash Flows

DOWA HOLDINGS CO., LTD. and Its Consolidated Subsidiaries
For the years ended March 31, 2020 and 2019

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Cash Flows from Operating Activities			
Income (loss) before income taxes.....	¥ 28,762	¥ 23,499	\$ 264,283
Adjustments for:			
Income taxes (paid) refund	(5,443)	(7,904)	(50,014)
Depreciation and amortization	19,774	19,138	181,699
Loss (gain) on sales and disposals of property, plant, and equipment, net.....	676	860	6,217
Share of (profit) loss of entities accounted for using the equity method	(605)	(2,470)	(5,566)
Loss (gain) on sales of investment securities, net (Note 4)	(1,555)	(158)	(14,297)
Loss on impairments (Note 5)	1,181	212	10,853
Changes in assets and liabilities			
Decrease (increase) in notes and accounts receivable	8,553	2,435	78,596
Decrease (increase) in inventories	4,361	(13,471)	40,076
Increase (decrease) in notes and accounts payable	(8,383)	5,883	(77,035)
Increase (decrease) in allowance for doubtful accounts	207	(42)	1,908
Increase (decrease) in net defined benefit liability	624	722	5,735
Decrease (increase) in interest and dividend receivables	3,362	2,967	30,898
Increase (decrease) in interest payable	(24)	143	(223)
Other, net	3,622	5,738	33,288
Net cash provided by operating activities	55,113	37,555	506,421
Cash Flows from Investing Activities:			
Acquisition of property, plant, and equipment	(35,241)	(23,395)	(323,823)
Proceeds from sales of property, plant, and equipment	605	338	5,560
Acquisition of intangible fixed assets.....	(885)	(288)	(8,138)
Acquisition of investments in securities	(8)	(1,835)	(77)
Proceeds from sales of investments in securities (Note 4).....	2,557	39	23,500
Acquisition of investments in subsidiaries and associates	(4,705)	(2,798)	(43,235)
Proceeds from sales of shares of subsidiaries and associates	—	196	—
Payments for loans	(8,120)	(23,818)	(74,613)
Proceeds from collection of loans	2,134	590	19,616
Proceeds from subsidies	6,484	882	59,585
Other, net	(633)	(936)	(5,820)
Net cash used in investing activities	(37,812)	(51,025)	(347,446)
Cash Flows from Financing Activities:			
Net increase (decrease) in short-term loans payable	4,661	(8,858)	42,833
Net increase (decrease) in commercial papers	(5,000)	4,000	(45,943)
Proceeds from long-term debt	9,840	23,601	90,422
Repayment of long-term debt	(10,262)	(6,811)	(94,301)
Proceeds from issuance of bonds.....	9,953	10,000	91,456
Redemption of bonds.....	(10,000)	—	(91,886)
Cash dividends paid	(5,577)	(5,641)	(51,249)
Repayment of lease obligations	(183)	(343)	(1,683)
Purchases of treasury stock	(1)	(1)	(10)
Other, net	0	(0)	0
Net cash provided by financing activities	(6,569)	15,944	(60,361)
Foreign Currency Translation Adjustment on Cash and Cash Equivalents			
Net Increase (Decrease) in Cash and Cash Equivalents	10,846	2,416	99,661
Cash and Cash Equivalents of Newly Consolidated Subsidiaries ..	383	112	3,525
Cash and Cash Equivalents at Beginning of Year	19,002	16,472	174,604
Cash and Cash Equivalents at End of Year (Note 3)	¥ 30,232	¥ 19,002	\$ 277,791

*1. The accompanying notes are an integral part of these consolidated financial statements.

*2. ¥ 108.83 = U.S. \$1, the rate of exchange on March 31, 2020.

Report of Independent Auditors

Deloitte.

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INDEPENDENT AUDITOR'S REPORT

To the Board of Directors of Dowa Holdings Co., Ltd.:

Opinion

We have audited the consolidated financial statements of Dowa Holdings Co., Ltd. and its consolidated subsidiaries (the "Group"), which comprise the consolidated balance sheet as of March 31, 2020, and the consolidated statement of income, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies, all expressed in Japanese yen.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of March 31, 2020, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with accounting principles generally accepted in Japan.

Convenience Translation

Our audit also comprehended the translation of Japanese yen amounts into U.S. dollar amounts and, in our opinion, such translation has been made in accordance with the basis stated in Note 1 to the consolidated financial statements. Such U.S. dollar amounts are presented solely for the convenience of readers outside Japan.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in Japan. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with the provisions of the Code of Professional Ethics in Japan, and we have fulfilled our other ethical responsibilities as auditors. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Audit & Supervisory Board Members and the Audit & Supervisory Board for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with accounting principles generally accepted in Japan, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern in accordance with accounting principles generally accepted in Japan and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Audit & Supervisory Board members and the Audit & Supervisory Board are responsible for overseeing the Directors' execution of duties relating to the design and operating effectiveness of the controls over the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with auditing standards generally accepted in Japan will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with auditing standards generally accepted in Japan, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks. The procedures selected depend on the auditor's judgment. In addition, we obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain, when performing risk assessment procedures, an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate whether the overall presentation and disclosures of the consolidated financial statements are in accordance with accounting principles generally accepted in Japan, as well as the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with Audit & Supervisory Board members and the Audit & Supervisory Board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide Audit & Supervisory Board members and the Audit & Supervisory Board with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

Interest Required to Be Disclosed by the Certified Public Accountants Act of Japan

Our firm and its designated engagement partners do not have any interest in the Group which is required to be disclosed pursuant to the provisions of the Certified Public Accountants Act of Japan.

Deloitte Touche Tohmatsu LLC

July 15, 2020

Subsidiaries and Affiliates (As of March 31, 2020)

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	●
82 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	Manufacturing 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-TSUJUN 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 LTD.	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.	1,703 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	Landfill 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	Landfill 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	Manufacturing and sale of semiconductors, electronic, and advanced fine materials	●
DOWA HIGHTECH CO., LTD. (Conductive materials and battery materials)	450	100.0	Manufacturing of metal compounds and chemical products	●
DOWA SEMICONDUCTOR AKITA CO., LTD.	300	100.0	Manufacturing of high-purity metals, compound semiconductor wafers, and light-emitting diodes	●
DOWA IP CREATION CO., LTD.	300	70.0	Manufacturing of Iron powder and Carrier powder	●
DOWA F-TEC CO., LTD.	300	100.0	Manufacturing of Ferrite powder	●
DOWA ELECTRONICS MATERIALS OKAYAMA CO., LTD.	100	100.0	Manufacturing 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	Manufacturing of copper, brass, and copper alloys	●
DOWA METANIX CO., LTD.	400	90.0	Manufacturing 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	Manufacturing of metal-ceramics substrates	●
NEW NIPPON BRASS CO., LTD.	100	100.0	Manufacturing 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	●
Heat Treatment				
Domestic				
DOWA THERMOTECH 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 THERMOTECH INDONESIA	278,256 million Indonesian rupiah	100.0	Heat treatment processing and surface processing	●
PT. DOWA THERMOTECH 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 THERMOTECH 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	●
Three other companies				

18 Affiliates Accounted for by the Equity Method

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.	10,285 thousand Mexican pesos	39.0	Nonferrous metal resource mining
ARRENDADORA MINERA ZACAZONAPAN, S.A. DE C.V.	8,000 thousand Mexican pesos	39.0	Nonferrous metal resource mining
EXPLORACIONES Y DESARROLLOS MINEROS TIZAPA, S.A. DE C.V.	728 thousand Mexican pesos	39.0	Nonferrous metal resource mining
MINERA PLATA REAL, S. DE R.L. DE C.V.	168,867 thousand U.S. dollars	30.0	Nonferrous metal resource mining
OPERACIONES SAN JOSÉ DE PLATA, S. DE R.L. DE C.V.	99 thousand U.S. dollars	30.0	Nonferrous metal resource mining
SERVICIOS SAN JOSÉ DE PLATA, S. DE R.L. DE C.V.	213 thousand U.S. dollars	30.0	Nonferrous metal resource mining
CONSTANTINE MINING LLC.	5,098 thousand U.S. dollars	49.0	Nonferrous metal resource development
KYOTO ELEX CO., LTD.	80	49.9	Manufacturing and sale of conductive pastes
TOKUYAMA-DOWA POWER MATERIALS CO., LTD.	250	35.0	Manufacturing of ceramic plain substrates
JAPAN COPPER CASTING CO., LTD.	200	30.0	Manufacturing 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	Manufacturing 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, 2020)

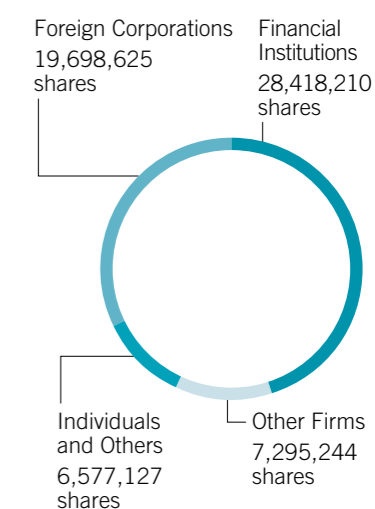
Company Data	Company Name	DOWA HOLDINGS CO., LTD.
	Founded	September 18, 1884
	Incorporated	March 11, 1937
	Employees	Approx. 7,000

Stock Information	Authorized Shares	200,000,000 shares
	Shares Issued	61,989,206 shares
	Number of Shareholders	10,342
	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)	11.59
Japan Trustee Services Bank, Ltd. (Trust Account)	9.91
NORTHERN TRUST CO. (AVFC) RE SILCHESTER INTERNATIONAL INVESTORS INTERNATIONAL VALUE EQUITY TRUST	6.57
FUJITA KANKO INC.	4.79
NORTHERN TRUST CO. (AVFC) RE U.S. TAX EXEMPTED PENSION FUNDS	3.44
National Mutual Insurance Federation of Agricultural Cooperatives	3.06
NORTHERN TRUST CO. (AVFC) SUB A/C NON TREATY	2.36
JFE Steel Corporation	1.87
Japan Trustee Services Bank, Ltd. (Trust Account 5)	1.69
Japan Trustee Services Bank, Ltd. (Trust Account 9)	1.68

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

Shareholder Distribution**Financial Section of DOWA Report 2020**

Please refer to "Financial Section" of *DOWA Report 2020*, for detailed information on the fiscal year ended March 31, 2020.
<https://ir.dowa.co.jp/en/ir/library/annual.html>

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